

Integrating Trainees to Telehealth Infrastructure in Primary Care in the Department of Veterans Affairs

Needs and Goals

- A nationwide Tele-Primary Care initiatives evolved to deliver cutting edge clinical services developing an educational infrastructure to incorporate trainees.
- A team of educators, telehealth (TH) experts, and primary care clinicians are developing a Tele-Primary Care curriculum for trainees to optimize their experience.

Setting and Participants

The 120,000+ healthcare professional trainees rotate through over 150 VA healthcare facilities. An assessment of the scope of TH training found 69% of all medical centers were providing individualized TH training opportunities for trainees.

- Developing an inventory of TH trained clinicians & pairing them with trainees for supervised TH training opportunities
- Cataloguing best practices in TH training
- Addressing policy obstacles such as training license and accreditation agency limitations.

Education Experience

- 15 Tele-Primary Care clinicians from different states assessed the need for a dedicated Tele-Primary Care curriculum meeting monthly via video conferencing technology.
- Each meeting a different components of the curriculum were addressed
- Common and interprofessional components in addition to individual profession-directed components within the scope of practice.
- Many lessons learned across the different sites were shared and challenges particularly in common were tackled amongst the group as a whole.
- Other sites can incorporate things that work well in another site like simulations, participation in established team virtual meetings and huddles.

Evaluation

- National standardized telehealth education model for trainees will be measured quantitatively and qualitatively.
- Quantify:
 - Web-based modules, Didactics, and Simulations provided
 - Trainee surveys
 - Competency-based formal evaluation
- Qualitative
 - Exit interviews
 - Post-telehealth training debriefing and reflection

Lessons Learned and Pearls

- Emphasize patient safety
- How to manage clinical and logistical emergencies
- Create a technology buzz
- Provide hands-on learning
- Teach them professional telepresence
- Communication and establishing rapport
- Provider and patient side physical environment
- Mind the gap: strategies bridge physical, cultural, and institutional gaps

Telemedicine coordination takes more time:

- Scheduling can be logistically challenging
- Negotiate with spoke site, telehealth visits can take longer, trainees can add additional time and clinic flow
- Telepresenters must be scheduled to assist with check-in, exam maneuvers, and procedures, such as ECGs.
- Provide a list of contacts to facilitate virtual warm handoffs to integrated mental health and pharmacy
- Work with the educational office liaison early on trainee schedules

Next Steps

- Continue to add more sites and catalogue experiences
- Quantify handoffs, select outcomes (Hgb A1c, PHQ9)
- Cross-profession evaluation (IPAC)

VA National Telehealth Primary Care Curriculum Call Group Report:

Our goal is to bridge the telehealth education gap using available technology that benefits patients in primary care

Thus far we have used different educational strategies depending on the telehealth site and we have been successful in our educational efforts so far

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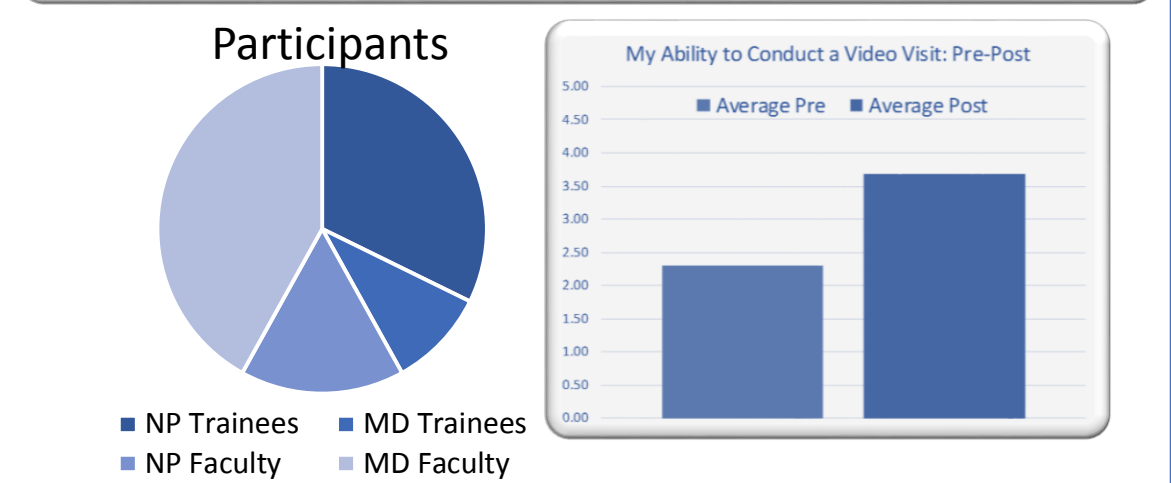
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San Francisco V-IMPACT Telehealth Hub & Center of Excellence in Primary Care Education

- Problem:** Despite available technology and benefits to patients, video visits were not being performed
- Needs Assessment:** certification requirements, knowledge, skills and attitude barriers identified
- Goals and Objectives:** developed for learners, for the curriculum and for the VA from needs assessments. **Curriculum**
- Curriculum & Educational Strategies:** 16 learners and 2 facilitators set in a computer training room
- Implementation**
- Evaluation**

Session	Content	Educational Strategies
Session 1 (1hr)	Equipment, technology, safety, documentation	Didactic, checklist, role play visits to VMR
Session 2 (1hr)	Video visit selection, integration into care delivery	Didactic, small group brainstorming, role play case vignettes
Session 3 (1hr)	Virtual physical exam, peripheral devices	Didactic, role play case vignettes



Atlanta V-IMPACT Hub

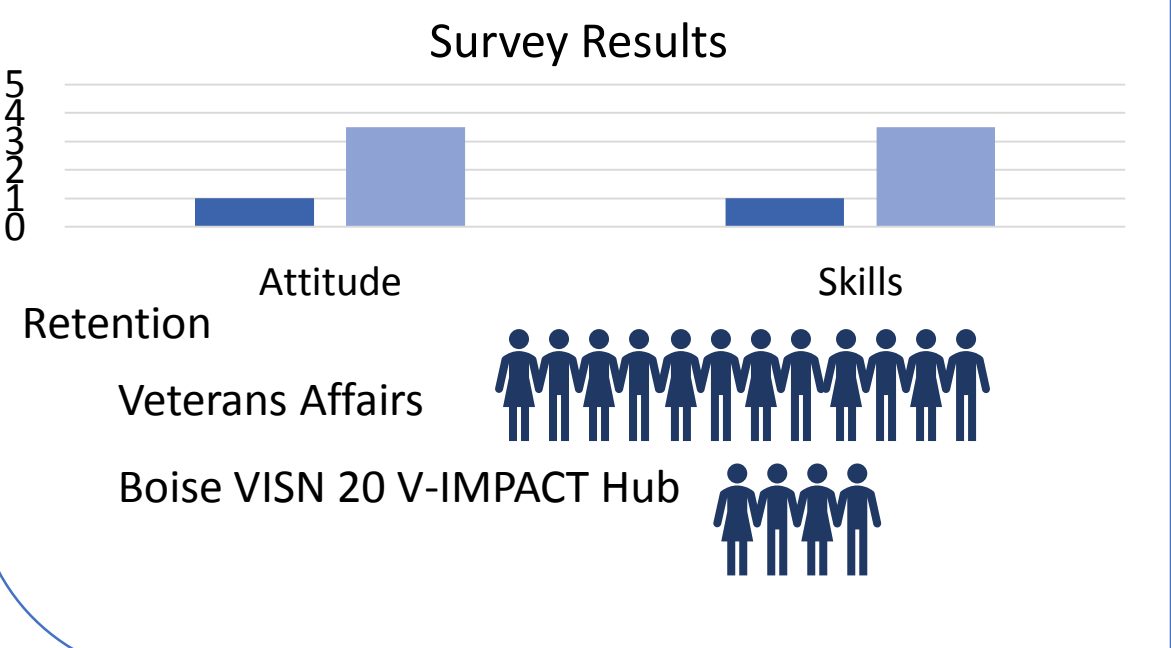
Objectives follow 6 ACGME core competencies
Teaching Methods/Learning Activities

