Navigating *The Playbook:* Digital Healthcare Edition

Your user guide to *The Playbook:* **Digital Healthcare Edition**

The **opportunities** digital health solutions bring to deliver high-value healthcare.

Industry definitions, classification and **regulation** of digital health solutions.

Your micro-playbooks to digital health solutions

- AI/ML
- AR/VR/MR
- Connected Sensor Technology
- Digital Therapeutics
- Electronic health records
- Mobile health applications
- Engagement and Social Media
- Virtual care

PRO TIP

Throughout the slides you will see ***'TL;DR'***. This is a common acronym for '***Too Long; Didn't Read.***'

We are acknowledging how busy you are and that a **small chunk of text is easier to digest** than a large portion of text on a slide.

Virtual care

TL;DR

Virtual care is the practice of using technologies such as video, audio, and instant messaging to connect patients and providers regardless of location

What is **virtual care?**

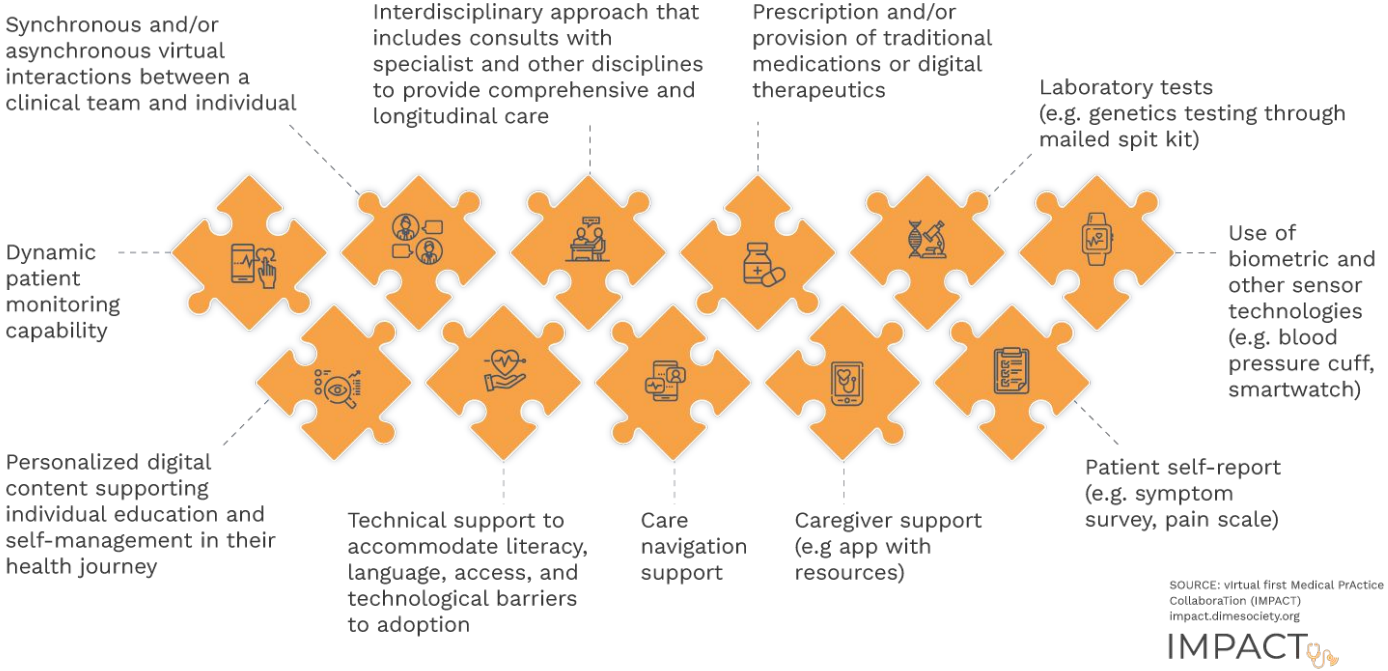
- **Virtual care** is a broad term that often encompasses the practice of **telehealth** and **telemedicine**. Definitions vary at the federal and state levels however. A few resources exist to help policy makers, national organizations, health systems, providers, and the public. with defining or differentiating these terms:
  - The American Telemedicine Association has a guide on standardized telehealth terminology.
  - The Center for Connected Health Policy (CCHP) offers a definition resource.
- **Virtual first care (V1C)** is medical care for individuals or a community accessed through digital interactions where possible, guided by a clinician, and integrated into a person's everyday life.
- The virtual care approaches are applied throughout the compendium of care delivery from the use of **virtual assistants, chat-based interactions, remote patient monitoring, remote patient management, and other technology-enabled modalities.**

