

Table of Contents

Virtual Care Center (VCC) Defined	3
5 Reasons Why You Need a VCC	4
Key Benefits of a VCC	6
VCC Readiness Assessment	7
The Importance of Video in a VCC	8
Virtual House Call with Dr. Brown	9
Case Study: Transforming Critical Care Telemedicine at Mercy	10
VCC Solution Brief: VidyoEngage for Healthcare	11
Partnering with Industry Leaders	12
Sources	13





Virtual Care Center Defined



A Virtual Care Center (VCC) is a centralized clinical operations center that leverages people, processes, and technology across the care continuum to enhance patient experiences, relationships, and outcomes.

A VCC must offer simple and intuitive clinician-to-patient and clinician-to-clinician interactions and deliver experiences that closely match the same workflows of face-to-face interactions. A VCC does not need to be a complicated matrix of standalone or replacement technology systems and processes. Rather, if appropriately designed and implemented, a VCC offers a streamlined care system that seamlessly merges the existing physical world of healthcare with that of the digital world.

Think of a VCC as a Hospital With no Beds...

...and also a bridge that enables caregivers and clinicians to work day and night to diagnose, treat, intervene, and provide care and support to patients and direct caregivers in real time, regardless of physical location.

In essence, a VCC is a place where shared services – like teleICU, eHospital, centralized telemetry, rapid response, transfer/ triage centers, disaster management, emergency/urgent care, eConsults, eVisits, population health management, and remote home monitoring – are brought together and leveraged as virtual resources.



"As we [Alaska Native Tribal Health Consortium] branched out into telehealth, we recognized that not having the video and audio components was a barrier to expanding our capabilities to serve our communities better."

-Stewart Ferguson, CIO, ANTHC

LEARN MORE



Five Reasons Why You Need a VCC

No two telehealth initiatives are alike, and indeed, no two healthcare delivery organizations (HDOs) are alike. Yet there are common themes among HDOs that make them likely candidates for VCCs.

Whether you are dabbling with remote patient monitoring, mobile healthcare, live interaction via video, store-and-forward communications, or are already knee-deep in your telemedicine deployment, a step up to a coordinated VCC can take your efforts to the next level of efficiency that benefits your patients, clinicians, and staff – anywhere and everywhere in the world today. Which of these reasons best describes your direction or current situation?

1

You have rolled out a series of standalone specialty technologies that handle certain areas of telemedicine like teleICU, telestroke or telepsychiatry.

The proliferation of multiple technology solutions within HDOs is creating problems with continuity of care, data integration and synchronization, scheduling, reimbursement, and more. A VCC alleviates these issues and drives operational efficiencies by providing a single point of access (via a command center) and centralized resource management for all the different centers of healthcare delivery so that patients are received and triaged to the correct clinical resource(s).

2

You have deployed an EHR "megasuite" but still need to address key requirements for virtual care delivery such as video-enablement.

While HDOs are increasingly moving to healthcare "megasuites" – such as Allscripts, Cerner, or Epic – instead of standalone telemedicine point solutions, megasuites do not typically provide all of the requisite capabilities to enable a VCC. Unless you have a centralized, well-integrated command center in your virtual care world, you will likely have a series of capability and functional gaps that will decelerate your overall telemedicine efforts. When adding functional capabilities such as video to your megasuite, look for technology solutions that have out-of-box integrations to lower your deployment cost and risk.

3

You operate under a tight budget, as most HDOs do, and just want to get started on building a VCC.

A multi-million-dollar virtual care facility is not necessary to reap the rewards of telemedicine. In most cases, a few multi-screen workstations installed in a centralized location are enough to get started. Some facilities choose to enter telemedicine to solve a specific community need, such as elder care or new mother follow-up. They then expand to other services once the community and facility are ready. The important point is centralization. Be sure that all your telemedicine operations flow through a single command center for improved management and operational efficiency.



4

Your telemedicine efforts have stalled because you are struggling to justify your investments.

If you have embarked on the telemedicine path, gaining stakeholder and community buy-in of your virtual care initiatives is essential to take your investments to the next level. By centralizing telemedicine resources within a VCC, you can reap the rewards of efficiency and generate the metrics and tracking analytics needed to cost-justify expansion to your stakeholders. When you centralize a VCC into a single command center, you can monitor quality and measure the effectiveness of the program. This makes return-on-investment (ROI) much easier to determine.

5

Your telemedicine resources are misaligned and off-target.