Teaching Method	Recommended PGY for 3 year Residency	Recommended Term for 1 year Residency
Didactics	PGY 1, 2, 3	T1, 2, 3
Simulation Practice	PGY 1, 2	T1,2
Clinical Observer Hub	PGY 1, 2	T2,3
Clinical Observer Spoke	PGY 1, 2	T1, 2
Continuity clinic	PGY 2, 3	T3
Tech based Eye Care	PGY 1, 2	T1,2
Tele Dermatology	PGY 1, 2	T1,2

Boise V-IMPACT Hub & COEPCE

Total 48 Post-Graduate from 2015 to 2019
Total 17 Students : 15 Medical, 2 Pharmacy

- Survey
- 72% will incorporate telehealth into their practice
- 91% would like more telehealth training
- 100% found the training useful
- Direct observation: Competency-based behavioral descriptors
- Formal written & verbal feedback
- Exit interview – Reflection

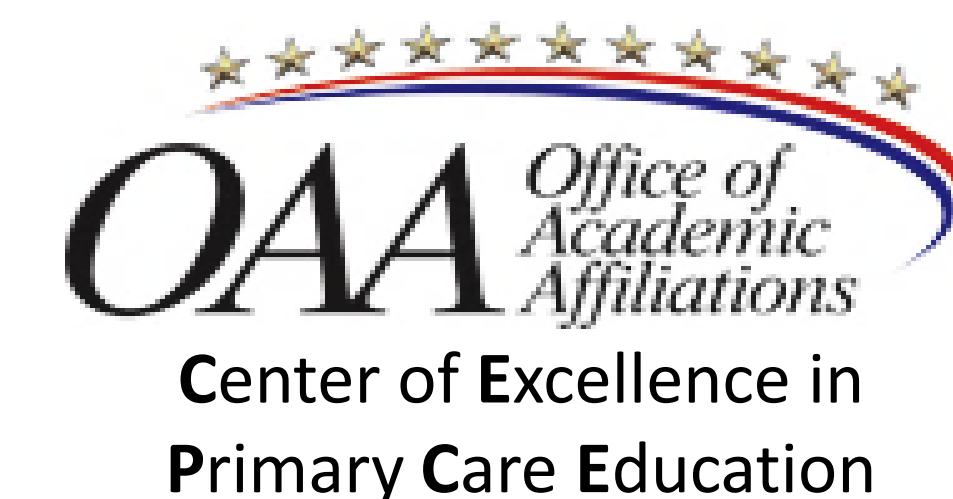


Telehealth Primary Care: Building towards Interprofessional Academic PACT

Telehealth V-IMPACT Hub

Center of Excellence in Primary Care Education

Sarai Ambert-Pompey, MD Janeen E. Smith, MD, Ijeoma A. Kene-Ewulu,
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Outline

- Introduction Telehealth in Primary Care
- Curriculum
- Evaluation
- San Francisco V-IMPACT Hub COEPCE
- Atlanta V-IMPACT Hub
- Boise V-IMPACT Hub COEPCE
- Lessons Learned
- Summary
- Questions

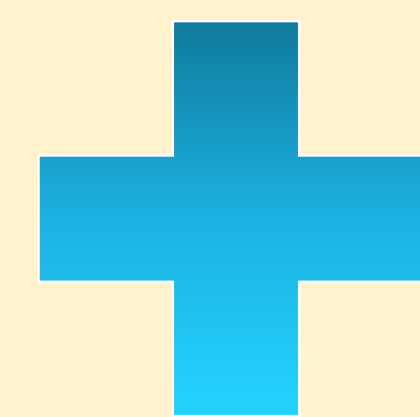
Objectives

- Review Telehealth Primary Care and integrated Telehealth in Primary Care to home and mobile devices
- Present the Telehealth Primary Care Curriculum and Evaluation
- Describe Telehealth Primary Care rotation experience and data to date including:
 - Workshops, simulations, and workplace learning
 - Interprofessional virtual real-time warm handoffs, virtual team huddles and meetings
- Discuss project lessons and pearls (2015 and beyond)