Applications

- Lifestyle intervention
- Diagnostic and prevention
- Remote tracking and monitoring
- Disease management and treatment
- R&D and production optimization
- Clinical decision support
- Communication and engagement

Source: DiMe-VHA The Playbook: Healthcare team analysis, https://www.americantelemed.org/resource/why-telemedicine/, https://impact.dimesociety.org/

V1C providers integrate fit-for-purpose components to deliver complete care solutions



Source: DiMe-VHA The Playbook: Healthcare team analysis, https://impact.dimesociety.org/v1c/

Designing care around the patient instead of care around the physical sites of care

Opportunities to create value for patients, providers and healthcare systems

Provide **timeliness, convenience**, and seamless integration into a person's everyday life

Creates **cost-effective solution** for individuals and systems

Improves outcomes via process improvement and efficiency in care coordination, navigation, and oversight

Allow individual **flexibility** for on-demand healthcare services when they need. Healthcare needs are not 9am-5pm Monday to Friday.

Provide **interdisciplinary approach** that includes consults with specialist and other disciplines to provide comprehensive and longitudinal care

Potential to narrow the digital divide by delivering high quality care accessible **to the most underserved populations**

Coordinate transitions across the care ecosystem with **data connectedness**

Personalize digital content supporting individual **education** and self-management in their health journey

Source: DiMe-VHA The Playbook: Healthcare team analysis, https://www.americantelemed.org/resource/why-telemedicine/, https://impact.dimesociety.org/v1c/

The gap map for the virtual care solutions that stifles its broad acceptance

While many are optimistic about the potential of virtual care to improve health outcomes and economics, others in the industry still have reservations. With the breakneck speed of evolving virtual care delivery models, the policy landscape is struggling to keep up. We must partner with policy makers to pursue for fit-for-purpose policies and standards around virtual care practice to promote equitable, successful, and standardized implementation.

Challenge

Technological limitations like broadband access, advanced tech tools, etc creates a digital divide

Challenge

Lack of **interstate licensure** for medical practice

Challenge

Lack of **accessible data,** regardless of patient's location, that is **viewable for treatment.**

Risk

Patient **safety**, **integrity** and **privacy** of data, large due to rapid implementation without adequate due diligence

Challenge

Lack of and uncertainty with parity **laws** for virtual care services

Challenge

Patient-Provider bonding may suffer with loss of personal touch in virtual interaction

Source: The DiMe-VHA The Playbook: Healthcare team analysis, ttps://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/virtual-health-a-look-at-the-next-frontier-of-care-delivery

Case study: Virtual COPD care - address access issues and provides care at scale

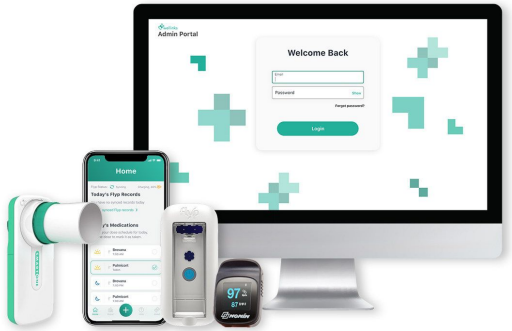
The Challenge:

Chronic obstructive pulmonary disease (COPD) is a preventable and treatable chronic lung condition. With **25M+ COPD patients**, most are **concentrated in rural and low-income areas** where healthcare access and quality suffers. People with COPD are unable to access appropriate care before reaching the hospital for a myriad of reasons, including **cost, location, and low awareness of treatment options**. The chronic lung disease increases risk for heart, metabolic, and mental health comorbidities, which only exacerbate the healthcare experience.

