

WHELD INFO 23

8 – 12 JULY 2023 | SYDNEY, AUSTRALIA

Simulating Telemedicine, Medication Reconciliation, and Social Determinants of Health | A Novel Instructional Approach to Health Systems Competencies

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AICH



Learning Objectives

- Describe a telemedicine simulation for future professionals to promote adoption and collaboration
- Report preliminary data studying effectiveness of teaching and learning
- Share lessons learned to improve logistics and impact



Association of American Medical Colleges (AAMC)



**PATIENT SAFETY &
APPROPRIATE USE**



ACCESS & EQUITY



COMMUNICATION



**TECHNOLOGY FOR
TELEHEALTH**



**ETHICAL PRACTICES &
LEGAL REQUIREMENTS**



**DATA COLLECTION
& ASSESSMENT**

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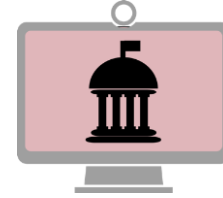
Foundations



Communication



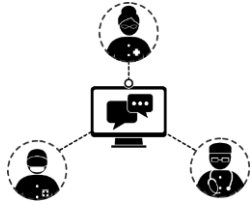
Physical Exams



Policies &
Governance



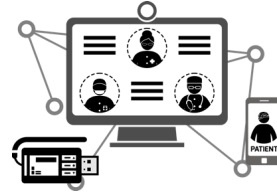
Workflow



Care Coordination



Social
Determinants



Tech Platforms



Safety &
Quality

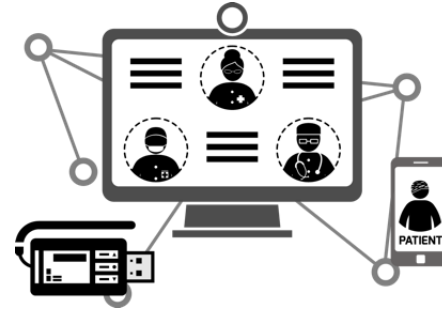
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Communication



Social Determinants



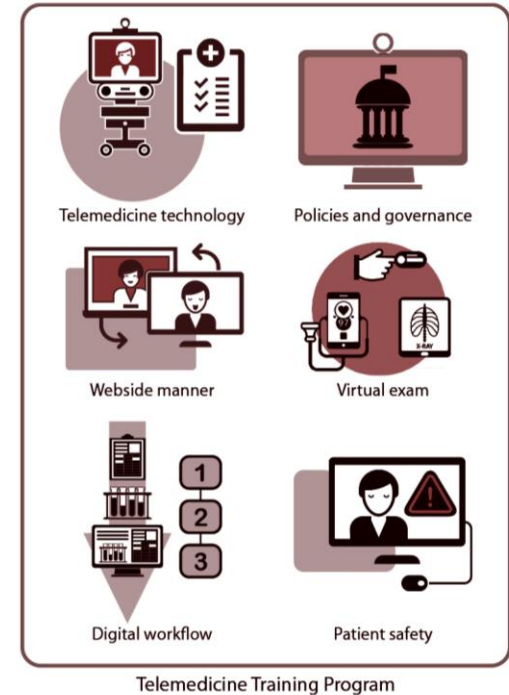
Tech Platforms



Workflow

AAMC | Cross-Cutting Competencies

Item	Domain	Competency
I 2a	Patient safety	Incorporates telehealth into encounters
II 2a	Access and equity	Defines how telehealth affects health equity
III 1a	Communication	Develops an effective rapport
III 2a	Communication	Assesses the environment
IV 1a	Data collection	Obtains a history during an encounter
VI 3a	Ethics and law	Knowledge of ethical and professional requirements



Telemedicine Instructional Workshop



1

Pharmacosafety
lecture

2

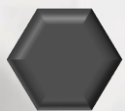
Telemedicine &
social determinants

3

Simulation &
individual feedback

4

Large group
debrief



Telemedicine Simulation

- **Standardized patient** presenting to a virtual appointment and **requesting refill**
- Student furnished with **brief history** and **last documented medication** list
- Patient had **medication bottles** and would retrieve if requested; **two discrepancies**
- Discrepancy **linked to a social determinant** that student must address