Telehealth in Primary Care is an Old Shoe



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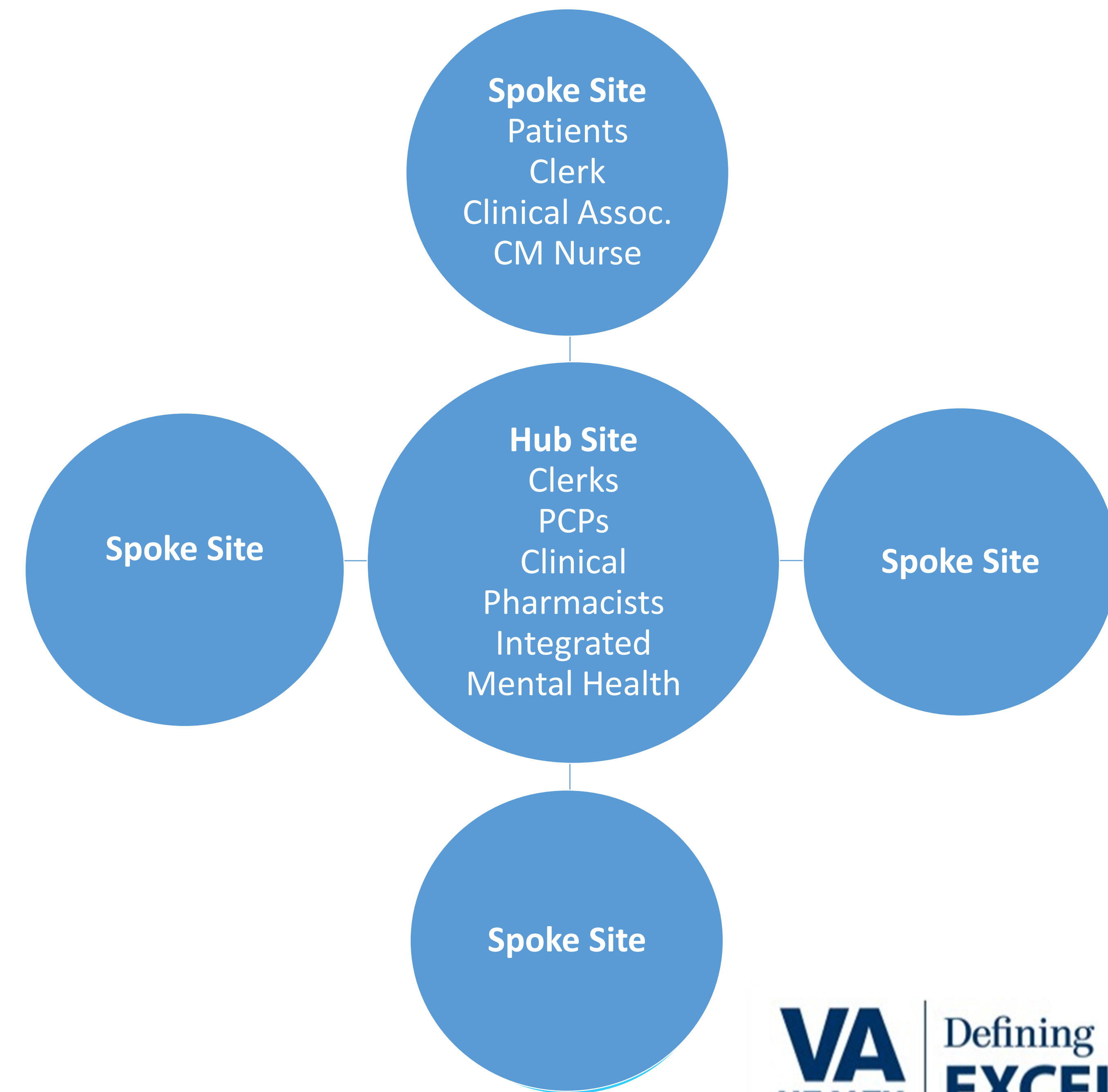
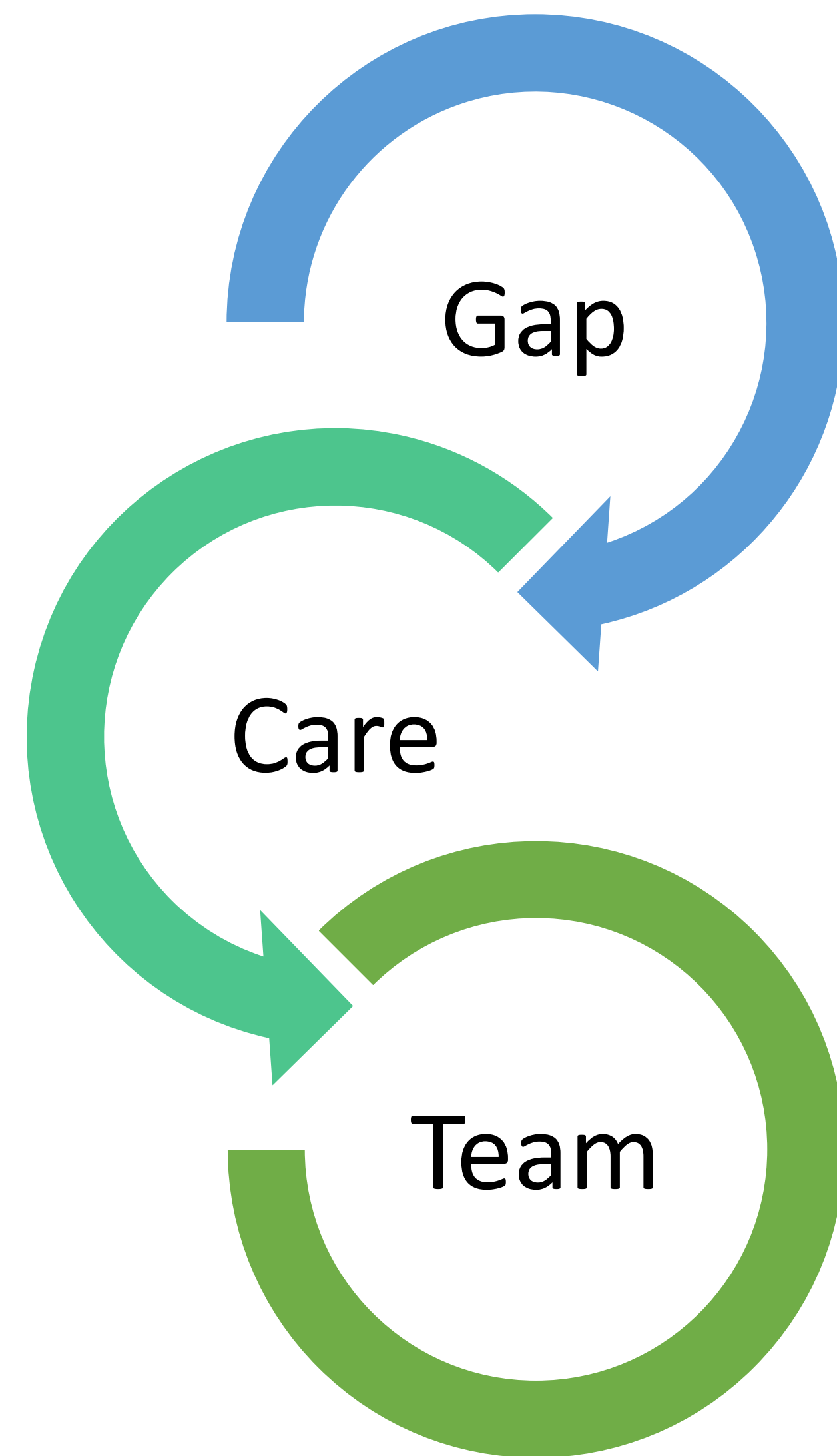


Take an aspirin
and call me in
the morning.



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V-IMPACT: Virtual Integrated Multisite Patient Aligned Care Team



VVC: VA Video Connect



DEFINITION

48 states and the **District of Columbia** have a definition for telehealth, telemedicine, or both



LOCATION

a few states have required a certain amount of distance between the provider and patient



In New Hampshire, Medicaid patients must be located in a rural area, as defined by Medicare

In South Dakota, an originating site and a distant site cannot be in the same community



MEDICAID REIMBURSEMENT

48

states & DC reimburse for **live video** through Medicaid

22

states reimburse for **remote patient monitoring**

2

offer reimbursement through their Department of Aging Services

13

states reimburse for **store and forward**

states rarely view **email/-phone/fax** as acceptable forms of service delivery

31

states reimburse for a **transmission/facility fee**

CONSENT

29

states include some sort of informed consent



ONLINE PRESCRIBING

Internet/online questionnaires are not adequate; states may require a physical exam prior to a prescription



PRIVATE PAYER LAWS

34

states and the **District of Columbia** have active laws



CROSS STATE LICENSURE

9

states issue special licenses or certificates for telehealth



Learning Objectives

	Physician (IM/FM)	NP	PA	CPS	PCMHI
Learning Objectives	<ul style="list-style-type: none"> • Learn how to safely and effectively provide care through <u>clinical telehealth modalities</u> (telehealth). • Demonstrate how to provide <u>profession specific care</u> through telehealth • Demonstrate how to provide <u>interprofessional team-based care</u> through telehealth • Provide primary care through telehealth 				
	<ul style="list-style-type: none"> • Primary care provider learners understand how to <u>remotely consult sub-specialties</u> via video 	<ul style="list-style-type: none"> • CPS and PCMHI learner <u>receive and balance same-day referral</u> availability with returning scheduled patients via telehealth 			

Modifiable Telehealth Primary Care Curriculum

Web module or equivalent	<ul style="list-style-type: none">● Clinical Video Telehealth (CVT) and/or Video to Home (VA Video Connect [VVC]), Emergency Procedures, Web side manners, Documentation
Skill assessment	<ul style="list-style-type: none">● Teleprovider Skills Assessment
Formal Didactic	<ul style="list-style-type: none">● Telehealth Introduction
Workshop/Simulation	<ul style="list-style-type: none">● Learner as a Teleprovider● Learner as a interprofessional team member – warm handoff● Learner as patient in sub-specialty clinic with post-simulation reflective practice● Case-based learning provider
Workplace Learning (Longitudinal)	<p>Interprofessional Academic TelePACT Clinic:</p> <ul style="list-style-type: none">● Telephone and Video direct patient care● Virtual huddles/team meeting, virtual warm handoffs● Population health management tools● E-Consult (non-visits chart reviews and recommendations)● Subspecialty video consult (if available)

