

VA



U.S. Department
of Veterans Affairs



VA IMMERSIVE PLAYBOOK

VA IMMERSIVE
SUMMER 2024



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What is Immersive Technology?



Introduction

What is Virtual Reality (VR)?

VR is a computer-generated illusion of reality that immerses the user into a simulated environment using specialized hardware and by engaging visual, audio and sometimes haptic senses. This environment can typically be explored and interacted with by the user. Simulated environments can be based on video footage of real environments, completely computer-generated images, or a combination of both.

What is Augmented Reality (AR)?

AR is an enhanced, interactive version of a real-world environment. Displaying the real-life environment right in front of you, enhanced through digital visual elements, sounds, and other sensory stimuli via holographic technology. AR uses digital enhancements, real-time interactions, and accurate 3D identification of virtual and real objects to change the user's experience. but enhanced through digital visual elements, sounds, and other sensory stimuli via holographic technology.

What is Mixed Reality (MR)?

MR is a blend of both real-world objects and digital-world objects. This term may also be used to describe devices capable of moving between AR and VR.

What is Spatial Computing (SC)?

The digitization of activities of machines, people, objects, and the environments in which they take place enables and optimizes actions and seamless interactions.

VA Immersive's Introductory Guide to Extended Reality

includes further descriptions of VR, AR, MR, and SC. VR is still the most common patient-facing immersive technology used at VA, while AR is most often used for employee-facing training. If you have more questions, don't hesitate to [reach out](#).

*Note: Hardware typically includes a head-mounted display, with or without integrated sound/headphones, handheld controllers, other external or worn sensors, and may sometimes require the use of a laptop, tablet, or other smart device. Hardware can be as simple as a smart phone or specialized AR glasses, like the Microsoft HoloLens. Software developed may be compatible with one or more types of hardware.





What is the VHA XR Network?

The VHA's VA Immersive team established the VHA Extended Reality (XR) Network for the sharing of resources, learning opportunities, success stories, and suggestions for improvement. The VHA XR Network functions as a resource hub to facilitate collaboration and communication between VA facilities, frontline employees, and administrators across the country in all efforts related to immersive technology use. To date, VA Immersive has launched numerous multi-site pilots assessing XR use cases, such as falls risk assessment, neurological assessment, pain management, anxiety, Post Traumatic Stress Disorder (PTSD), physical and occupational therapy, creative arts therapy, employee education, and more. In addition, XR equipment donations facilitated by the Center for Development and Civic Engagement are in use in over 50 VA sites. As XR use grows, so does our Community of Practice and other community groups on the VHA XR Network.

QUICK LINKS FOR VHA XR NETWORK:

[General Discussion](#)

[Contraindications and Precautions](#)

[CPRS Templates](#)

[Previous Meetings](#)

[Standard Operating Procedures](#)

[Vendor Information](#)

A Good Place to Start

[Click here](#) to join the VHA XR Network's MS Teams site.

[CLICK HERE TO REACH OUT TO US VIA OUR EMPLOYEE INTAKE FORM.](#)

Then, get involved in the Community:

WEEKLY OFFICE HOURS CALLS

• Immersive Technology Office Hours - General

Tuesdays from 1-3pm ET

These office hours serve as an open forum to answer any of your questions related to Immersive Technology!

MONTHLY CALLS

• General XR Community of Practice

4th Wednesday of every month from 1pm-2pm ET

ALTERNATING BI-MONTHLY CALLS

• XR in Mental Health

2nd Tuesday of every other month from 11am-12pm ET
(new series started January 9th, 2024)

• XR for Rehabilitation

2nd Tuesday of every other month from 11am-12pm ET
(new series started February 13th, 2024)

• XR for Employee Well-Being

4th Thursday of every other month from 1pm-2pm ET
(new series starting July 25th, 2024)

• XR for Education and Training

4th Thursday of every other month from 1pm-2pm ET
(new series starting August 29th, 2024)

QUARTERLY CALLS

• XR for Pain Management

2nd Wednesday quarterly from 12-1pm ET

[Let us know](#) if any of these calls interest you or your team.



General Implementation Guidance



See below a general guide for implementing XR programs or pilots at your site:

*Note: some of the same information is needed for CRADAs or other pathways.

