Guide to the Virtual Care Journey Maps:
Background, Tips, and Glossary for Review

U.S. Department of Health and Human Services
Health Resources & Services Administration
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The Journey Map Design Process

The journey maps were created specifically to help health centers promote equity in virtual care. The journey map development process and content were informed by OVC application data and perspectives from health centers gathered from focus groups. This method, called user- or human-centered design,[1] resulted in journey maps that can support health center initiatives to improve virtual care and health equity.

The journey maps were developed through a peer-reviewed process that included:

- The journey map development process and content were informed by OVC application data and perspectives from 11 health centers gathered from three focus groups.

- Discussions with HRSA Project Officers and MITRE subject matter experts in the populations included in the journey maps, health equity, virtual care, health centers, and clinical care.

- Data from evidence-based frameworks,[2-7] social determinants of health research,[8,9] peer-reviewed articles, reports and publications from trusted organizations, and OVC awardee applications.

Many populations are important to consider when working in health equity. The populations selected for the four journey maps are a subset of populations identified by HRSA as populations of interest. These populations were matched with health needs, location, and virtual care technologies that are being used by OVC awardees.

To review the four journey maps, visit the OVC program webpage. To access references for the journey maps, continue to the References pages below.

The journey maps were created as part of the Optimizing Virtual Care (OVC) Implementation Toolkit, by the Health Resources and Services Administration (HRSA) Health Center Program and the MITRE Corporation to help health centers support virtual care and health equity.

For more information on the OVC program, visit the OVC program webpage.

If your health center has questions about the OVC journey maps, please contact HRSA through the BPHC Contact Form.

The virtual care journey maps serve as a resource for health centers that are part of the U.S. Health Resources and Services Administration (HRSA) Health Center program.[10] This guide provides background information to orient health centers to the journey maps and how to use them. References for each journey map are included at the end of this document.

The journey maps depict the issues impacting four select populations in their journey to access, receive, and engage in virtual care at a health center. Through the journey maps, health centers will be able to:

Pinpoint areas to improve equity in virtual care access and delivery.

Identify actionable strategies to support virtual care equity for populations experiencing inequities.

The Four Journeys

PEOPLE EXPERIENCING HOMELESSNESS
(a HRSA special population[11]) in urban areas seeking primary care using synchronous telehealth[12]

OLDER ADULTS
(the fastest growing health center population[13]) living in rural areas using remote patient monitoring[14] for managing multiple chronic conditions.

RESIDENTS OF URBAN PUBLIC HOUSING
(a HRSA special population[11] and focus area[14]) using an mHealth[16] app to support prenatal care.

ADOLESCENTS
seeking mental health care (a HRSA focus area[17] and U.S. Surgeon General priority area[18]) using asynchronous[19] and synchronous[12] telehealth care in urban school-based service sites.[20]

Key Terms

A JOURNEY MAP
is a tool to show how a person or group accomplishes a goal.[21]

SCENARIO
Part of a journey map that describes the situation being addressed in the journey map.[21]

VIRTUAL CARE
uses technologies, such as telehealth, remote patient monitoring, and self-management tools driven by artificial intelligence and machine-based learning.[22]

HEALTH EQUITY
is the ability for every person to attain the highest level of health possible, especially among populations that face inequities due to injustices and circumstances that are socially determined.[23] Within virtual care, health equity includes the ability for everyone to be able to access, use, and engage in virtual care, especially among communities that have been marginalized.[24]

How Your Health Center Can Use Journey Maps

Your health center can apply information from the journey maps in several ways to promote equity in planning or implementing virtual care programs.

1. Think strategically to promote equity in virtual care access and delivery.

- Systematically think about virtual care for your patient populations and identify the barriers and potential solutions to delivering equitable care.

- Create your own population-focused journey map for your unique health center populations, virtual care technologies, and health interests by using the methods used to develop the journey maps.

2. Identify equity-related issues and actionable strategies to mitigate issues.

- Use the factors included in the journey maps as starting points for building strategies to optimize virtual care, especially if your health center uses technologies to provide virtual care to populations with similar characteristics and health needs.