The Approach:

Wellinks' approach reinvents the COPD experience, connecting patients, caregivers, services, and information to enable truly integrated care. It serves people at all stages of their COPD journey, be it an individual in the community needing support to improve health and avoid an exacerbation, or one who is post-acute care transitioning to pulmonary wellness at home. Wellinks meets patients where they are with an access to kit of devices, software, and a coach.

wellinks



The Result:

Wellinks users with a **mean age of 79** and advanced disease reported the solution **easy to use (94%)** and showed **excellent engagement (100%) over 8 weeks**.

Source: DiMe-VHA The Playbook: Healthcare team analysis, https://www.wellinks.com/

Putting V1C in action

"With better COPD-specific virtual tools, we can detect exacerbations, understand medication compliance and usage, and adjust therapy to prevent clinical worsening. This could be immensely useful."

Brian Gelbman MD
Pulmonologist and Associate Clinical Professor, Weill Cornell Medical College;New York Presbyterian Hospital

V1C in Action

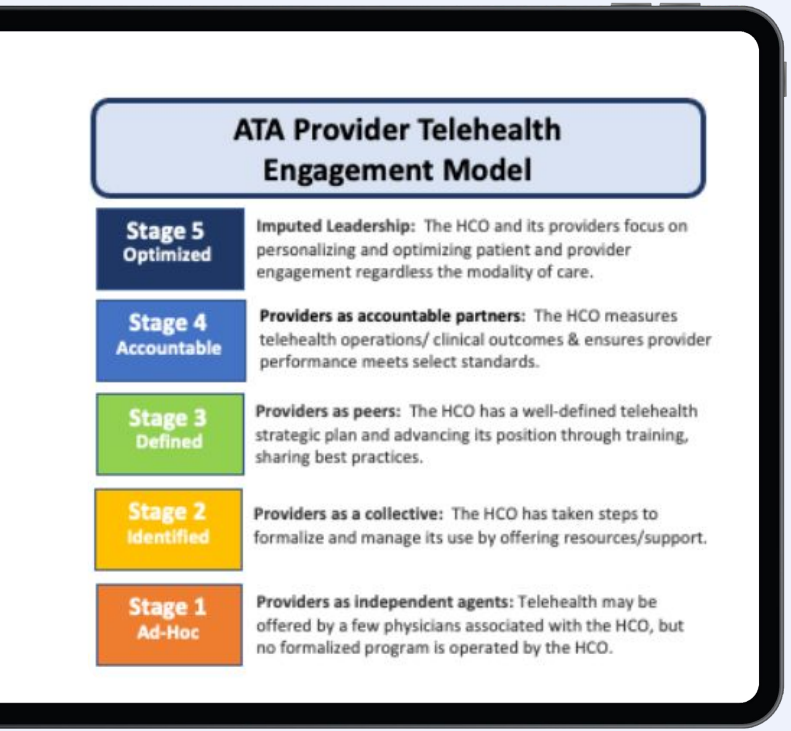
COPD V1C addresses access issues and provides care at scale

wellinks

Components:

- Synchronous and/or asynchronous virtual interactions between a clinical team and individual
- Interdisciplinary approach that includes consults with specialists and other disciplines to provide comprehensive and longitudinal care
- Use of biometric and other sensor technologies (e.g. blood pressure cuff, smartwatch)
- Patient self-report (e.g. symptom survey, pain scale)
- Technical support to accommodate literacy, language, access, and technological barriers to adoption
- Care navigation support
- Personalized digital content supporting individual education and self-management in their health journey
- Dynamic patient monitoring capability

Source: DiMe-VHA The Playbook: Healthcare team analysis, https://impact.dimesociety.org/v1c/



SPOTLIGHT

How to access provider engagement in Telehealth programs?