STEP 1

Determine the problem to solve or specific use case where immersive technology may be helpful

STEP 2

Determine the WHO and the WHERE

STEP 3

Determining funding or acquisition mechanism or sources:

1. Must determine funding source and "color" of money that might be used
2. **Channels for procurement:**
 - o Logistics = VA facility, multiple users
 - o Prosthetics = non-VA location, single user
3. Has this product already been purchased before or already in use in VA?

*Note: if a logistics purchase, may need to go through local CPRC process prior to purchasing. If a prosthetics purchase, may need to go through CPRC in order to receive a demo device for the purpose of pre-purchase device trial (see at-home device issuance guidance for more detail).

STEP 4

Additional requirements and considerations for contracting or other document completion:

1. Complete the **Privacy Data Ownership Determination (PDOD) Checklist**
 - o Is PHI/PII or other data involved?
 - o Who owns the data?
 - o Will a Business Associate Agreement (BAA) be needed?
2. Complete **VA Form 6500.6 and 6550**
 - o Does it need connection to Wi-Fi
 - o Does the device need to connect to VA systems
3. For contracting/procurement:
 - o Are there many **similar solutions** on the market? Or **only one device** that meets the need?
 - o What are the **salient characteristics** of the solution being sought
 - o US-based vendor or distributor?
4. Does the contract or CRADA **need to include development** or is the VA intending to use an **off-the-shelf device**?
5. Connect with local Biomed, IT, Information Security, and Privacy based on needs identified in completion of PDOD, 6500.6, and 6550. 5) Training

STEP 5

Establish implementation resources needed:

1. SOPs and cleaning procedures
2. Competencies
3. Documentation templates or forms
4. Establishing pilot or program success metrics
5. Training

STEP 6

Begin implementation

1. Device(s) delivered to facility or to individual patient home
 - o On station: Biomed should review and assign EE Numbers to put devices into inventory
2. Use pre-determined means of data collection, if needed or desired
3. If clinical use, create encounters using specific health factors and add-on CPT codes as appropriate

STEP 7

Follow-up and continued support

1. Follow-up with patients and/or other end users at appropriate cadence
2. XR Champion continues to support, may aid in supplying or developing additional resources, facilitating further training, or keeping leadership apprised of progress and results.





STEP 1: Determine the Problem to Solve or Specific Use Case Where Immersive Technology May Be Helpful

Determining the problem you want to solve will help guide your market research. Technology is being used in VA across over 40 clinical indications. Please see a list below of active use cases; while this list is not all-inclusive, it includes many current uses.

EXAMPLE ACTIVE USE-CASES:

- Suicide Prevention
- Anxiety
- Depression
- Social isolation
- Substance Use Disorder
- Addiction recovery
- Post Traumatic Stress Disorder
- Phantom limb pain
- Facilities management
- Procedural use
- Physical, occupational, recreational therapy
- Spinal cord injury and disease
- Low vision rehabilitation
- Pain management (acute, chronic, acute on chronic)
- Neurological assessment
- New employee orientation
- Empathy training
- Employee wellness
- Employee education
- Firearms safety
- Stress Reduction, Relaxation, and Positive Distraction
- Women's Health
- Pre-surgical planning

STEP 2: Determine the WHO and the WHERE



Defining **who**, **where**, and **what** you want to impact can direct which hardware and/or experiences best fit your goals.

CHOOSING THE RIGHT FIT

A good starting place is the [Introductory Guide to Extended Reality](#) and the associated [VA Immersive Reference List](#). Within the Introductory Guide to Extended Reality and VA Immersive Reference List, you will find more information about software or applications currently in use in the VA and the hardware they are compatible with, purchasing information, and even pricing information. This allows employees to make informed, and fiscally responsible, decisions about the solution that best meets the need(s) identified.

There is an abundance of XR content in the world that is constantly changing and advancing so these resources are updated as often as able to keep VA employees knowledgeable. The VA Immersive [XR Teams page](#) can also help you navigate and stay up to date.

As you learn and discover, we hope you will share your experiences with the XR Network and help grow the Community. We would love to hear about how you are using immersive technology at your facility.

If you have any questions, please [reach out](#). The VA Immersive Team can help you decide what best suits your needs, aid in navigating the procurement process, share lessons learned, and connect you with other participating VA employees and community members.