How well are your clinical and IT teams working together to achieve your clinical and business goals? Clinicians, IT, and staff must work together seamlessly to push your telemedicine initiatives forward. Clinicians understand the best tools for patient care, and IT has the skills to integrate and maximize the use of EHR systems, applications, and medical devices for ease of use and connectivity. Building a VCC legitimizes virtual care initiatives and centralizes resources in a co-located facility with dedicated resources that come together strategically to align people, processes, and technology for optimal telemedicine and patient outcomes.

Vidyo Healthcare Summit Recap

In late 2017, hundreds of clinical and technical healthcare leaders met for three days to discuss the future of telehealth. Visit our Summit page to see videos of keynotes and be inspired by all of our post-Summit content.



VIEW THE LATEST



Key Benefits of a VCC

Virtual Care Centers address several of healthcare's most prominent needs and pain points, providing a number of key benefits to HDOs and patients alike:

Reduce length of stay and throughput issues

Brick-and-mortar is an expensive place to deliver care, while home care lowers costs and decreases risk of infection.

due to lack of timely access, specialty availability, or distance to the nearest care delivery location.

Minimize patient leakage Tackle safety issues

related to high risk patients, rapid response situations, high mortality rates, lack of proactive monitoring, or the need for early intervention tools such as video assessment.

Gain efficiency and scale with fewer resources

Where traditional care delivery models may struggle, virtual care is emerging as a critical tool that leverages limited or poorly utilized resources.

Proactively manage the epidemic of chronic care and enhance quality of life

As much as 75% of healthcare dollars are spent on the treatment of chronic disease in the United States. Virtual care is extremely effective at handling the many repetitive and chronic care processes in patients' home environments.

Alleviate readmissions from home or post-acute locations

Reduce frequent flier admittance and inefficient use of resources (e.g., ED for primary care visits) as well as associated penalties.

Increase the reach of providers, specialists, and clinicians

Budget scarcity is the new norm, so leveraging time and resources from a central virtualized hub is both necessary and essential.

Improve the efficiency of your services and assets

across a hospital, health system, or even internationally in terms of software applications, hardware, call centers, medical devices, central monitoring units, and transfer centers.

Reduce duplication of people, processes, and technologies

There is no need for multiple call centers, overlapping software applications, and roles that perform similar functions within a VCC.

Enrich reporting through data capture, dashboards, trending, and benchmarking. Create the environment for innovation that drives the success and sustainability for all care delivery programs.

Preserve quality of life for providers and clinicians

leading to reductions in turnover and recruiting expenses. In the virtual world, no clinician needs to be on-call 24/7/365, and no patient should be made to wait hours when clinicians can be made available dynamically based on the needs of the patient.



VCC Readiness Assessment

All HDOs in the United States and Canada have made substantial investments in their brick-and-mortar foundations to deliver care across a wide range of specialties. Many have also invested in some of the key components required to implement a VCC.

Yet a major challenge for HDOs is intelligently integrating physical facilities and people with a centralized VCC command center to unleash the power of virtual care. Here are several factors to consider from a VCC readiness perspective.

VCC Readiness Checklist

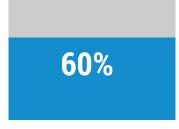
- Network of dedicated standardized workstations: Standard computer workstations with 6-8 screens that provide access to electronic tools or applications that are already available to the patient or bedside.
- Access to EHR/healthcare portal(s)/Health Information Exchange (HIE): Enables from anywhere access to the complete or main patient information required to make an informed decision for care and treatment.
- Real-time multi-point video communications software: Two-way audio/video is required to support rapid response for patient intervention and to improve real-time collaboration with one or more healthcare team members.
- Video/chat-enabled triage dashboard: Opens up communication channels and ensures rapid and effective patient triage to the right provider, location, and level of care, 24/7/365.
- ✓ **Video call transfer capabilities that enable a warm handoff:** Provides a more personal patient/provider experience and improves handoff communication.
- Application programming interfaces (APIs) which facilitate connecting disparate applications and data:

 Streamlines the user experience for providers and clinicians while enabling the visualization of patient data in new and meaningful ways.
- Video solutions that integrate with medical devices: Provides the ability to see and hear patient and clinical images or sounds respectively (e.g., inner ear, pupils, skin abnormalities, heart/lung/bowel sounds).