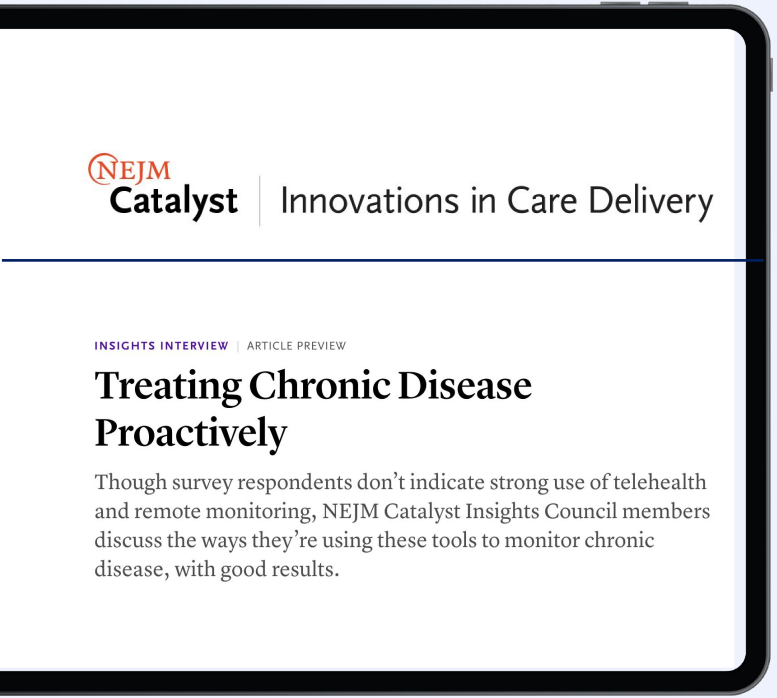
Many health systems didn't have a telehealth program in place pre-pandemic, but quickly put one in place during in need. Many organizations are now asking **"what now"?**

American Telemedicine Association built and launched a **Provider Telehealth Engagement Model (PTEM)**, an objective way to **assess where an organization is in the effective deployment** of telehealth programs – **synchronous, asynchronous, remote monitoring** – and determine where and how one can improve.

PTEM's output:
A customized report to showcase:

- where any healthcare organization is today,
- where the organization is relative to its peers,
- and evaluate each of their delivery points.

Source: DiMe-VHA The Playbook: Healthcare team analysis, PTEM by American Telemedicine Association



SPOTLIGHT

Developing operational procedures for managing information generated by remote monitoring

Ochsner Medical Center in New Orleans developed and deployed a digital hypertension program staffed by pharmacists.

These pharmacists monitored 6,000 high-risk patients' **blood pressure (BP) readings remotely** and followed up with patients via **text** and **email** when data from remote monitoring indicated poor BP control.

This program increased in the proportion of patients who **met their blood pressure goals** from **30% to 79%** over 180 days.

Source: DiMe-VHA The Playbook: Healthcare team analysis, NEJM - Treating Chronic Disease Proactively

Case study: Virtual first sleep clinic provides comprehensive consult, diagnosis and treatment solution

The Challenge:

1B people suffer from sleep apnea globally and people face **barriers to diagnosis, treatment and adherence**. If sleep apnea is suspected, patients are referred to a sleep study for diagnosis, and then, in the case of Obstructive Sleep Apnea (OSA) are **left alone to navigate CPAP therapy** - a treatment that dominates the sleep care market, but that has **poor compliance (~50%)**, which leads to **increased risk of stroke** and cardiovascular diseases.

The Approach:

Dreem is the **first virtual sleep clinic**. For OSA, **remote coaching** by healthcare professionals supports patients through their adoption of CPAP. An **insomnia diagnosis is treated with digital therapy sessions**. A unique finding from CPAP adherence in OSA patients is that 38% of them also suffer from comorbid insomnia and sleep apnea (COMISA). Dreem uses specific **behavioral coaching program** for patients who suffer from both conditions.