IDENTIFY XR CHAMPIONS

When considering immersive technology for Veteran care, or VA Employee or caregiver use, identifying an XR Champion(s) is critical to ensure safe and successful implementation. This individual can be anyone but is typically an individual who is highly engaged with the immersive technology program/pilot of choice and is willing to aid others through implementation. The Champion(s), or their designee, would be the main point(s) of contact for a particular department, Medical Center, Outpatient Clinic, or any other VA site of care. Once the Champion(s) is/are trained in setup, troubleshooting, Veteran exclusion criteria, and safety precautions, it is encouraged for them to train others and aid in tracking XR use across their healthcare system.



STEP 3: Determining Funding Acquisition Mechanism or Sources

PROCUREMENT, COLLABORATIONS, DONATIONS, AND RESEARCH

Through VA Immersive, pilot participation may be available for various use cases. These pilots usually last six (6) months to two (2) years and are typically at no financial cost to the facility during the pilot period of performance. Facilities may be responsible for any continuing costs beyond the pilot period.

Below you will see four pathways for accessing immersive technology. If you need additional information on pathways to access immersive technology, please [reach out](#).

PROCUREMENT: LOGISTICS OR PROSTHETICS PURCHASES

Procurement of devices to be used on station, or within VA-owned facilities by patients or employees, or items that will not be issued to individual patients for use off station are typically purchased through Logistics, devices to be purchased or issued to a single patient for use outside of VA facilities is typically a Prosthetics purchase.

VA facilities can have procurement contracts or purchase via purchase cards on their own without VA Immersive, and those likely would be at a financial cost to the facility or VISN (e.g. prosthetics purchases made after placement of a PSAS consult come out of the local facility annual prosthetics budget).

For logistics purchases, dependent on the product to be purchased, lower cost purchases may not require a contract if acquired via purchase cards (if under 10k and a purchase card is available).

Some devices are available on GSA Advantage or through a SDVOSB distributor. If creating a contract and you have a particular device in mind, sole source justification, or reasoning for that one product being the only one to meet the need, is required.

VA facilities can also choose to use existing funding or special-purpose funding to purchase hardware, software, or any combination. Do not hesitate to [reach out](#) if you want to connect with a particular vendor, need examples of procurement/contracting documents, guidance, etc.





IMMERSIVE TECHNOLOGY PURCHASING FOR USE AT-HOME OR NON-VA LOCATIONS

Currently, most facilities using XR across VHA are using XR on-station. However, a growing number of facilities have begun issuing devices to patients for at-home use. Device issuance may be for a specific period (e.g., 8-week at-home program) or may be permanently issued to a patient.

In most situations, orders for at-home device issuance will go through Prosthetics locally via a Prosthetic and Sensory Aids Service (PSAS) consult. Prior to placing that consult, there are specific tasks and documentation that must occur, including a trial of the device to determine suitability, safety, and evidence of benefit. It is possible that certain situations may involve the loan of government-owned equipment to a patient, and this requires a different process. If you intend to use this process, please seek VA Immersive's guidance.

Importantly, for any devices to be used in the patient's home that collect data – whether use and engagement data or clinical assessment data – the patient must be informed that data is being collected, who has access to it, where it will be stored, and how it will be used. It should be documented whether the patient did or did not consent for the above to occur. Language regarding clinician (VA) and vendor access to the data should be included in any contracts or other agreements related to purchase or to use of the product as possible (i.e. the VA documents patient awareness and permission granted, or some language may be included within vendor terms of use). Please [reach out](#) to VA Immersive for more details on this process or access the [VA Immersive At-home Device Issuance Guidance](#) resource.

Physical Medicine and Rehabilitation and Blind Rehabilitation Services have written, in collaboration with VA Immersive, and issued specific at-home device issuance and some general guidance for their clinical programs:

- [PMRS SOP](#)
- [BRS XR Protocol](#)



COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT (CRADA)

CRADAs serve as a flexible vehicle for effectively transferring commercially useful technology from the nonfederal sector. These agreements represent collaborations between government agencies and entities such as private companies, non-profit, or universities, fostering joint efforts in research and development endeavors. CRADAs provide opportunities including, faster launches, low investment on the front-end parties involved, and they can help determine the best path forward if one exists.

*Note: there is no financial obligation to VA or the collaborator through a CRADA

STEPS FOR QUALITY IMPROVEMENT/INNOVATION CRADA IMPLEMENTATION:

To successfully initiate and implement a CRADA, specific requirements and steps must be followed:

1

IDENTIFY A NEED OR MUTUAL PROBLEM WE ARE TRYING TO SOLVE

Identifying this need is pivotal, serving as the foundation for selecting a solution that precisely meets the criteria for a CRADA.