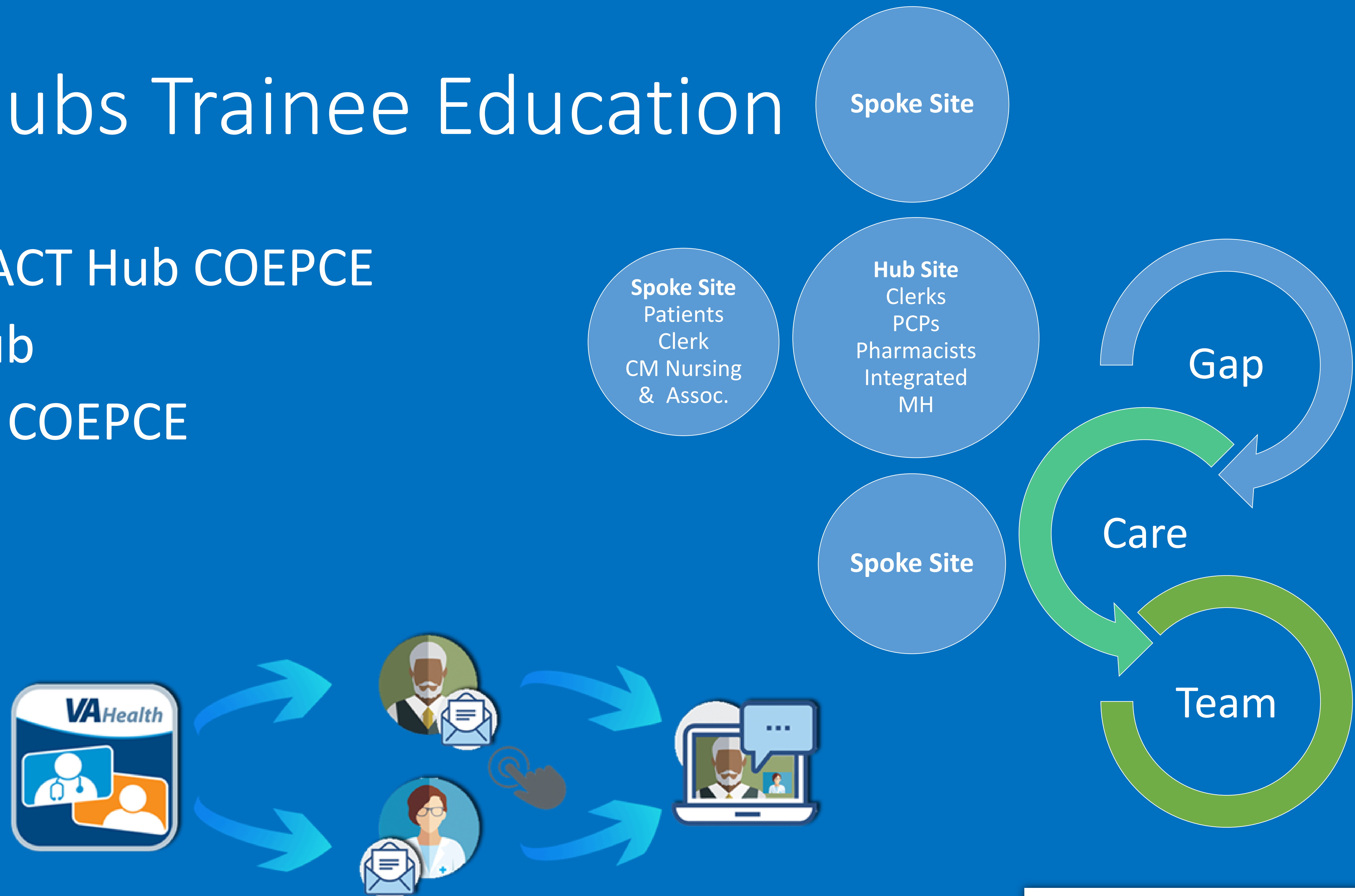
Telehealth Primary Care Evaluation

Evaluation

- Survey: Pre/Post Self-Assessment
- Observation-based feedback (periodic on longitudinal rotations)
- Evaluation Form: Complete training required components, CVT and/or VVC patient care, Documentation, Virtual Interprofessional activities (IP-CAT)
- Reflection: Exit Interviews
- Track number virtual visits
- Track clinical outcomes based on the virtual visits (vitals, labs, consults ordered)

V-IMPACT Hubs Trainee Education

- San Francisco V-IMPACT Hub COEPCE
- Atlanta V-IMPACT Hub
- Boise V-IMPACT Hub COEPCE



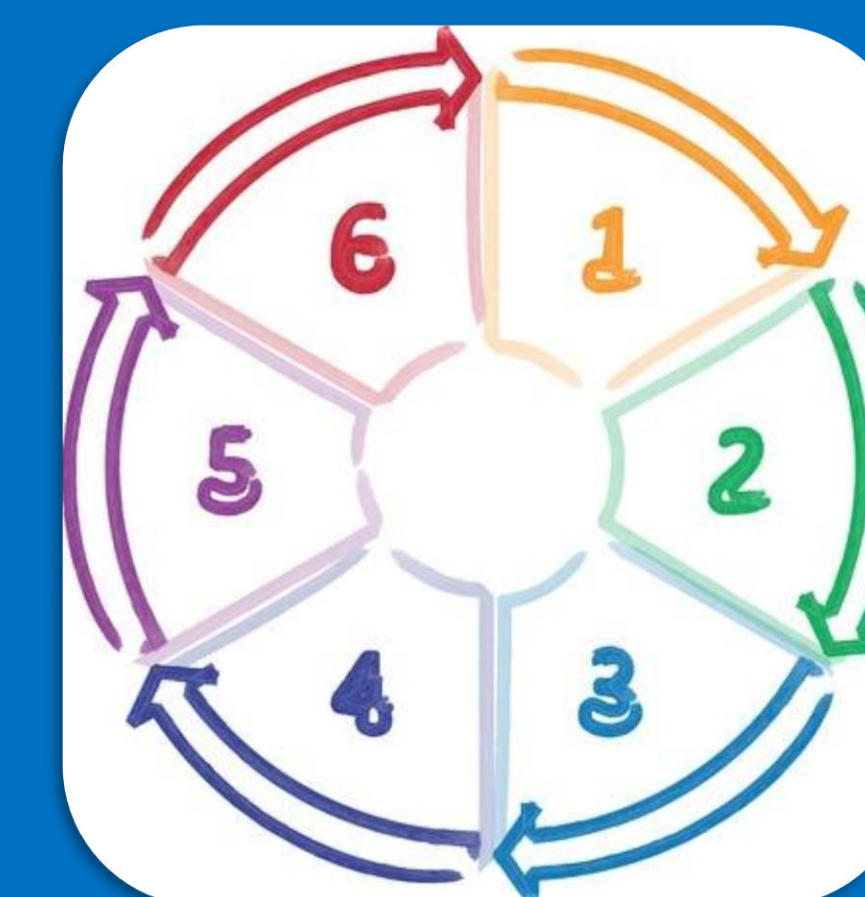
San Francisco V-IMPACT Hub and COEPCE

A Telehealth Curriculum for Interprofessional Trainees and Staff

Bringing back the house call via video

We used the Kern's 6 Step Model for Curriculum Development

- 1. Problem:** Despite available technology and benefits to patients, video visits were not being performed
- 2. Needs Assessment:** certification requirements, knowledge, skills and attitude barriers identified
- 3. Goals and Objectives:** developed for learners, for the curriculum and for the VA from needs assessments



- 4. Curriculum & Educational Strategies:** 16 learners and 2 facilitators set in a computer training room

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San Francisco V-IMPACT Hub and COEPCE

A Telehealth Curriculum for Interprofessional Trainees and Staff

5. Implementation
6. Evaluation

Implementation: 6 sessions offered to date (session 1 & 2)

Participation: 33 participants (10 NP trainees, 3 MD trainees, 5 NP faculty, 13 MD faculty, 2 unknown)

Certification: All participants passed a certifying test required to perform VVC visits

Satisfaction with session quality:

Facilitator quality: 4.7-4.8 out of 5

Effectiveness of educational strategies: 4.6 out of 5

Self-assessed comfort and ability to perform telehealth visits:

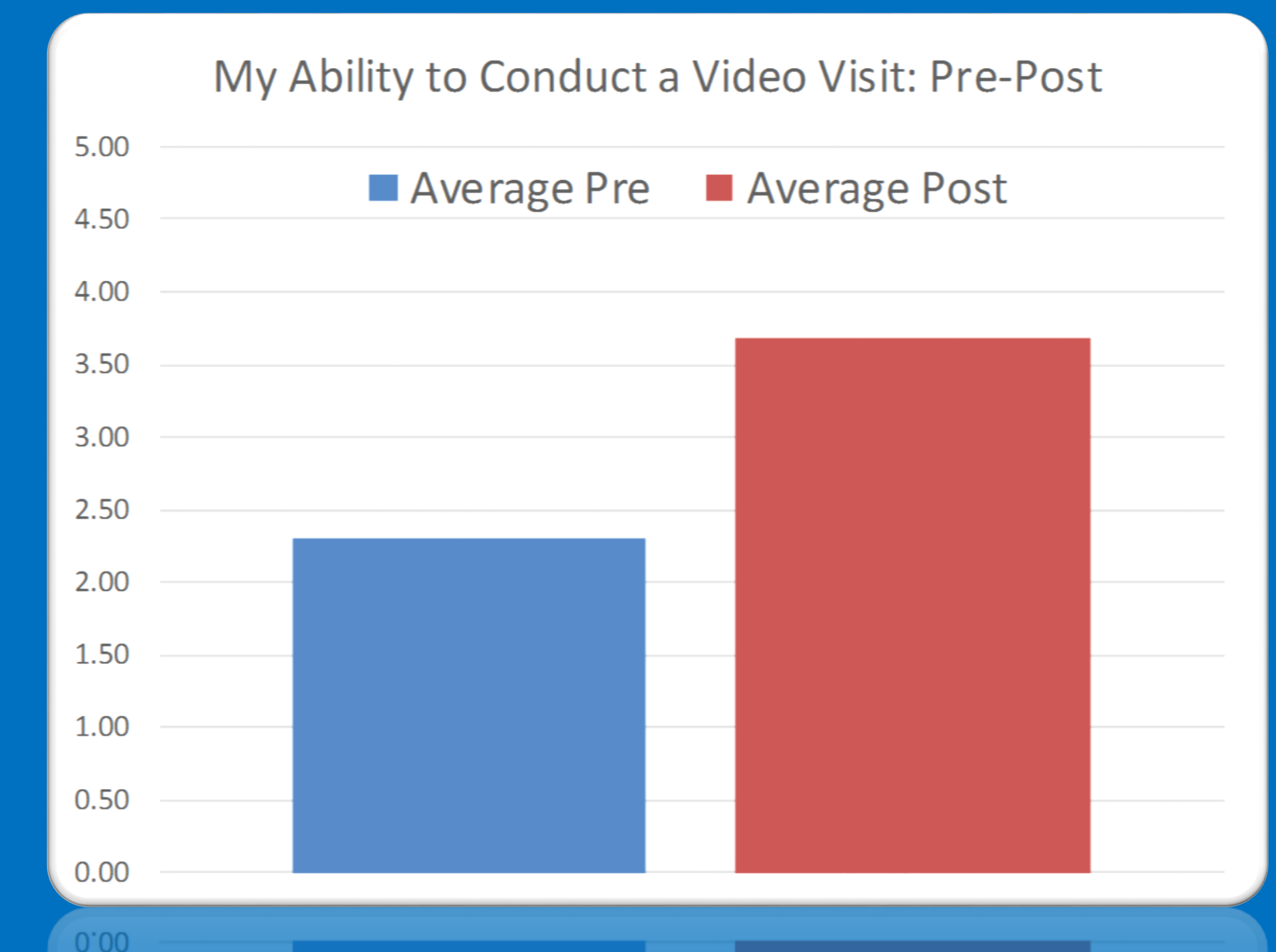
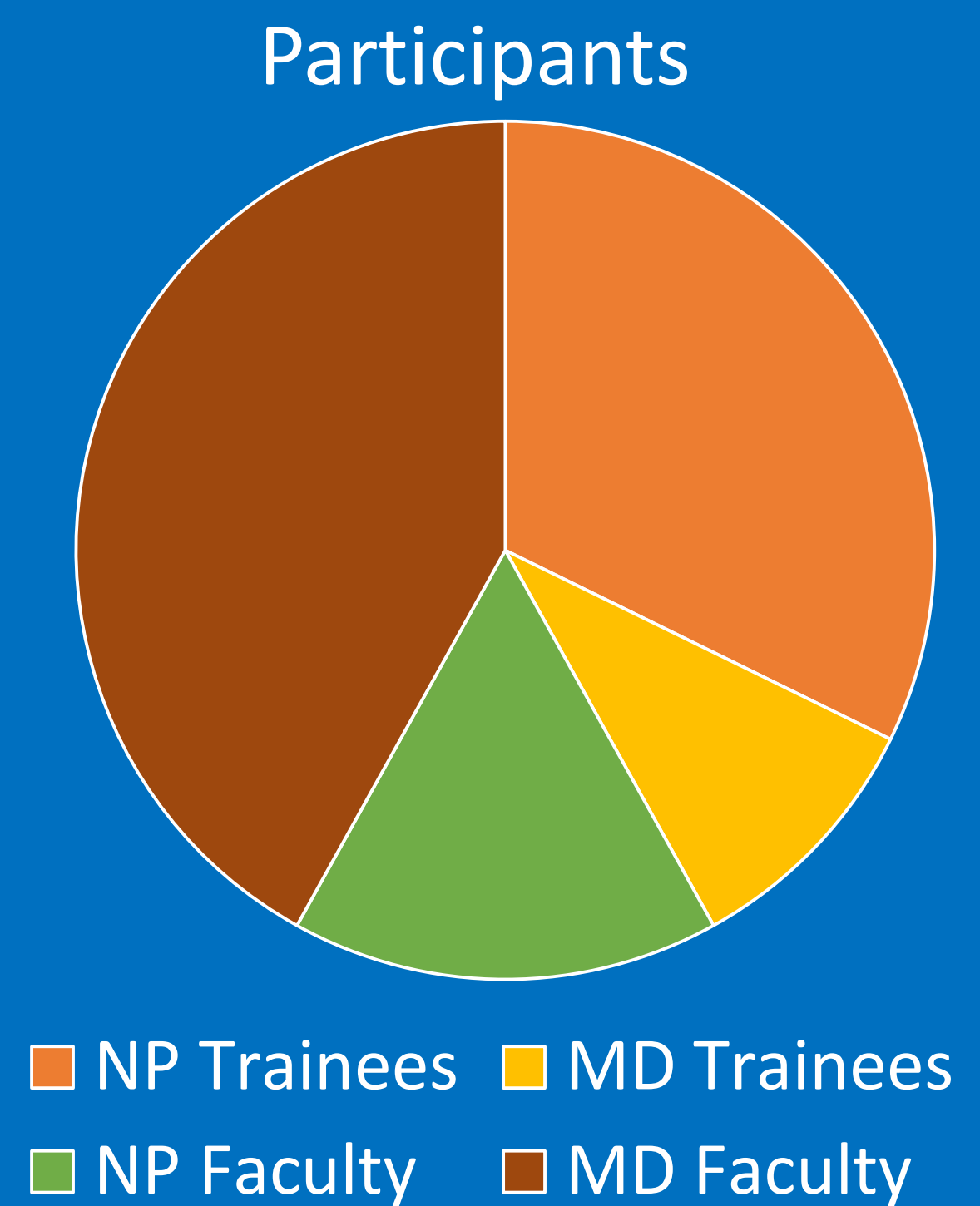
Ability to perform VVC visit: increased from 2.3 to 3.7 out of 5