- Consider the emerging practices highlighted throughout the journey maps as actionable strategies for your health center to overcome challenges and barriers to equitable virtual care. The highlighted practices are based on strategies employed by health centers in the real world or recommended by subject matter experts.

- Determine which practices your health center can adopt in your community based on your care setting and needs.

3. Prepare to establish or expand virtual care.

- Conduct a needs assessment to assess feasibility in establishing a new or expanded virtual care program. Using an approach that shifts the focus from individuals to populations in journey maps can help identify external factors that could impact a program. Resources included in the journey maps can help guide this work.

- Inform processes for technology selection to ensure that the technology is usable and appropriate for the population of focus. The journey maps can help health centers think through technology selection from a user-centered perspective.

- Consider factors that may impact equity when making IT-related decisions. This inclusion of population-focused equity factors complements the more often discussed health-center focused technical implementation factors.

4. Implement and evaluate virtual care.

- Incorporate equity into quality improvement and assessments of virtual care outcomes. Evidence-based resources included in the journey maps help support processes and decision-making to improve virtual care services and address equity issues.

5. Enhance peripheral workstreams in health care delivery.

- Incorporate practices that can improve health care delivery workstreams (e.g., for in-person care) peripheral to virtual care. The journey maps can help health centers flag cross-cutting areas for improvement to boost success in health care delivered virtually or in-person.

The Journey Map Features and Tips for Review

Each journey map describes five steps that populations go through to access virtual care. The features included in the journey maps, designed to lead the reader through the population journey and steps, include:

- The scenario and context for the journey map.

- A one-page overview of the journey.

- A page detailing each of the 5 steps regarding:

    - Issues that the population may face.

    - Health center activities that impact access to care.

    - Social factors impacting the population.

    - Ways a health center can support the population.

- Resources for health centers related to the journey scenario.

- Resources and evidence for information included in the journey map are provided as superscript numbers that correspond to guides and research listed in the separate References document.

When reviewing the steps, keep the following items in mind:

- Factors may impact a population across multiple steps. Instead of including them at every step, we provide a list of social determinants of health with the scenario and include factors within steps where they have a large impact on care seeking.

- Health centers are diverse with unique care settings, populations served, virtual care capacity, and other factors. The factors included are not exhaustive and some factors may not be directly applicable to the specific populations that your health center serves.

A Spotlight on Equity: Mapping by Populations and Not Individuals

People within certain populations have been or continue to be marginalized by systems (e.g., the legal system), policies (e.g., state regulations), or culture (e.g., common beliefs). This leads to inequities given these populations are treated differently than others and not given the same opportunities due to discrimination within systems, policies, and culture.[24]

The journey maps intentionally shift the focus from individuals to populations seeking virtual care in an attempt to not perpetuate inequities. This shift helps health centers more effectively promote equitable access to virtual care through:

- Understanding the multi-level factors and processes that shape inequities in virtual care access faced by specific populations.

- Identifying actionable strategies and resources that can directly address or mitigate factors impacting equity.

- Applying insights to the provision of virtual care that is tailored to populations' needs and account for societal factors.

Consolidated Glossary for All Journey Maps and the Guide

Ableism

- Prejudice and discrimination aimed at disabled people, often with a patronizing desire to "cure" their disability and make them "normal."[25]
- Portrays individuals who are being defined by their disabilities as inherently inferior to nondisabled people.

Adverse Childhood Events (ACEs)

- Adverse childhood experiences (ACEs) are potentially traumatic events that occur in childhood.[26-29]
- ACEs include violence, abuse, and growing up in a family with mental health or substance use problems.
- Toxic stress from ACEs can change brain development and affect how the body responds to stress.
- ACEs are linked to chronic health problems, mental illness, and substance misuse in adulthood.
- ACEs can be prevented.

Ageism

- How communities think (stereotypes), feel (prejudice), and act (discrimination) toward others or themselves based on age.[30]

Asynchronous Telehealth

- A communication approach that uses technology (e.g., a patient portal) to electronically transmit medical information (such as x-rays, sonograms, other digital images, data derived from questionnaires, and pre-recorded audio or videos that are not real-time interactions) for remote evaluation.[31]
- Can include evaluation by a provider, which is defined as interpretation and follow-up.
- Also known as "store-and-forward."