2

IDENTIFY AND SELECT POTENTIAL PARTNERS

interested in a CRADA, considering both non-federal and federal entities. Simultaneously, a diligent exploration is conducted to ascertain if there are existing CRADAs that align with the identified need. The option to join an existing CRADA is carefully considered, recognizing the potential benefits of collaboration.

3

REACH OUT TO VA IMMERSIVE FOR ASSISTANCE

VA Immersive serves as the primary source of information for CRADA-related inquiries for immersive technology, providing valuable insights and guidance for the next steps and processes. Engagement with VA Immersive ensures access to current CRADA information upon request, enhancing the organization's understanding and facilitating informed decision-making.

Next: VA Immersive will connect you to the OHIL Collaborations team that will provide the appropriate documents to complete steps 4 through 7.

No site should pursue a CRADA without first connecting with VA Immersive and/or the OHIL collaborations team.

4

DUE DILIGENCE (DD)

Due diligence must be completed by the VA Point of Contact (POC) and the POC cannot ask the collaborator company for this information. The information should all be public.

- a) Please complete the correct for profit/nonprofit form depending on the type of collaborator company
- b) For further guidance, please see the DD guide [here](#).
*Note: Currently there is only a guide for the non-profit DD sheet, however it may be helpful to review regardless if you are filling out a for-profit form.
- c) Please return this as soon as complete.
*Note: DD is a great place to start. It ensures we are choosing to collaborate with appropriate outside organizations.

5

STATEMENT OF WORK (SOW)

Obtaining program office approval, and securing concurrence from the Office of the General Counsel (OGC) before execution. Notably, CRADAs may be signed by the Medical Center Director or Administrative Officers where such authority has been delegated, highlighting the flexibility of this collaborative mechanism.

- a) Complete this document with input from both VA Parties and collaborator party before sending it back for review.
- b) This template includes suggestions, please also refer to the “SOW Tips and Tricks” document for guidance as well.
- c) The SOW will be included as an appendix item in the final CRADA document and explains the project purposes, responsibilities, timeline, etc. When the CRADA draft stage is reached, the CRADA itself will include almost all legal language. It is helpful to let collaborator know so they are not adding in legalese to the SOW.

6

CONFLICT OF INTEREST FORMS (COI)

On page one of the SOW, identify all Parties to the collaboration. Every party must have a POC and signatory. For each VA Party, the POC listed must complete a COI. Please be sure VA POCs use the attached “COI helps” document to complete these. There is a specific way to complete them.

- a) Please send back as soon as this is complete.
- b) VA POCs should use the “COI helps” document to complete COI forms

7

PRIVACY/DATA CHECKLIST (PDOD)

Complete the PDOD and send back to the [OHIL Collaborators Team](#) once reviewed, your PDOD will be submitted to Privacy for their review.

8

BEGIN IMPLEMENTATION AND MANAGEMENT OF CRADA

With support from the VA Immersive Team, pilot participants will comply to ensure project management activities are completed as outlined within the fully executed CRADA (i.e. pilot kickoff, metric workgroup determination, technical training, device coordination, feedback collection).

Once you complete these steps outlined above, please send to me for review. You don't need to send them all at once, but can send as you complete the steps.

***Note: If there are any flags raised in the DD or COIs, it is not an automatic “no” on the project. Flags are reviewed and escalated to OGC/leadership/ethics as needed for review.**

DONATIONS

An external entity may donate immersive technology to a facility, VISN, or VA Immersive. Facilities and VISNs should follow their respective protocols for receiving these donations, but donations must typically go through VA Center for Development and Civic Engagement (CDCE) processes. Be sure to [let us know](#) so we can highlight and celebrate these with you! If donations are made to VA Immersive, we will gauge interest with the entire Community.

***Note:** facilities should NOT be soliciting for donations. Any donations must go through their local CDCE.

RESEARCH FUNDING

Researchers may apply for a grant or other research funding to evaluate and use immersive technology like XR. Any research funding is subject to usual VA Research regulations. A best practice is to engage with local, regional, or national Researchers and the Office of Research and Development (ORD). If interested in pursuing research, let the VA Immersive team know to help prevent duplication of efforts, share gaps noted in existing immersive literature, and gain support through connection to helpful contacts as needed.



