TELEHEALTH AND TELENURSING – PART II

CAROLYN SIPES, PHD, CNS. APRN, PMP, RN-BC, NEA_BC, FAAN

CORE FACULTY, PHD NURSING PROGRAM

AGENDA

Summarize The Current Status Of Telehealth/

Telenursing - Definitions, Applications, Trends

Discuss Impact Of Pandemic On Telenursing &

Education

Identify Informatics Competencies Required For

Delivery Of Telenursing

Discuss The Impact Of Telenursing On Patient

Outcomes

Current Exemplars Of Telenursing

Self-assessment Quiz

THE IMPACT OF THE PANDEMIC ON TELEHEALTH/TELENURSING - DEFINED

Telemedicine defined- diagnosis and treatment of health conditions from remote location, is one part of telehealth.
Only physicians and nurse practitioners can perform telemedicine (diagnosis and treatment). Nurses can perform telehealth which includes education, monitoring, and triage from a remote location

Telenursing - nurses provide distance nursing care monitoring, education, follow-up, remote data collection and interventions, pain management, family support, and multidisciplinary care in an innovative way

THE IMPACT OF THE PANDEMIC ON TELENURSING - DEFINED (CONT.)

Telenursing Is:

Cost-effective Method That Reduces Treatment Costs,
Compensates Hospital Bed And Nursing Staff Shortage,
Reduces Patient Anxiety, Quarantine,
Keeps Patient At Home To Avoid Infecting Others In Society.
Telenursing Reduces Risk Of Nursing Staff Infection

APPLICATIONS OF TELENURSING DIGITAL FUNCTIONALITY

Monitoring activities, VS

Diagnostic evaluations

Decision-support systems;

Storage, dissemination of EHRs for diagnostic purposes;

Image compression for storage and retrieval;

Research;

e-prescriptions;

Education of healthcare professionals & consumers;

Support of caregivers

CURRENT STATUS & UPCOMING TRENDS

Current Issues - Trends

Increased Demand For Care During The Pandemic

Retiring Nurse Educators Mean A Falling Number Of - Nursing Faculty

Nurse Burnout From The Pandemic

An Aging Population With Complex Medical Needs

Nursing Staff Reaching Retirement

Greater Shortage In Rural Areas

154% Increase In Telehealth Visits In March 2020 Compared To March 2019.

CURRENT STATUS & UPCOMING TRENDS

Choose Home Care Act: Congress in October 2021.
–
Expand The Benefits Provided By Medicare For Home Healthcare Services.

More Remote Monitoring

Seniors Could Choose Telehealth Nursing Services For Seniors.
To Go Home Rather Than A Skilled Nursing Facility After Hospitalization.