TeleSimulations | Med Rec



A

Collect a medication history

B

Environmental cues & artifacts

C

Reconcile & refill medications

D

Develop person-centered plan

Example of the Medication List

	Student medication list	Patient medications at home	Indication for use	Comments	Location
1	Amlodipine 10mg once a day	Amlodipine 10mg once a day	Hypertension / high blood pressure	Taking as prescribed	Medicine cabinet
2	Apixaban 5mg twice a day		Anticoagulation / stroke prevention	Has not been taking for several months	Do not have
3	Atorvastatin 40mg once a day	Atorvastatin 40mg once a day	Hyperlipidemia / high cholesterol	Taking as prescribed	Medicine cabinet
4	Carvedilol 25mg twice a day	Carvedilol 25mg twice a day	Congestive heart failure	Taking as prescribed	Medicine cabinet
5	Furosemide 40mg once a day	Furosemide 40mg once a day	Congestive heart failure / fluid retention	Empty bottle; needs a refill	In hand
6	Metformin ER 1000m once a day	Metformin ER 1000m once a day	Hyperglycemia / diabetes	Taking as prescribed	Medicine cabinet
7	Sacubitril/valsartan one tab twice a day	Sacubitril/valsartan one tab twice a day	Congestive heart failure / blood pressure	Taking as prescribed	Medicine cabinet
8	Spirolactone 25mg once a day	Spirolactone 25mg once a day	Congestive heart failure / fluid retention	Taking as prescribed	Medicine cabinet
9		Ibuprofen 200mg; one to two tablets three days a week	Occasional joint pain or back pain	This is an over-the-counter medication the patient purchased	In computer desk

Measurement of Teaching and Learning

- Faculty measured student competencies using structured instrument
- Surveyed student satisfaction with the simulation and self-assessment of performance



4. **Communication via telehealth (III 1a):** Develops an effective rapport with patients via real or simulated video visits, attending to eye contact, tone, body language, and non-verbal cues.

Not yet entrustable	Approaching entrustment	Entrustable
The learner did not attempt or did not establish a rapport with the patient. The learner frequently did not make eye contact by looking in the camera. The learner did not attend to body language and other non-verbal cues. Engaged in activities off camera without verbalizing what he/she/they were doing. Frequently used medical and technical jargon. Respected patient preferences if <u>expressed</u> , but did not actively solicit preferences or confirm understanding.	The learner attempted to establish rapport with the patient. Engaged in active listening, allowing for expression of caring, concern, and empathy. Made some eye contact with the camera. Did not optimize his/her/their camera presence by attending to camera angle, and distance from the camera or microphone. Sometimes verbalized activities off camera, but there were some lapses or awkward pauses.	The learner established rapport with the patient. Engaged in active listening. Routinely “slowed down”, avoided jargon, checked patient understanding, and solicited patient preferences. Made eye contact with the camera regularly. Sat an appropriate distance from the camera, using body-language and non-verbal cues effectively. The learner verbalized what he/she/they were doing when not focused on the patient (e.g., looking at patient records) or when moving off camera.
□	□	□