Caregiver

- Someone who provides support to individuals with special health needs who require help taking care of themselves at home or in health care settings.[32-35]
- Caregivers can be either:
  - Informal, typically family members or friends, whose primary role is not caregiving and who are not paid for their time.
  - Formal, including health professionals and social workers, whose job it is to provide care and who are paid for their time.

Community Health Worker

- A frontline public health worker who is a trusted member of the community being served or has a very good understanding of the community.[36,37]
- Supports work within and collaboration among the community, social services, and health centers to help the community know about and get services.
- Helps improve the quality of services available to the community and help ensure services are in line with the needs and cultures of the community.

Competing Priorities

- Factors that impact a person's decision making or ability to take action (e.g., seek medical care).[38]

Digital Navigator

- An individual who works repeatedly with community members to address all their digital needs e.g., access to the internet, access to devices, digital skills).[39]

Digital Health Literacy

- The ability to:[40]
  - Seek, find, understand, and appraise health information from electronic sources.
  - Apply knowledge gained to addressing or solving a health problem.

Digital Redlining

- Discrimination by internet services providers in the availability and reliability of services to specific areas often based on income, rurality, race, or ethnicity.[41-43]

Ecological Momentary Assessment

- Repeatedly assessing people's behaviors, thoughts, and experiences in their everyday life over an extended period of time.[44]

Electronic Health Record (EHR)

- A digital version of a patient's paper chart.[45,46]
- Real-time, patient-centered records that make information available instantly and securely to authorized users.

Family Educational Rights and Privacy Act (FERPA)

- A federal law enacted in 1974 that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.[47,48]
- FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level. Students to whom the rights have transferred are "eligible students."
  - Parents or eligible students have the right to inspect and review the student's education records maintained by the school.
  - Parents or eligible students have the right to request that the school correct records which they believe to be inaccurate or misleading.
  - Generally, schools must have written permission from the parent or eligible student to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to certain specified parties or under specified conditions.
- The primary purposes of FERPA are to:
  - Give parents or eligible students more control over their educational records.
  - Prohibit educational institutions from disclosing "personally identifiable information in education records" without the written consent of an eligible student, or if the student is a minor, the student's parents.

Food Desert

- An area (particularly some urban areas, rural areas, and low-income neighborhoods and communities) where people have limited access to affordable and nutritious food, such as or grocery stores.[49,50]
- Access to healthy foods can be impacted by lack of transportation and long distance between residences and supermarkets or grocery stores.
- Also known as "Health Food Priority Areas".

Gentrification

- When high-income people move into low-income neighborhoods which can lead to:[51,52]
  - Changes to the financial and cultural makeup of the neighborhoods with increased redevelopment that replaces lower-cost housing and real estate with high-cost buildings.
  - The displacement and segregation of the original long-term, low-income residents who cannot afford to live or work in the area due to high cost of living.
  - Barriers faced by new low-income residents who want to move into the area.

Health Equity

- The ability for every person to attain the highest level of health possible, especially among populations that face inequities due to injustices and circumstances that are socially determined.[53]
- Within virtual care, health equity includes the ability for everyone to be able to access, use, and engage in virtual care, especially among communities that have been marginalized.[54]

Health Information Technology (HIT)

- The electronic health systems that health care professionals and patients use to store, share, and analyze health information.[55]
- Can include electronic health records, personal health records, electronic medical records, electronic prescribing, privacy, and security.

Health Insurance Portability and Accountability Act of 1996 (HIPAA)

- Federal law that required the Secretary of the U.S. Department of Health and Human Services (HHS) to develop regulations protecting the privacy and security of certain health information. To fulfill this requirement, HHS published what are commonly known as the HIPAA Privacy Rule and the HIPAA Security Rule.[56,57]
  - The Privacy Rule, or Standards for Privacy of Individually Identifiable Health Information, establishes national standards for the protection of certain health information.
  - The Security Standards for the Protection of Electronic Protected Health Information (the Security Rule) establish a national set of security standards for protecting certain health information that is held or transferred in electronic form. The Security Rule operationalizes the protections contained in the Privacy Rule by addressing the technical and non-technical safeguards that organizations called "covered entities" must put in place to secure individuals' "electronic protected health information" (e-PHI).