THE IMPACT OF THE PANDEMIC ON TELENURSING -

NEW DEVELOPMENTS

Education Of Healthcare Consumers And
    Professionals
Higher Quality Of Care
Removes Geographic Barriers To Care
May Lower Costs Of Healthcare
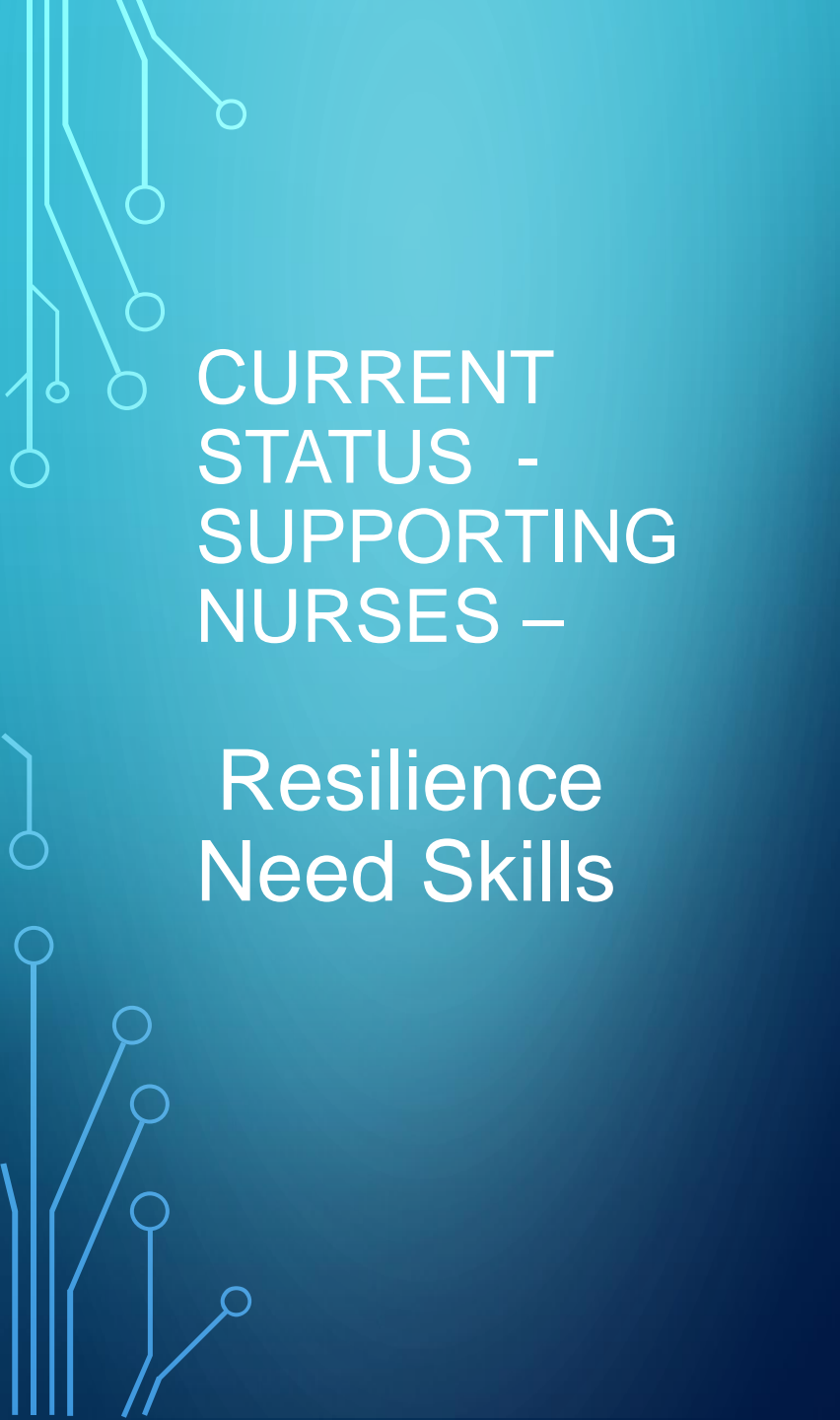Improved Quality Of Health Record

Continuity Of Care
Centralized Health Records
Incorporation Of The Healthcare Consumer As An
Active Member Of The Health Team
Collaboration Among Healthcare Professionals
Improved Decision Making

CURRENT STATUS - SUPPORTING NURSES –

Resilience Need Skills

Experts Promoting Resilience More Now To Prevent Burnout During Pandemic.
Nurses Are Especially Prone To Stress-related Illnesses And Burnout

Key is Recovering, Recuperating Quickly Helps Reduce Risk Of Negative Consequences.
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Program Designed To Help Students Practice Nursing Skills Like Clinical Decision-making While Exposing Them To Diverse Patient Population And Practice Setting

VIRTUAL SIMULATION = VSIM

VSIM -

A NURSING SIMULATION PLATFORM HELPS REINFORCE LESSONS OF HIGH-FIDELITY PATIENT SIMULATORS

A VIRTUAL SIMULATION MODALITY FOR NURSING STUDENTS

FOR NURSING | MENTAL HEALTH: PSYCHIATRIC NURSING VIRTUAL SIMULATIONS –

AN INTERACTIVE, PERSONALIZED SIMULATION EXPERIENCE FOR EVIDENCE-BASED, PSYCHIATRIC PATIENT SCENARIOS.