DIGITAL SOCIETY = VIRTUAL CARE



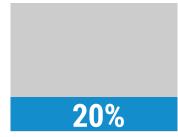
Broadband households interested in visiting physician services.¹



Broadband households interested in remote care options.¹



Want to communicate digitally with physicians.¹



Prefer text message communication.¹



The Importance of Video in a VCC

Video interaction is central to VCC success because of its ability to closely mirror the experience of face-to-face interactions and extend an HDO's capability to deliver personalized care outside of its physical facilities, especially to rural or hard-to-reach areas.

Video enables real-time interaction between patients and clinicians by using devices that are readily available, such as tablets, smartphones, and desktop computers. There is almost no learning curve required for patients or clinicians to use video technology. When video is integrated into clinical workflows, it has been proven to improve patient outcomes, reduce the cost of delivering care, and generate significant return-on-investment (ROI) across the care continuum.

Home Ambulatory Specialist Consult In-Patient Post-Acute

utilization \$960 savings/case Accelerate time

Reduce ER

to treatment

More @ 7.8% profit

Reduce unnecessary transfers \$260 /transfer

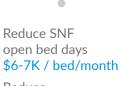
Unused capacity
--> Mobile clinics
More volume,
less cost

New teleradiology revenue

\$50 MRI read

Reduce 30% error rate Better outcomes faster New revenue via B2B services \$30-50K / ICU bed/year

Reduce referral leakage Save \$34K / in-net CHF



Reduce readmissions \$11,200 / case

Video-Powered Telemedicine Across the Care Continuum²

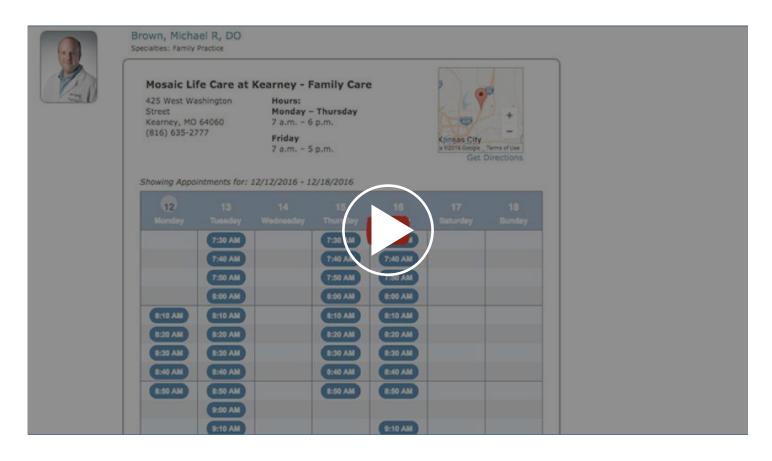
The key to integrating video is quality and compatibility. High-quality "4K video" is preferred for providing the detailed images critical for video-based healthcare consultations. Making video work within existing healthcare networks requires open application program interfaces (APIs) that allows seamless and hassle-free integration with existing EMR and EHR systems, such as Allscripts, Cerner, Epic, and others.



Telemedicine for Remote Patient Care at the California Telehealth Network



The Art of the Virtual House Call with Dr. Michael Brown



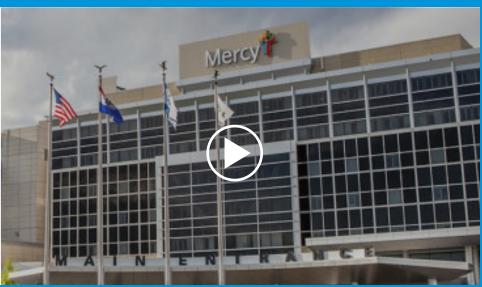
The transition from traditional medicine to telemedicine can open new doors to patient care. With the right mix of tools and technology, clinicians and providers can improve patient outcomes and business results. Watch this video to see the power of a Virtual Care Center in performing a virtual house call.

WATCH NOW



Case Study: Transforming Critical Care Telemedicine at Mercy





Mercy Telehealth Services augmented on-site patient care with virtual care that spans 15 hospitals which serve 140,000 patients and provide 550,000 hours of critical care. As a result, ICU mortality was reduced by 40%.

"

"With Vidyo we are able to do many things a bedside physician can do, except physically touch a patient. We can see the entire room, from the drips to the ventilator panel, to how the patient looks. We can talk to the family, patient or nurses in the room."