Health Literacy

- The combination of personal health literacy and organizational health literacy:[58]
  - Personal health literacy: The degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.
  - Organizational health literacy: The degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others.

Intimate Partner Violence (IPV)

- A pattern of abusive behavior in any relationship that is used by one partner to gain or maintain power and control over another intimate partner.[59, 60]
- Can be physical, sexual, emotional, economic, psychological, or technological actions or threats of actions or other patterns of coercive behavior that influence another person within an intimate partner relationship. This includes any behaviors that intimidate, manipulate, humiliate, isolate, frighten, terrorize, coerce, threaten, blame, hurt, injure, or wound someone.
- Also known as "domestic violence" or "domestic abuse".

Journey Map

- A tool to show how a person or group accomplishes a goal.[61,62]

LGBTQI+

- Lesbian, gay, bisexual, transgender, queer, intersex and other sexual and gender-diverse communities (LGBTQI+).[63-70]

mHealth (Mobile Health)

- Technologies, like smartphone and tablet applications (apps), that:[71,72]
  - Enable people to capture or track personal health, fitness, or wellness information, or to access general health education materials independent of an interaction with a health care provider.
  - Capture data that are used for health self-management (it is the user's choice to share data with a provider).
  - Do not meet the U.S. Food and Drug Administration (FDA) definition of a medical device.

Open Access Scheduling

- A scheduling method that allows all patients to receive an appointment on the day they contact their health care provider.[73]
- A health center's schedule is:
  - Open for about 1/2 of the day for patients who request an appointment the day they contact they health center.
  - Booked for about 1/3 of the day for follow-up visits and appointments for patients who choose to schedule appointments for future dates.
- Also known as same-day or advanced access scheduling.

Opportunity Cost

- Costs to individuals for seeking health care due to:[74]
  - Lost opportunities due to time spent seeking care (e.g., lost wages).
  - Seeking additional resources (e.g., time spent by family or friends accompanying patients to care visits).
  - Indirect costs (e.g., transportation).

Remote Patient Monitoring (RPM) Devices

- Devices that can be used to collect and transmit medical patient data, like pulse and blood pressure, from patients in one location (typically a home) to health care providers in a different location for monitoring and evaluation.[75,76]
- RPM technologies can:
  - Collect health data from patients in their daily lives to monitor their health conditions (e.g., a device that measures heart rate and rhythm to monitor heart conditions).
  - Transfer collected data to a secure location either synchronously (e.g., data are continuously sent to a health provider in real time) or asynchronously (e.g., a batch of data is transmitted only at specific points in the day).
  - Provide data to a provider or other qualified health professional in another location (e.g., at the health center) for analysis and interpretation to assess a patient's status or to develop or adapt a care plan.
  - Include a smartphone or tablet app that is used along with an FDA-regulated medical device used for RPM.
- For clinical care, RPM devices need to be:
  - Prescribed or recommended by a provider or by a qualified health professional who is under the general supervision of a provider.
  - Documented in the patient health record.

Resident Council

- An elected group of public housing residents who represent the interest of all residents in improving their quality of life and satisfaction.[77]
- May work together with a housing authority to assist in public housing operations.
- Also known as a "tenant task force" or "tenant board".

School Based Service Site (SBSS)

- A Health Center Program service delivery site located at a school due to School-Based Service Site funding to expand access to health center services.[78]

Scenario

- Part of a journey map that describes the situation being addressed in the journey map.[62]

Social Norms

- The perceived informal, mostly unwritten, rules that define acceptable and appropriate actions within a given group or community, thus guiding human behavior.[79]

Synchronous Telehealth

- Synchronous (real-time) telehealth services include:[80,81]
  - Audio-only services that use a two-way, interactive audio-only technology, such as a telephone for live or real-time interactions between a patient and provider.
  - Video-only services that use a two-way video technology or other HIPAA-compliant video connection to conduct a live or real-time interactive visit between a patient and provider.

Usability

- The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use.[82]

Virtual Care

- The use of technologies, such as telehealth, remote patient monitoring, and self-management tools driven by artificial intelligence and machine-based learning.[83]