IMPACT OF THE PANDEMIC ON TELENURSING & EDUCATION –

COVID-19 Changed How Education Is Delivered

Online Nursing Programs & Bridge Programs

Increased during Pandemic

Nursing Colleges Used Online Classes To Help

Reduce Spread Of COVID-19

Trends In Online Classes To Continue After

Pandemic

Online Learning Increased Retention of

Information. Data Show -It Can Take Less

Time To Learn - Lowers Overhead For Colleges

And Universities.

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Colleges And Universities - Online Classes Help Reduce The Spread Of Infectious Diseases

National League For Nursing Worked With company To Develop Vsim.

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During 2020, = Rise In The Demand For Travel Nursing. Hospitals Raising Temporary Staff Salaries, Benefits To Fill Staffing Needs

IMPACT OF THE PANDEMIC ON TELENURSING & EDUCATION

COVID-19 PANDEMIC AFFECTED NURSING STUDENTS

- clinical sites, onsite classrooms closed to physical participation
- move to virtual classrooms and virtual clinical experiences.
- nursing schools adopted telenursing to comply with Board of Registered Nursing direct patient care requirements..

Requires Improved Training And Better Leadership Models To Bridge This Gap So It Does Not Affect Patient Care Or Negatively Impact Staff Well-being.

IMPACT OF THE PANDEMIC ON TELENURSING & EDUCATION

American Association Of Colleges Nursing **Preference For Nurses Who with** BSN

82% **Employers Express** Strong **Preference For These Nurses.**

Setting Higher Bar For Education, Skills, And Motivation - Help Improve Better Patient Outcomes

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Requires Improved Training - Better Leadership Models To Bridge Knowledge Gap

Key to Not Affect Patient Care Or Negatively Impact Staff Well-being.

IMPACT OF THE PANDEMIC ON TELENURSING & EDUCATION (CONT.)

COMPETENCIES

Informatics core competencies for physicians	D0: Informatics core competencies for nurses (enriched by the nursing informatics working group of the GMDS)
1. General contents	1. Principles of nursing informatics
2. Applied computer science	2. Applied computer science
3. Data protection and security	3. Data protection and security
4. Medical documentation	4. Nursing documentation
5. Information and communication systems	5. Information and communication systems for nursing
6. Telematics	6. Telematics and eHealth