STEP 4: Additional Requirements and Considerations for Contracting or Other Document Completion

PRIVACY

For all immersive technology devices not currently in use in VA, including those to be piloted via a CRADA, a Privacy Data Ownership Determination (PDOD) Checklist should be completed. To ensure no evaluation duplication, please contact VAImmersive@va.gov for additional information specific to individual XR platforms before prescription and purchase and for access to the most up-to-date version of the PDOD Checklist.

If the device or platform to be used in VA facilities or issued for non-VA location use collects or is capable of collecting data, inclusive of embedded patient-reported outcome measures, experience questionnaires, usage and engagement data, or objective assessment data, etc., PDOD Checklist completion prior to ordering/contract award or initiation of a CRADA is necessary. Completion of this checklist aids in understanding privacy and data security needs and may inform responses on the required 6500.6 Appendix A, Checklist for Information Security in the Initiation Phase of Acquisitions for acquisitions (which must be completed for all XR devices, both procurements and CRADAs) and 6550 (which must also be completed for any device with intent or potential to connect to VA systems or network).

For additional Privacy considerations for devices issued for at-home or non-VA location use, please access the *VA Immersive At-Home Device Issuance Guidance* document.



INFORMATION TECHNOLOGY AND SECURITY REQUIREMENTS

Different devices have different requirements. We are currently working with Office of Information and Technology's (OIT) VA Innovation Unit and other IT employees to get devices and software approved for VA network connectivity where it is necessary and/or beneficial. This may include access to cloud-based or web-accessed data or use portals. If you have questions or trouble with connectivity, [let us know](#). Some sites have had success asking their local IT for a mobile hotspot.

Additionally, some vendors provide hotspots as a part of standard procurement. Some devices require Wi-Fi connectivity, some do not, or may require connectivity only for software updates. Please ensure you know what connectivity requirements are needed for the device(s) you hope to use prior to purchasing as this may create an unintended barrier to use. If you have questions about a particular device, please [reach out](#) to us.

XR AS A SUPPLEMENT TO TELEHEALTH OR VA VIDEO CONNECT (VVC) APPOINTMENTS

XR can be used during VVC appointments or as a supplement to a VVC appointment. Determination of ability is dependent on device issued to the patient for at-home use. So, if your intent is to use the technology for this purpose, ensure you select an appropriate product using the [VA Immersive Reference List](#). It is important to note that at-home devices may be used synchronously (in collaboration with a remotely connected clinician), asynchronously (used independently by the patient), or both, dependent on the device and the intended use. If meant to be used synchronously at any point, a simultaneous phone or VVC appointment may be required unless the patient is bringing the device on station for those appointments.

PHYSICAL SECURITY OF THE TECHNOLOGY

XR devices are resources that require protection. For security purposes, please keep the device in a locked cabinet or office when not in use or plan for another means of securing and tracking the technology when within VA facilities. This may require communication with local logistics leadership to brainstorm the best approach for tracking inventory.

SCREEN CASTING OR MIRRORING

Some XR-based experiences offer the option to screen cast or mirror, allowing others (e.g., providers, caregivers) to see what the user (e.g., Veteran, VA Employee) is seeing in real-time. This function is particularly helpful for Veterans who may have initial difficulty with navigating the XR environments, those who are new to using XR, or those with functional and/or cognitive limitations, as it allows the facilitator to guide the user. If this is a functional capability needed for the product to be ordered, please make sure it is listed in salient characteristics or is a feature of the product selected prior to purchasing or contracting.

BIOMED

It is BioMed's preference to be able to review devices when received and to track devices by adding an EE number for inventory tracking. Logistics and BioMed at your facility should be able to help navigate this process. The EE number will be added to inventory for the specific service line or department where the device will be used. Some facilities may also require approval for devices through the local products committee (CPRC). If this is required, this should be completed prior to purchasing.

STEP 5: Establish Implementation Resources Needed

In addition to this resource, the Intro Guide, and other resources already called out in this document, the VHA XR Network Teams site has a variety of implementation resources available including, but not limited to:



CONTRAINDICATIONS CLINICAL GUIDANCE

Standard Operating Procedures

- [Example SOPs](#)
 - o Note: Example SOPs also include cleaning procedures that can be followed for any immersive technology device.
- [General VR SOP](#)
- [Example Clinical Service SOPs](#)



EVENTS AND COMMUNICATIONS

VXR & EXR Event Guidance:

- [VA Immersive Veteran and Employee Engagement Toolkit](#).