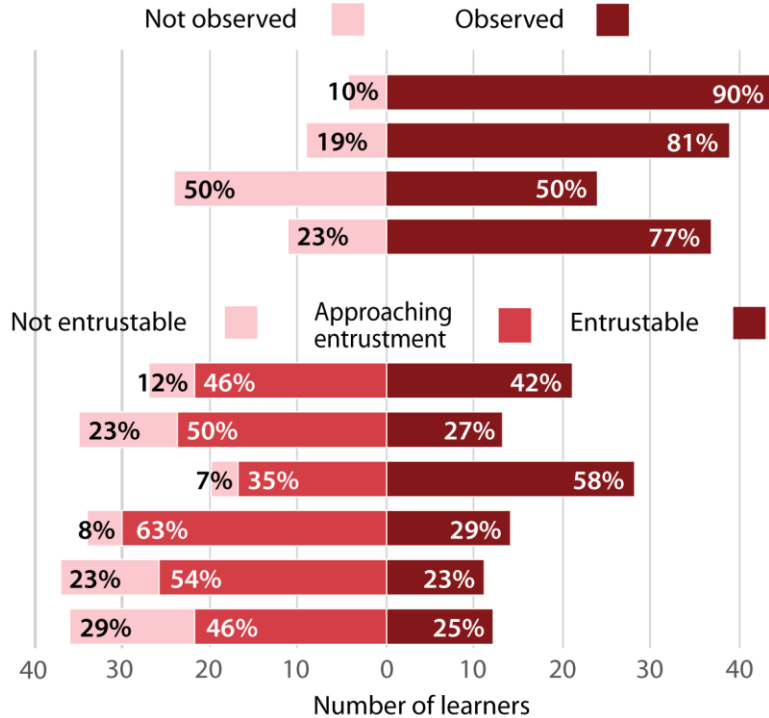
Competency Development

Medication Reconciliation Competencies

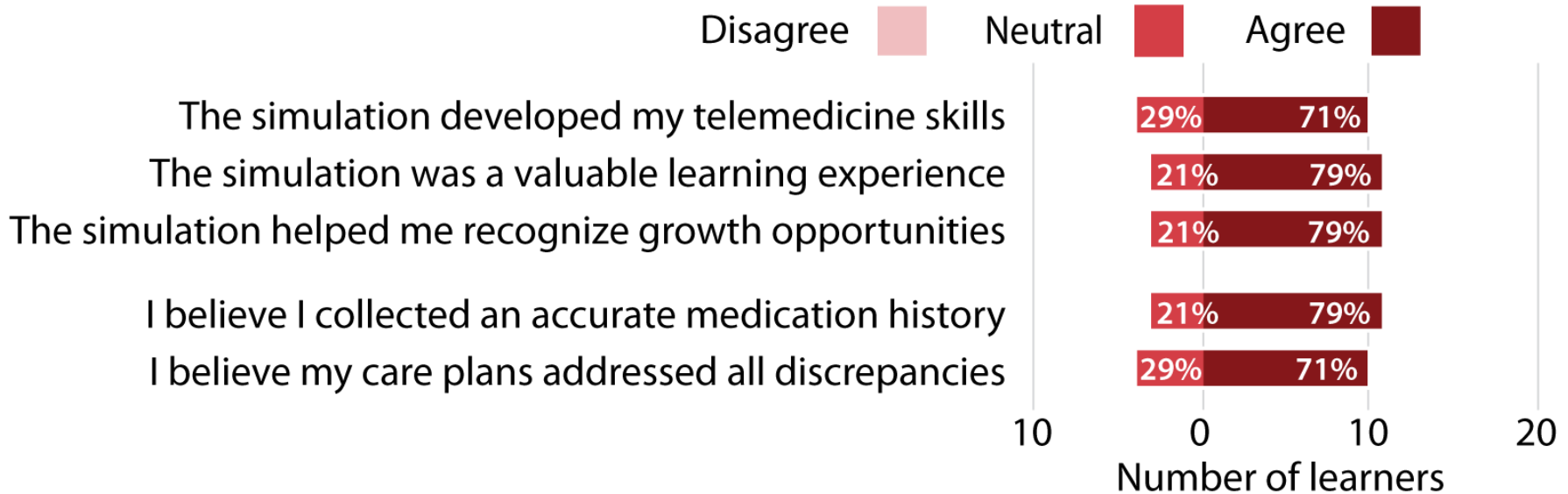
- Identified medication patient was not taking
- Discovered the root cause (i.e., financial constraints)
- Identified an additional over-the-counter medication
- Proposed patient-centered reconciliation solution

Telemedicine Competencies*

- I 2a: Patient safety; appropriate use of technology
- II 2a: Equity: how telehealth affects health access
- III 1a: Communication; develop an effective rapport
- III 2a: Communication; assessing and managing environment
- IV 1a: Data collection; collecting a patient history
- VI 3a: Professionalism; ethical challenges and requirements



Satisfaction with Simulation



Discussion

- A **practical strategy** for teaching and evaluating telemedicine competencies
- Emphasized the **relative advantages** of telemedicine over traditional care
- First step towards **illustrating intersection** between social determinants, telemedicine, and digital divide
- Most **approaching entrustment**; simulation and module well-received
- Learners **struggled with some reconciliation** tasks; requires reinforcement



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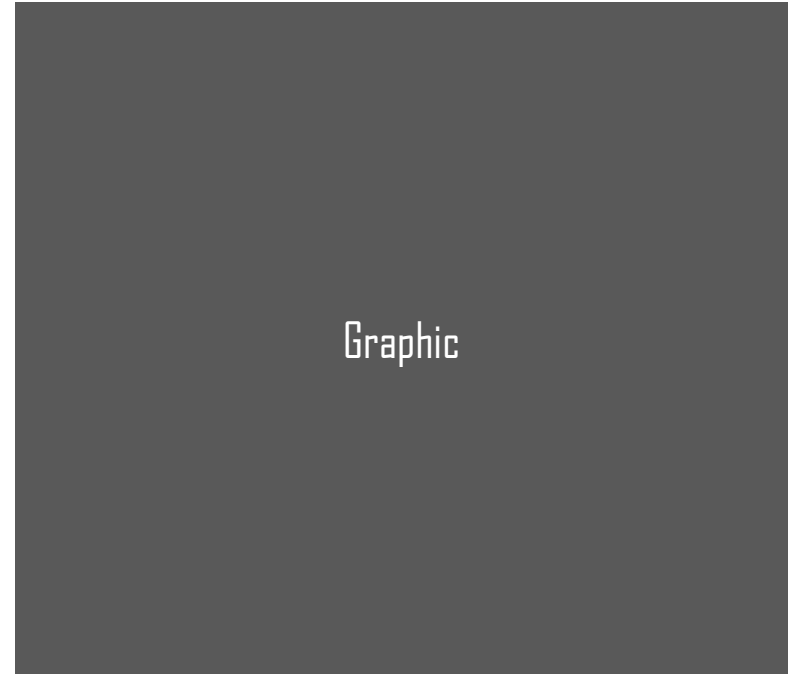
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Template

- Bullet number one
- Bullet number two
- Bullet number three



1. Reference
2. Reference