ISSUES RELATED TO TELENURSING PRACTICE; CURRICULUM DEVELOPMENT

Developing Telenursing programs, based on research in Netherlands. All nursing telehealth activities – except for NT-EPA 7 and 8 – require multiple knowledge sources, ranging from 2-4 types.
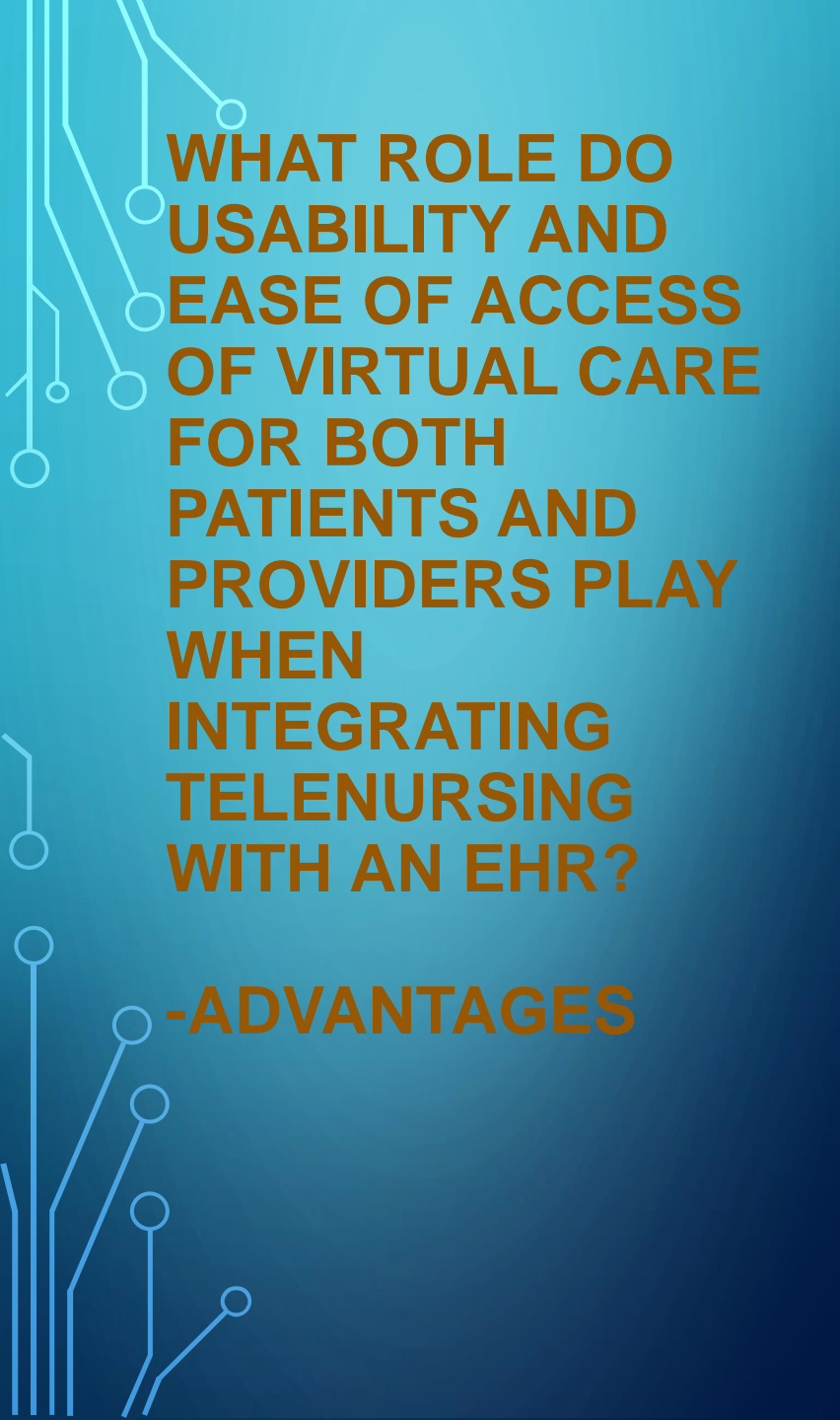
- Clinical and procedural knowledge (what to do in case of an emergency) were the most frequently selected knowledge items
- Each NT-EPA requires a specific set of competencies (at least ten). In total, 52 competencies were identified as essential in telehealth

NURSING TELEHEALTH ENTRUSTABLE PROFESSIONAL ACTIVITIES (NT-EPAS). NT-EPA —

Support patients in use of technology
2: Train patients in use of technology in order to strengthen their social network
3: Provide health promotion remotely
4: Triage incoming calls and alarms
5: Analyze and interpret incoming data derived from (automatic) devices for self-measurement

6: Monitor body functions and lifestyle
7: Provide psychosocial support
8: Encourage patients to undertake health promotion activities
9: Instruct patients and family care givers in self-care
10: Assess patient capacity to use telehealth

11: Evaluate and adjust patient care plan
12: Coordination of care with use of telehealth technology
13: Independent double-check of high-risk medication
14: Guidance and peer consultation

WHAT ROLE DO USABILITY AND EASE OF ACCESS OF VIRTUAL CARE FOR BOTH PATIENTS AND PROVIDERS PLAY WHEN INTEGRATING TELENURSING WITH AN EHR?