Authorization Instructions

- [VA form 10-3203](#) - CONSENT FOR PRODUCTION AND USE OF VERBAL OR WRITTEN STATEMENTS, PHOTOGRAPHS, DIGITAL IMAGES, AND/OR VIDEO OR AUDIO RECORDINGS BY VA



TRAINING & EDUCATION OPPORTUNITIES

Training Opportunities

- XR 101 & 102 Course Offerings



DOCUMENTATION TEMPLATES & OUTCOME MEASURES

National Templates

- VIRTUAL REALITY FOR CHRONIC PAIN AND SUICIDE PREVENTION
- VIRTUAL REALITY FOR CREATIVE ARTS THERAPY
- EXTENDED REALITY FOR REHABILITATION (in development)

CPRS Templates Health Factors

- All VR use Health Factors (HFs)
- All XR use Health Factors (in development)
- Rehabilitation and Prosthetics Service Specific



COMPETENCIES

Example Competencies

- Device Setup
- Device Maintenance
- Patient Assessment
- Safety Procedures



STANDARD OPERATING PROCEDURES

While not required to be in place prior to technology use for some facilities, creating an SOP is the primary means of putting expectations in place at a local facility or VISN level for how and by whom immersive technology may be used, requirements for competencies, cleaning and safety procedures, etc.

To aid in development of local or VISN-level SOPs, VA Immersive and XR Network participants have added examples to the MS Teams Group:

Example SOPs: for guidance on SOP development.

- **General VR SOP** (can be adapted to be an XR SOP)
- **Example Clinical Service SOPs**
- **Blind Rehab SOP**
- **RPS SOP**

Note: Infection control procedures should be followed for all immersive technology devices regardless of end user and use setting. Please see example SOPs that include cleaning procedures.

TRAINING & EDUCATION OPPORTUNITIES

Most platforms are intuitive and require minimal guidance. Some vendors provide technical training as part of the contract or as the site requests it. Clinicians need to be aware of any precautions and contraindications to use. Every VA medical facility should have a plan for ensuring clinicians are trained on these safety considerations. VA Immersive offers on-demand and in-person training and education opportunities. Please [reach out](#) to VA Immersive for more details on these opportunities.

There are TMS training course offerings; XR101 (Available Now!) and XR201 (Coming Soon!), which provide training and education accreditations, to ensure the safe and effective handling of immersive technology into clinical workflow. See below for more information on XR 101 and XR 201 course offerings.



XR101

Now Available, on-demand, with CEUs for **20 different disciplines!**

Please see the [XR 101 brochure](#) and below for more information on our XR 101 course offering.

Instructions for Completing Registration in TMS:

Per ILEAD, there is no need to register to watch the recording. All you need to do is start and complete the course. Then, take the post-test. If you have any trouble, [let us know!](#)

Course Description:

Utilization of Extended Reality (XR) technology has increased significantly in the past seven years from just a few VA facilities to now over 165; however, no standardized education is available to VA employees interested in learning more about the technology, how to utilize it safely and effectively, how, and where it may be utilized, and steps to integrate this technology into clinical workflow. This recorded, knowledge-based course will allow interprofessional healthcare teams to study all these topics in a structured, standardized manner and better support the care needs of their patients when integrating immersive technology and ensure all are receiving proper guidance on how to do so safely. For those participating who are not in clinical positions, this serves as education so that they may better guide decisions related to this technology, have a better understanding of VA offerings to Veterans, or so that they may better understand how XR integrates into clinical practices within the VA for their part in the business/organization. Participants will utilize knowledge gained from this offering to better lead, design, and/or implement extended reality programs and pilots within VHA. As engagement with and use of XR continues to increase across the enterprise, it is important a standardized training be offered to those employees interested in learning more to support or pursue use with patients, employees, or caregivers. Completion of the course will also facilitate better leadership of XR pilots and programs as either Project Lead or VR Champion for a facility or VISN.

ACPE Accreditation (for Pharmacists)

Any participants seeking ACPE accreditation must have their eProfile ID number in TMS to receive the accreditations.