Likelihood of performing VVC in next 3 months: 4.3 out of 5

Next steps

Focus groups with providers and trainees (further needs assessment)

Track performance of VVC visits



San Francisco V-IMPACT Hub and COEPCE

Educational experiences for UCSF internal medicine residents in development

- Rural Telehealth Elective- for any UCSF internal medicine residents with interest
- TelePrimary Care Continuity Clinic- for UCSF primary care internal medicine residents as a second clinic choice

Atlanta V-IMPACT Hub

Tele Primary Care Curriculum

- Goals
- Objectives follow 6 ACGME core competencies
- Teaching Methods/Learning Activities

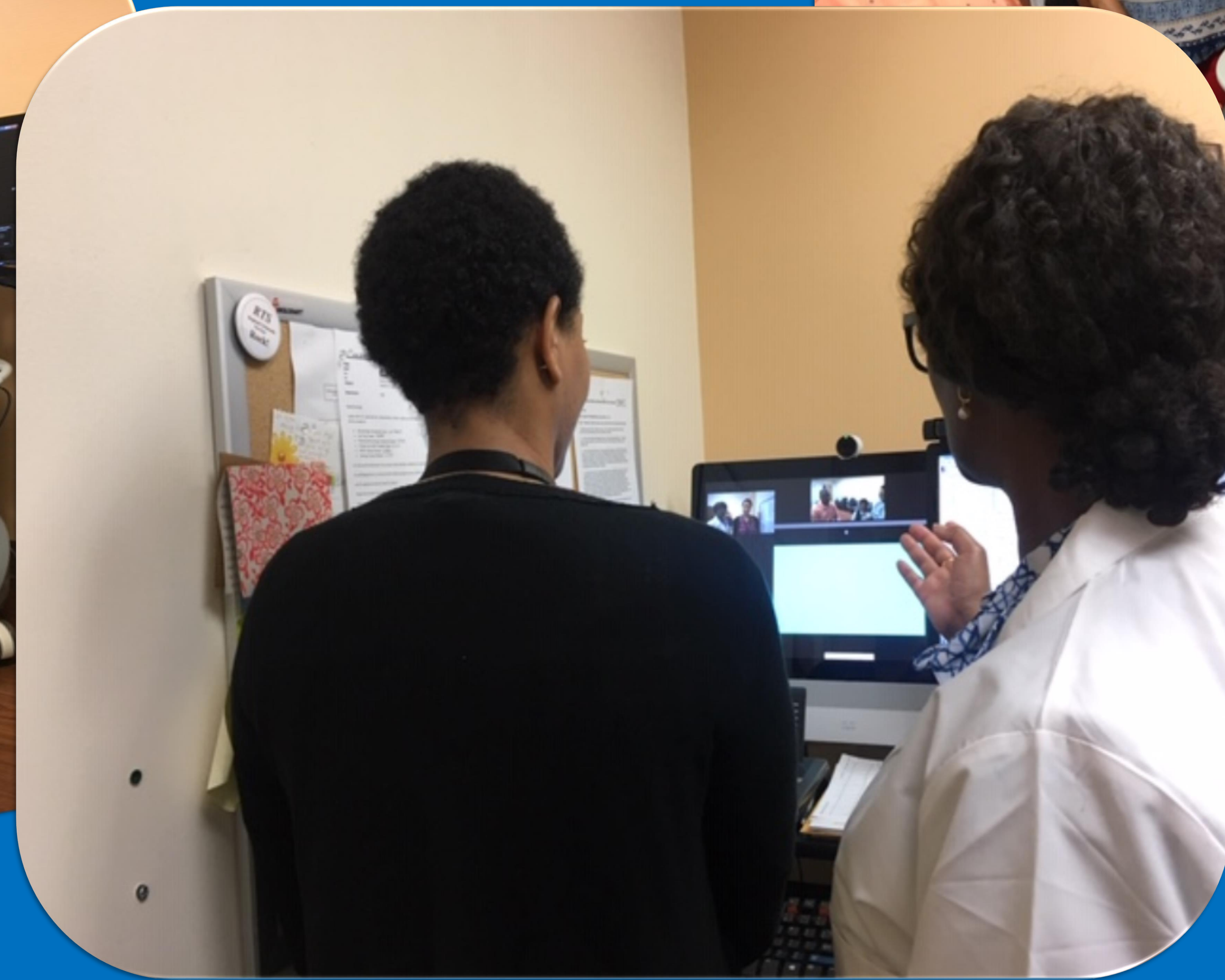
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Atlanta V-IMPACT Hub

Tele Primary Care Rotation Evaluation

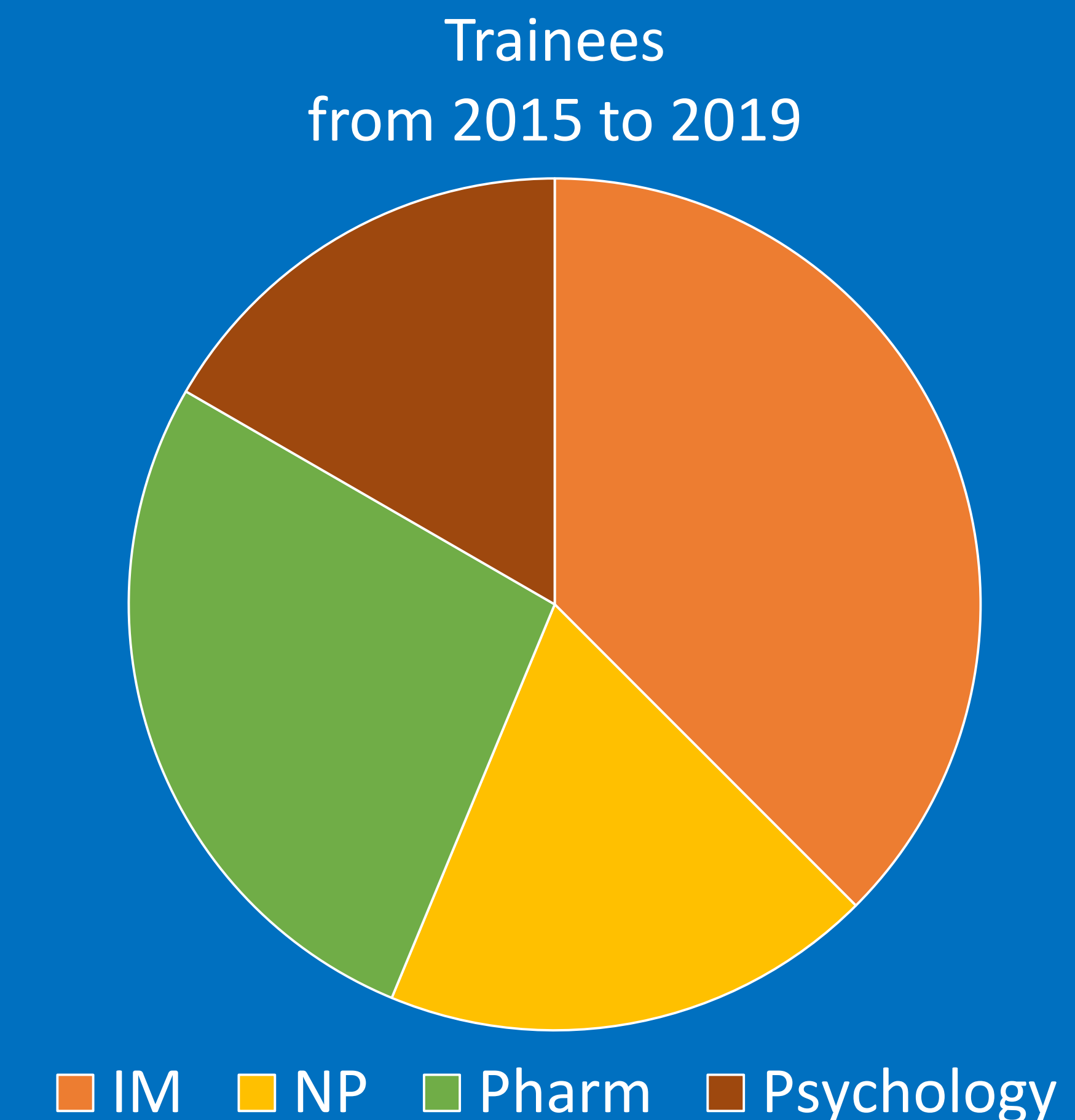
- **Review of Documentation** (History and Physical Note, Progress Notes, Diagnostic result notification)
- **Communications Skills** (Communicating with Patients, PACT Team members)
- **Completion of simulated telemedicine encounter** (Obtain consent, Tele-presence, Clarity, Documentation, Closing Encounters)
- **Attendance at Didactics** or one-on-one teaching
- **Discussion and Case-based Learning**
- **Attendance** at Relevant Conferences, Live Encounters, QI Project