-ADVANTAGES

If Integrating Telehealth With An EHR –

It Expedites Telehealth Adoption For Both Providers And Patients.

Patients Get Better Quality Of Care From Virtual Appointment with All Their Information Already Integrated

Providers Save Time - Have A Better User E Experience While Conducting Telehealth Visits

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When Trusted By Patients And Providers, and fully Integrated Helps Build Trust - Removes Barriers.

INTEGRATION OF TELEHEALTH INFORMATION INTO EHR- ADVANTAGES

When providers take notes during a telehealth visit, information automatically goes into the patient's health record, simplifying the data entry process.

- - reduces chances of making error when updating EHR system, ensuring providers have access to current, accurate information
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95% OF U.S. HOSPITALS USE CERTIFIED EHR PLATFORMS

Benefits. EHR Platforms Provide

-Better Continuity Of Care,

-Simplify Data Collection,

Decrease Overhead Costs, And

Reduce Mortality Rates For The Chronically Ill

EXEMPLARS IN PRACTICE – USE OF SECURE PLATFORMS

Video chat applications	Apple FaceTime	Facebook Messenger video chat	Google Hangouts video	Zoom
Skype	**Text-based applications**	Signal	Jabber	Facebook Messenger
	Google Hangouts	WhatsApp	iMessage	

Integrating EHR system with telehealth platform

-       improves clinical workflows.

 - allows patient information to pass easily from one interface to another

 When used together, telehealth and EHR systems can improve the care delivery system.

If **NOT** Integrated With The Facility's EHR System,

Need To Enter Same Information Several Times Into Patient's Health Records, Reducing Efficiency In The Workplace

 Providers Looking To Implement A Telehealth System Should Look For Platforms That Integrates With Their Current EHR System.

INTEGRATION OF TELEHEALTH INFORMATION INTO ELECTRONIC HEALTH RECORDS -

ADVANTAGES

When Health Systems Are Looking To Integrate Telehealth With The EHR,

Need to Factor In Both Synchronous and Asynchronous Workflows.

Synchronous Telehealth appointments are typical Virtual visit where provider and patient on video call together **In real time.**

Asynchronous Telehealth Visits- Patient records vital signs with telehealth device on their own prior to the virtual appointment.

INTEGRATION OF TELEHEALTH VISITS INTO EHR - ADVANTAGES

For Asynchronous Health System has a Telenursing Workflow,

Providers can access Vital Signs patient recorded in EHR Before appointment Occurs.

Enables diagnosis before a live synchronous visit while keeping all clinical data in Patient's EHR.

ISSUES RELATED TO TELENURSING PRACTICE – EHR INTEROPERABILITY AND INTEGRATION

Telehealth Nursing consists of EHRs, analytic systems, biometric monitoring, and other digital systems

- data must be integrated – automatic, not manual access interoperable across systems.
- clinicians at the point of care to improve patient diagnosis and treatment.

Office of the National Coordinator for Health Information Technology (ONC)

Users must be able find use information on both ends, whether sending or receiving

- Including third-party systems (independent IT vendors). c

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Telehealth Resources
- Free Recorded Webinars: **Telephone Triage and COVID-19**
- ***Scope and Standards of Practice for Professional Telehealth Nursing*** -
  - Use these standards to promote effective clinical and administrative management of services provided by RNs via telecommunications technology.
- **Telehealth Education** -
  - Learn from education sessions in the special telehealth track offered at the AAACN Annual Conferences. Recordings and contact hours are available in the Online Library.
- Telehealth Nursing Practice Special Interest Group (SIG) -
  - Join this active SIG to network and address your professional telehealth issues and education needs.

TELENURSING TOPICS, WEB- RESOURCES (CONT.)

Telehealth Resources

•AAACN Telehealth Nursing Practice Education Resource Directory -

•The Telehealth Resource Directory was developed as an online toolkit that AAACN members can use to enhance and advance practice and increase the effectiveness of the role of the RN in telehealth.