Course Date and Time:

Enduring, recording offered from March 25, 2024
– March 24, 2027 (*ASRT expires on March 24, 2025*)

Registration:

For MOST VA Employees: See Direct VA TMS
Registration

- TMS course # 131006967
- [Extended Reality \(XR\) 101 - Enduring](#)
(1.0 Credit Hour)

For VA Employees seeking American Society of
Radiologic Technologist (ASTR) CEUs:

- TMS course # 131012373
- [Extended Reality \(XR\) 101 - ASRT Enduring](#)
(1.25 Credit Hours)

XR 201

Coming Soon! XR 201 course will act as a complementary course to XR101, diving deeper in outline how to utilize Immersive Technology in clinical practice, device procurement, documentation of XR sessions in electronic health records, and facilitation of local and VISN-level engagement through training and education activities.

COMPETENCIES

Additionally, the XR Network Teams Channel has [example competencies](#) that cover knowledge and skills checks such as:

- Device Setup
- Device Maintenance
- Patient Assessment
- Safety Procedures



DOCUMENTATION TEMPLATES AND OUTCOME MEASURES

Tracking outcomes and/or usage of XR clarifies the usability, feasibility, and benefits of the XR program you are implementing. Some national reminder dialogue templates are available for use and should already be installed at all VA facilities with CPRS. Currently, we have the following national templates available for use:

- **VIRTUAL REALITY FOR CHRONIC PAIN AND SUICIDE PREVENTION**
- **VIRTUAL REALITY CREATIVE ARTS THERAPY**
- **EXTENDED REALITY FOR REHABILITATION (in development as of July 2024 with planned release October 2024)**

There are also many [CPRS templates](#) (Oracle Cerner templates in progress) available through a local sites or VISN development that can be shared amongst Clinical Application Coordinators (CACs) for installation via VISTA. If you don't see a template for the use case you are looking to implement, [let us know](#).

Additionally, example questionnaires are available resources for clinicians to utilize. Some sites use a short questionnaire before and after use to determine differences in pre- and post-XR metrics (e.g., pain intensity, anxiety, depression, etc.) or may use feedback questionnaires to capture Veteran and clinician feedback on sessions or products. A resource is in development to guide VA employees to appropriate measures, provide detailed information about existing templates, and already embedded or embeddable health factors for data tracking; this resource will be available soon to the XR Network!

General health factors (HFs) for initial and subsequent sessions have been created to enable tracking of sessions completed locally and VA-wide. These health factors are embedded in many of the CPRS templates available, but if not using a CPRS template, these HFs should be added to the clinical encounter using this [guide](#) (see additional information in next section) or a site may develop their own template and add national health factors to it. Additionally, the national CPRS templates, and some of the others include HFs for tracking patient outcomes related to specific measures and other XR specific information. These allow facilities to track how the technology is impacting patient outcomes and other pertinent data. For questions about how to use these HFs, please [reach out](#) to us.

Additionally, the national CPRS templates, and some of the others include HFs for tracking patient outcomes related to specific measures and other XR specific information. These allow facilities to track how the technology is impacting patient outcomes and other pertinent data. If not using the nationally developed templates, a local template may be developed with national health factors embedded. For questions about how to use these HFs, please [reach out](#) to us.

For those working within rehabilitation disciplines, there are also Physical Medicine & Rehabilitation-specific health factors for initial and subsequent VR sessions, if the platform you choose will be used in that service line.

Overall, using standardized measures and associated HFs help demonstrate the added value of XR and can help encourage buy-in from all stakeholders (Think: future support and funding!).

All VR use Health Factors (HFs):	All XR use Health Factors [to be released October 2024]	Rehabilitation and Prosthetics Service Specific:
VA-HIL-VIRTUAL REALITY-FIRST VISIT COMPLETE	VA-HIL-EXTENDED REALITY-FIRST VISIT COMPLETE	VA-RPS-VIRTUAL REALITY-FIRST VISIT COMPLETE
VA-HIL-VIRTUAL REALITY-SUBSEQUENT VISIT COMPLETE	VA-HIL-EXTENDED REALITY- SUBSEQUENT VISIT COMPLETE	VA-RPS-VIRTUAL REALITY- SUBSEQUENT VISIT COMPLETE

Please refer to [these instructions](#) on how to add VR HFs in CPRS. If your XR program will be VA employee-facing, documentation may not be necessary. Though data collection is still helpful.

EVENTS & COMMUNICATIONS

VXR & EXR Events

If there is continued interest in experience immersive technology at your facility, hosting an interactive immersive technology Veteran eXpeRience (VXR) or an Employee eXpeRience (EXR) event is a great way to engage with the technology. Existing events related to Whole Health, Employee Recognition Days, and Skills Fairs are perfect opportunities to incorporate and showcase this technology for employees. Standdowns and Town Halls are great opportunities for engaging Veterans and employees.