Atlanta V-IMPACT Hub TelePrimary Care Simulation



Boise V-IMPACT Hub and CoEPCE

- TH PC Experiences available
 - Clinical Pharmacy Students and Residents
 - Medical Students and Internal Medicine Residents
 - Nurse Practitioner Residents
 - Psychology Interns and Residents
- Total 48 Post-Graduate
- Total 17 Students (15 Medical, 2 Pharmacy)



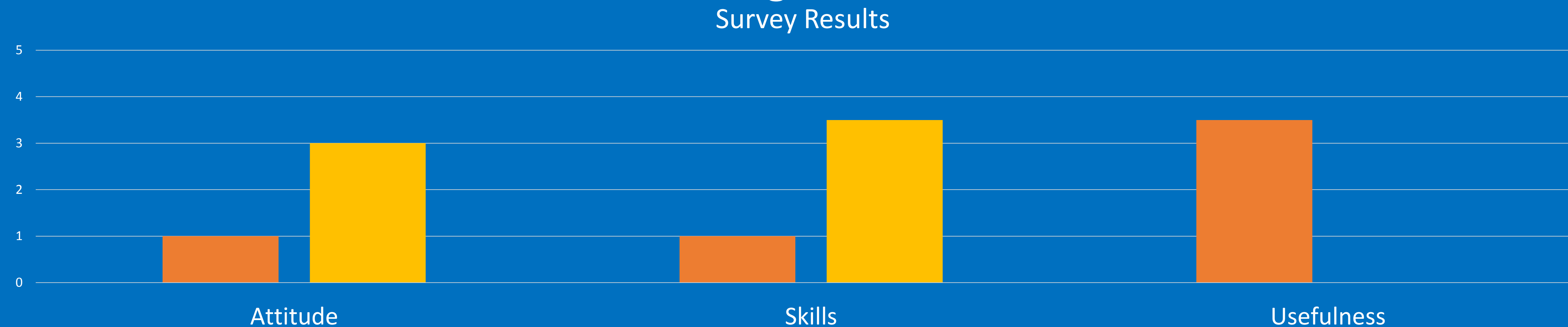
Curriculum

- Interprofessional noon conference: live mock visit to an off-site clinic
- Half-day during ambulatory clinic block available for student level trainees
- Exposure: one or two half-days during ambulatory block
- Immersion: 1-4 week block rotation
- Longitudinal: once a week rotation for 6 -12 months
- Workplace Learning: Hub-Spoke sites clinic staff
- Attending on-site for staffing and supervision



Evaluation

- Trainees complete a pre/post self- assessment: attitude, skills and usefulness of training
 - 72% plan to incorporate telehealth care into their practice
 - 91% would like more telehealth training



- Direct observation: milestone-based behavioral descriptors
 - Formal written and verbal feedback for trainees

- Exit interview – Reflection



- Future direction – completing Interprofessional Clinical Assessment Tool



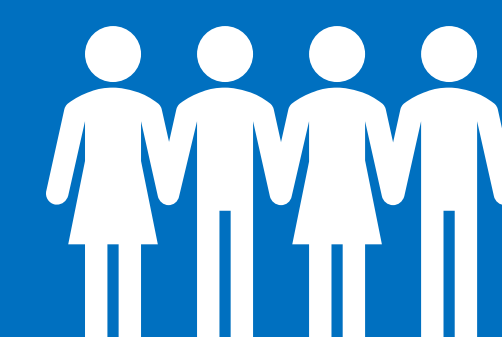
Boise V-IMPACT Hub and COEPCE

- Retention

- Veterans Affairs



- Boise VISN 20 V-IMPACT Hub



Pharmacy Resident Learning Experience

- 4 week rotation
- Completion of a presentation or in-service via CVT
- Shadowing different members of the TelePACT team

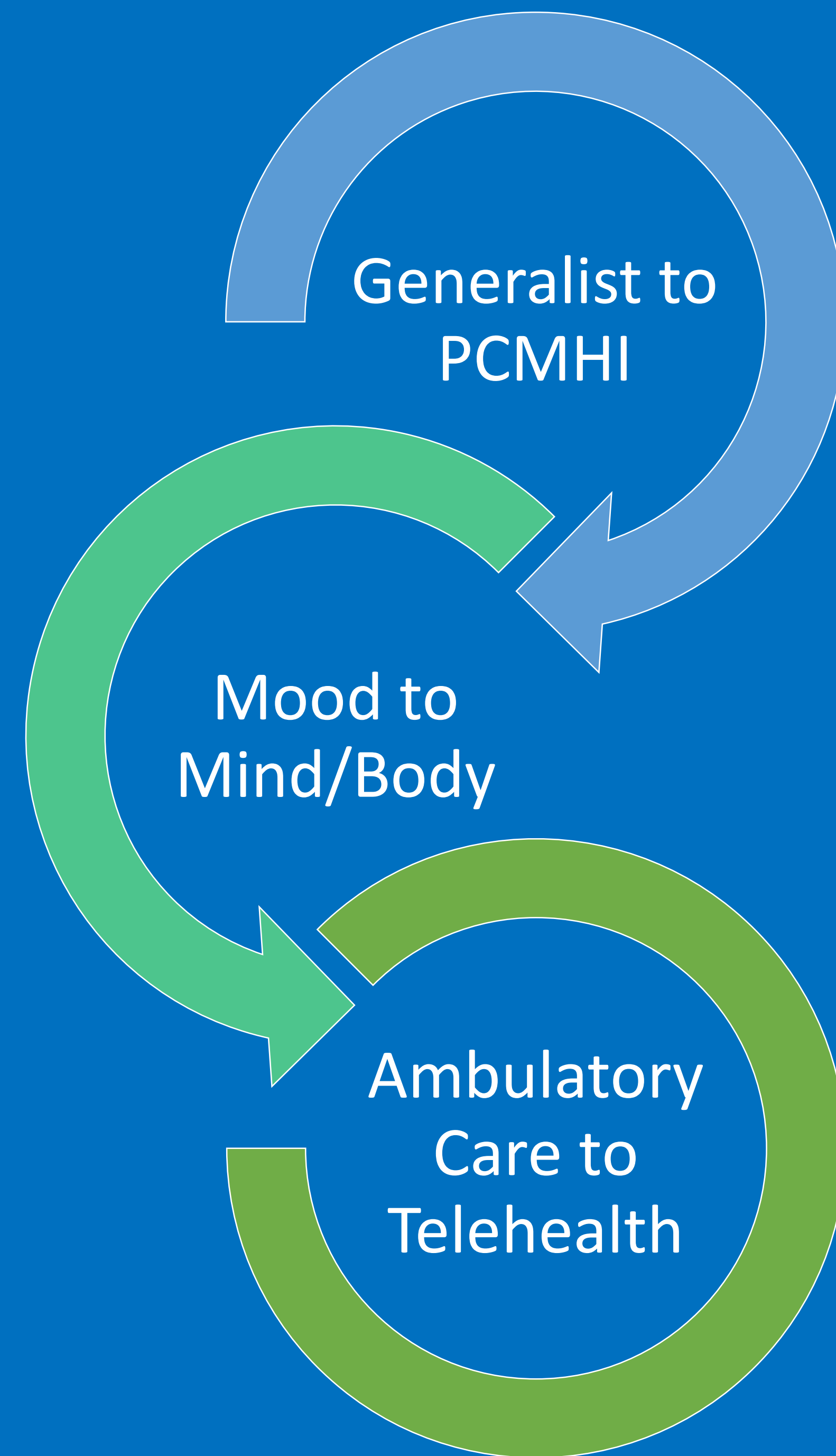
PGY1	PGY2
A more introductory experience to TH focusing on exposure to the different technologies and TelePACT team roles	Increased autonomy, may be the primary point of contact for some TelePACT teams
Visits observed by preceptor	Visits conducted independently
Orders and charting completed by preceptor	Orders and charting completed by resident with scope of practice