• **The Future of Nursing 2020-2030;** Charting a Path to Achieve Health Equity (2021)

•Telephone Triage Course:

•Telehealth Nursing Services For Seniors

TELENURSING TOPICS, WEB- RESOURCES (Cont.)

HTTPS://THEHARRISPOLL.COM/TELEHEALTH-NEW-NORMAL-HEALTHCARE/

CHECK OUT – 16 ADDITIONAL VIDEOS

SELF-ASSESSMENT QUESTIONS

Synchronous Telehealth appointments are typical Virtual visit where provider and patient on video call together **In real time**

1. TRUE
2. FALSE

SELF-ASSESSMENT QUESTIONS

There are alternative means for students to practice and develop skills such as,

VSIM = Nursing Simulation Platform Helps Reinforce Lessons Of High-fidelity Patient Simulators

1. TRUE
2. FALSE

SELF-ASSESSMENT QUESTIONS

If EHR Integrated with the Facility's EHR system,

1. Need To Enter Same Information Several Times

2. Information automatically goes into the patient's health record

3. Reduces chances of making error

4. All of the above

SELF-ASSESSMENT QUESTIONS

ONC = Must Have Automatic Access Clinical Information From When Treating A Patient -

Users Must Be Able Find, Use Information When Sending Only - Not Receiving?

1. True
2. False

SELF-ASSESSMENT QUESTIONS

HIPPA Secure Platforms Used In Telenursing Include:

1. Zoom

2. Whatsapp

3. Skype

4. Facebook Messenger Video Chat

5. All of the Above

SELF-ASSESSMENT QUESTIONS

Refection Question:

How Will Telehealth Be Utilized In The Next 3-6 Months?

QUESTIONS - DISCUSSION

REFERENCES

Asimakopoulou, E. (2020). Telenursing in clinical practise and education. *Int J Caring Sci, 13,* 781.

Egbert, N. (2019). Competencies for nursing in a digital world.

FirouzkouhiM, AbdollahimohammadA, ArulappanJ, NouraeiT, FarziJ. Challenges and opportunities of using telenursing during COVID

-19 pandemic: An integrative review. Front Health Inform 2021; 10: 98. DOI

Hargreaves L, Zickgraf P, Paniagua N, Evans TL, Radesi L. COVID-19 Pandemic Impact on Nursing Student Education: Telenursing with Virtual Clinical Experiences. SAGE Open Nurs. 2021 Oct 4;7:23779608211044618. doi: 10.1177/23779608211044618. PMID: 34692998; PMCID: PMC8529906.

REFERENCES

- Ackerman, M. J., Filart, R., Burgess, L. P., Lee, I., & Poropatich, R. K. (2010). Developing next-generation telehealth tools and technologies: patients, systems, and data perspectives. *Telemedicine journal and e-health : the official journal of the American Telemedicine Association*, *16*(1), 93–95. https://doi.org/10.1089/tmj.2009.0153

- American Hospital Association | February 2019https://www.aha.org/system/files/2019-02/fact-sheet-telehealth-2-4-19.pdf

- Cavanaugh, C. (2021). Top 5 Challenges with Healthcare Interoperability (& How to Solve Them)https://www.healthjump.com/blog/5-challenges-with-healthcare-interoperability

- Chesser A., Burke A., Reyes J., Rohrberg T. Navigating the digital divide: a systematic review of eHealth literacy in underserved populations in the United States. *Inform Health Soc Care.* 2016;41:1–19.

- Christian Miller, Rebecca Davidson Kaltman, Andrea Leon, Andrea Gesteira, Samuel Duffy, and Paula Brooke Burgess (TUQ) DOI:10.1200/JCO.2020.38.29_suppl.265 *Journal of Clinical Oncology* 38, no. 29_suppl (October 10, 2020) 265-265.

- Cummins, N., & Schuller, B. W. (2020). Five crucial challenges in digital health. *Frontiers in Digital Health*, 38.