The Result:

Using a V1C approach adherence to CPAP for COMISA patients report **15% higher adherence**. This increase compliance leads to **better quality of life, increased productivity and low risks**. The program demonstrates reduced insomnia symptoms, supported by greater access to evidence-based, virtual therapy. With **-8 points on the Insomnia Severity Index** scale on average, and **more than 70% retention**, Dreem's digital insomnia therapy is equivalent to an in-person therapy.

dreem

Source: DiMe-VHA The Playbook: Healthcare team analysis, https://impact.dimesociety.org/wp-content/uploads/2021/06/V1C-vignette-Dreem.pdf

Putting V1C in action

"I was tired of the medical system not being able to help me. Endless prescriptions and lack of funding for behavioural/cognitive help is a real problem. Dreem helps by being there for you, for the long haul. The support is receptive, and the tech has made a huge impact. It assists every day to make the behavioural changes needed to help with sleep, and more.

Crystal
Patient testimony

V1C in Action

Virtual Sleep Clinic Provides Comprehensive Consult, Diagnosis and Treatment Solution

dreem

Components:

- Synchronous and/or asynchronous virtual interactions between a clinical team and individual
- Interdisciplinary approach that includes consults with specialists and other disciplines to provide comprehensive and longitudinal care
- Personalized digital content supporting individual education and self-management in their health journey
- Technical support to accommodate literacy, language, access, and technological barriers to adoption
- Prescription and/or provision of traditional medications or digital therapeutics
- Caregiver support (e.g app with resources)
- Care navigation support
- Patient self-report (e.g. symptom survey)
- Dynamic patient monitoring capability

Source: DiMe-VHA The Playbook: Healthcare team analysis, https://impact.dimesociety.org/v1c/. Image from by Pexels

SPOTLIGHT

Recommendation from AMA's Telehealth Implementation Playbook

Part 1: Introduction

Part 2: Pre-game:

- **Identifying a need**: What's the problem
- **Forming the team**: Who needs to be involved and when?
- **Defining Success**: What are we trying to achieve?
- **Evaluating the vendor**: What's the right technology
- **Making the case:** How do we get political and financial buy-in?
- **Contracting:** What's expected timing, budget, and plan with vendor?

Part 3: Game time

- **Designing the workflow**: What will need to change to integrate technology?
- **Preparing the care team**: Does everyone know what they need to do?
- **Partnering with the patient**
- **Implementing**: How does it work in practice?
- **Evaluating success**: Did it work?
- **Scaling**: What's next?

Source: DiMe-VHA The Playbook: Healthcare team analysis

LEARN FROM THE EXPERTS

Click on the image below to launch

Source: DiMe-VHA The Playbook: Healthcare team analysis, View video from DEFCON Conference: https://youtu.be/lb2p212rc6o

Harvard Business Review

TECHNOLOGY

How to Make Remote Monitoring Tech Part of Everyday Health Care

by Samantha F. Sanders , Ariel D. Stern and William J. Gordon

July 02, 2020

Samantha F. Sanders, MD, is an internal medicine resident physician at NYU Langone Health.

Ariel D. Stern is the Poronui Associate Professor of Business Administration at Harvard Business School, where she is a faculty affiliate of the Health Care Initiative and the Digital Initiative. She is also a faculty member at the Harvard-MIT Center for Regulatory Science and Ariadne Labs.

William J. Gordon, MD, is a member of the faculty of the Division of General Internal Medicine and an associate physician at Brigham and Women's Hospital. He is also an instructor at Harvard Medical School and the medical director of the Health Innovation Platform team at Mass General Brigham (formerly Partners HealthCare).

SPOTLIGHT

Recommendation proposed by teams at NYU and Harvard

- The technology must be **easy** for both patients and clinicians to adopt and continue using.
- The tools should be incorporated into clinician **workflows.**
- Sources of **sustainable funding** must be identified and tapped.
  - Note: this implicitly disadvantages care settings where such funding doesn't exist /is limited.
- Dedicate sufficient non-physician staff to **operate** the program.
- Focus on digital health **equity.**
- Start with an initial pilot and expand after **demonstrated successes.**

Source: DiMe-VHA The Playbook: Healthcare team analysis, https://hbr.org/2020/07/how-to-make-remote-monitoring-tech-part-of-everyday-health-care

VA Video Connect allows Veterans and their caregivers to quickly connect

Click on the image below to launch

Source: DiMe-VHA The Playbook: Healthcare team analysis