*Currently there is no independent practice allowed by trainees across state lines. All visits are observed by CPS preceptor. Charting and orders also completed by preceptor.

Pharmacy Resident Feedback

- Valued the opportunity to work with different VA locations that we serve from Hub
 - Exposure to different team structures
 - Experiences with selecting medications based on different formulary management from site to site
- Valuable to have shadowing experiences incorporated to observe how different PACT members utilize telehealth technology in their roles
- Many found the opportunity to work with multiple CPSs a good way to see how different CPSs manage their clinic flows and utilize different telehealth modalities to conduct appointments (CVT vs. VVC vs. phone)

Psychology Fellows



Psychology Fellows

- Internship required (year 5); Fellowship optional (year 6)
- Six month rotation, one day/week
- Varied clinics (PCMHI in 16 sites, each with 1-9 panels)
- Supervision only within state of Idaho (2 sites, 5 panels)
 - Independent with preceptor on site
 - Preceptors sign all notes

Psychology – Goals, Reactions, Future

- Set goals - developmental approach
 - Participate in weekly team meetings/huddles
 - Receive handoffs, not solely scheduled patients
 - Collaborative care with onsite staff (MD, Pharm, RN, etc.)
 - Observe/Facilitate a group
- Reactions: innovative, Veteran comfort, good rapport, improving flexibility
- Future:
 - Initiate training earlier in process?

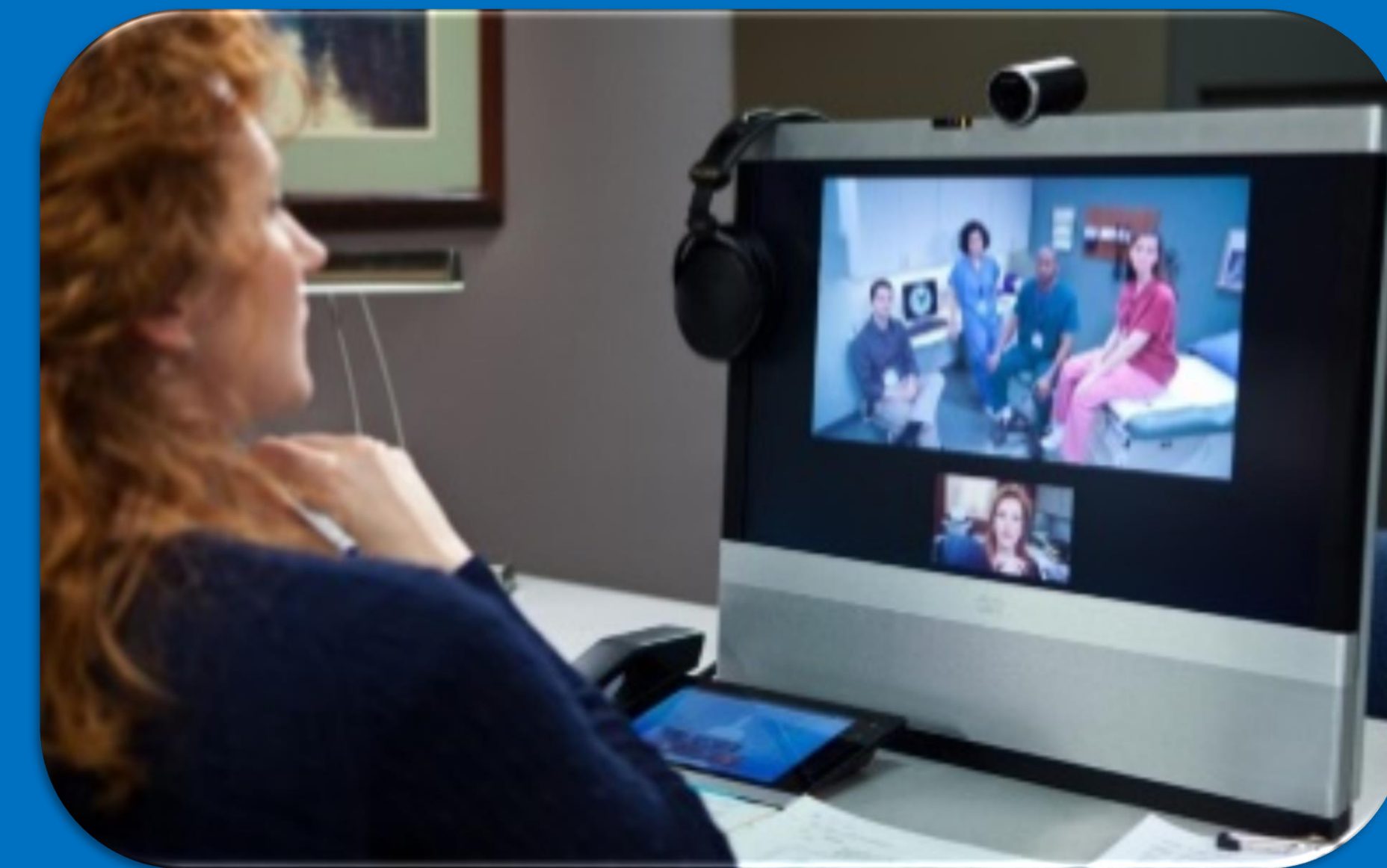
Lessons Learned

Telemedicine coordination takes more time

- Scheduling can be logistically challenging
- Negotiate with spoke site, telehealth visits can take longer, trainees can add additional time and clinic flow
- Telepresenters must be scheduled to assist with check-in, exam maneuvers, and procedures, such as ECGs.
- A list of contacts must be generated to facilitate virtual warm handoffs to

integrated mental health and pharmacy team.

- Work with the educational office liaison early on trainee schedules



Top Pearls

Emphasize patient safety

- How to manage clinical and logistical emergencies

Create a technology buzz

- Provide hands-on learning and access to practice equipment

Teach them professional telepresence

- Communication and establishing rapport
- Provider and patient side physical environment

Mind the gap

- Strategies bridge physical, cultural, and institutional gaps



Summary

- Telehealth is only expanding
- Telehealth learning opportunities need to expand with it
- Interprofessional and multisite collaboration
- Tailor learning experience to current local resource

Telehealth Primary Care Curriculum Group

- Monthly call
- Modifiable interprofessional work-based learning curriculum
- Exchange ideas, experiences, challenges, and overcoming those

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Questions