For helpful guidance regarding VXR or EXR events, please review our [VA Immersive Veteran and Employee Engagement Toolkit](#). We also have [additional resources](#) relating to events and communications on our XR Network Teams Channel.

Photo/Video/Voice Recording/Verbal and Written Statement Consent

Unless covered by a disclaimer at an event, VA employees should see consent from Veterans, Caregivers, and/or employees using [VA Form 10-3203](#), CONSENT FOR PRODUCTION AND USE OF VERBAL OR WRITTEN STATEMENTS, PHOTOGRAPHS, DIGITAL IMAGES, AND/OR VIDEO OR AUDIO RECORDINGS BY VA - when taking photos, videos, using quotes from Veterans, caregivers, and/or other employees.



STEP 6: Begin Implementation

CREATING ENCOUNTERS

If using XR in a clinical area or within a discipline that requires encounters for patient interactions, continue to use the same encounter process (including CPT codes) that you would typically use, supplemented by specific note templates and/or health factors indicating VR or XR use and use add-on CPT codes as you are able. Adding XR or VR Specific Health Factors to an encounter can be done using these steps.

While currently non workload credit-bearing and non-reimbursable CPT codes, the American Medical Association (AMA) has released some category III or add-on CPT codes so that they may learn more about how XR is being use for future reimbursement considerations by CMS and other payers.



Current Category III VR CPT Codes (none currently for XR in general):

CPT code 0770T: Virtual reality technology to assist therapy (List separately in addition to code for primary procedure).

This is the primary code that can be added to ANY encounter where VR was used.

AR Gait Training Add-on Code: 0791T– Motor-cognitive, semi-immersive virtual reality–facilitated gait training, each 15 minutes (List separately in addition to code for primary procedure).

Use this code if using an augmented reality (AR) solution for gait training – use code multiple times for a single encounter for each 15 min increment.

CPT code 0771T: VRPD services provided by the same physician or other qualified health care professional performing the diagnostic or therapeutic service that the VRPD supports, requiring the presence of an independent, trained observer to assist in the monitoring of the patient's level of dissociation or consciousness and physiological status; initial 15 minutes of intraservice time, patient age 5 years or older.

Use this code to for the first 15 min of VR use within an encounter.

CPT code 0773T: Virtual reality (VR) procedural dissociation services provided by a physician or other qualified health care professional other than the physician or other qualified health care professional performing the diagnostic or therapeutic service that the VRPD supports; initial 15 minutes of intraservice time, patient age 5 years or older.

Use this code for the first 15 min of VR use in a procedural setting or other type of encounter where procedural dissociation may be needed.

CPT code 0772T: Each additional 15 minutes intraservice time (List separately in addition to code for primary service) (Billed in conjunction with 0771T).

Use this code for each additional 15 min of VR use within an encounter.

CPT code 0774T: Each additional 15 minutes intraservice time (List separately in addition to code for primary service) (Billed in conjunction with 0773T).

Use this code for each additional 15 min of VR use in a procedural setting or other type of encounter where procedural dissociation may be needed.

XR and Complementary and Integrative Health or Whole Health Modalities

If utilizing XR as a mode of providing Complementary and Integrative Health (CIH) modalities, creation of clinical encounters may be beneficial under a clinic, with specific stop codes or CHAR4 codes, for the modality provided for national “credit.” Please see the [OPPCT guidance document](#) for when to use CIH specific CHAR4s, HFs, etc.

STEP 7: Follow-up and Continued Support

Once you have successfully implemented XR at your facility, continue to follow-up with patients and/or other end users at an appropriate cadence. XR Champions will continue to support implementation, may aid in supplying or developing additional resources, facilitating further training, or keeping leadership apprised of progress and results. Be sure to [let us know](#) about your progress so we can highlight any successes and celebrate with you!





Thank you!

Thank you for your excitement in implementing immersive technology! We believe in VA's culture of innovation, and with this technology, the possibilities are endless.

Please keep us updated on your progress and [let us know](#) if we can help you overcome any barriers.

Additionally, we love sharing and highlighting successes through various platforms, both internal and external to VA! If you are interested in sharing your work, either via a presentation or through written communication, [let us know](#)!