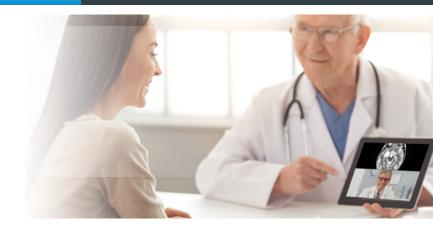
- Wendy Deibert, VP Telehealth Services at Mercy

LEARN MORE



VCC SOLUTION BRIEF





Benefits

- Builds relationships with face-to-face connections
- Enhances phone communications to video communications
- Leverages resources from one or many locations
- Allows the triage of video calls via one centralized dashboard
- Gathers information with pre-and post-survey options
- Promotes branding and customization of your video communications
- Deploys rapidly from the cloud
- Reduces capital expenditures and the cost and burden of IT resources

Business Challenge

In today's age of digital transformation, HDOs of all shapes and sizes have many points of contact and call centers that offer convenience and efficiency for clinicians and patients. Email, web-chat and phone often lack the visual cues and personal touch needed to improve patient experience and outcomes. While the digitalization of these services has greatly improved efficiency, digital services have come at a cost: human relationships.

The Vidyo Solution

Vidyo provides a unique approach that bridges the gap between online convenience and emotional connections with patients. VidyoEngage is a turnkey solution for video patient engagement – integrated into your organization's website, mobile app, or healthcare facility kiosk. This Vidyo communication experience enables click-to-video chat, skills-based routing, patient waiting videos, pre/post call surveys and summaries, all in a professionally branded and highly customized workflow that integrates into your existing EHR systems and workflows.

Unlike other approaches, VidyoEngage not only provides the technologies to enable the highest quality and most reliable video experience available, but also the deep expertise in patient engagement solution design, project management, and clinician readiness to ensure a successful launch of your organization's video patient engagement program. This bundled solution combines a robust cloud-based software-as-a-service with professional services designed from the ground-up with your success, and the positive outcomes of your patients, in mind.

Anticipated Results

The ability to provide positive interpersonal patient experiences provides healthcare clinicians with a distinct advantage. Not only does an emotional connection enabled by video increase patient satisfaction and life-long relationships with clinicians, it also improves patient outcomes. Patients feel more engaged and emotionally connected over video than any other digital medium.

LEARN MORE ABOUT VIDYOENGAGE



Partnering with Industry Leaders

Hundreds of HDOs rely on Vidyo for their telemedicine and VCC needs. Additionally, we partner with, integrate to, and embed our video technology into the solutions of several industry leaders, including Epic, Cerner, Allscripts, American Well, Philips Healthcare, and Honeywell – combining existing patient records into a telemedicine call to speed diagnosis and drive positive patient outcomes.

Vidyo #1 In Video-Enabled Healthcare





























































View best practices, case studies, and learn more about Vidyo's industry-leading healthcare solutions at https://www.vidyo.com/video-conferencing-solutions/healthcare.



Sources

- 1. Fierce Healthcare, Healthcare consumers show mounting interest in virtual, on-demand care, August 14, 2017
- 2. Sources for page 8, Video-Powered Telemedicine across the Care Continuum
 - http://www.beckershospitalreview.com/quality/6-stats-on-the-cost-of-readmission-for-cms-tracked-conditions. html - Increase compliance with follow up care through convenience
 - https://www.cga.ct.gov/2000/rpt/2000-R-1067.htm remote specialist assessment prior to transfer leads to fewer unnecessary transfers - \$260/transfer
 - http://blog.myhealthdirect.com/sprung-a-leak-the-cost-of-referral-leakage assumes \$3600 initial implant and \$1600 per year maintenance for 20 years
 - http://longtermcare.gov/costs-how-to-pay/costs-of-care/ delivering care to the patient's bedside avoids need for return trips to the hospital which leaves their bed in the SNF open and not generating revenue
 - http://www.beckershospitalreview.com/finance/7-things-to-know-about-emergency-department-profitability.html - Time to treatment is accelerated through on-demand access to specialist, leading to greater through put
 - https://www.debt.org/medical/emergency-room-urgent-care-costs/ Use central triage call centers to address non-urgent cases in lower cost settings like patient home
 - http://www.teleradiologygroup.com/what-does-teleradiology-cost/ New revenue opportunity varying from \$8-50/ read depending on image type
 - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2999012/ Stream line treatment and reduce errors through realtime collaboration between radiologist and specialist. Decrease law suits.



Vidyo, Inc.

433 Hackensack Ave. Hackensack, NJ 07601 1.866.99.VIDYO www.vidyo.com

