

Wound Healing with Your Tablet: Breaking Barriers Across the Care Continuum

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Disclosures:

- **Jonathan Johnson, MD, MBA, CWSP:** Consultant-Molecular Biologics-Medline, V-tail Healthcare Telecommunications; MolecuLight
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Objectives

- 1) Identify techniques & tools to optimize wound care in the mobile setting
- 2) Discuss potential limitations & how to address them
- 3) Assess the future landscape of technological advances



OUTLINE

- Trends in wound care telemedicine
- Wound care apps/telemedicine platforms
- Future of tele-med in wound care (telewoundcare)
- Discussion: Advantages and disadvantages

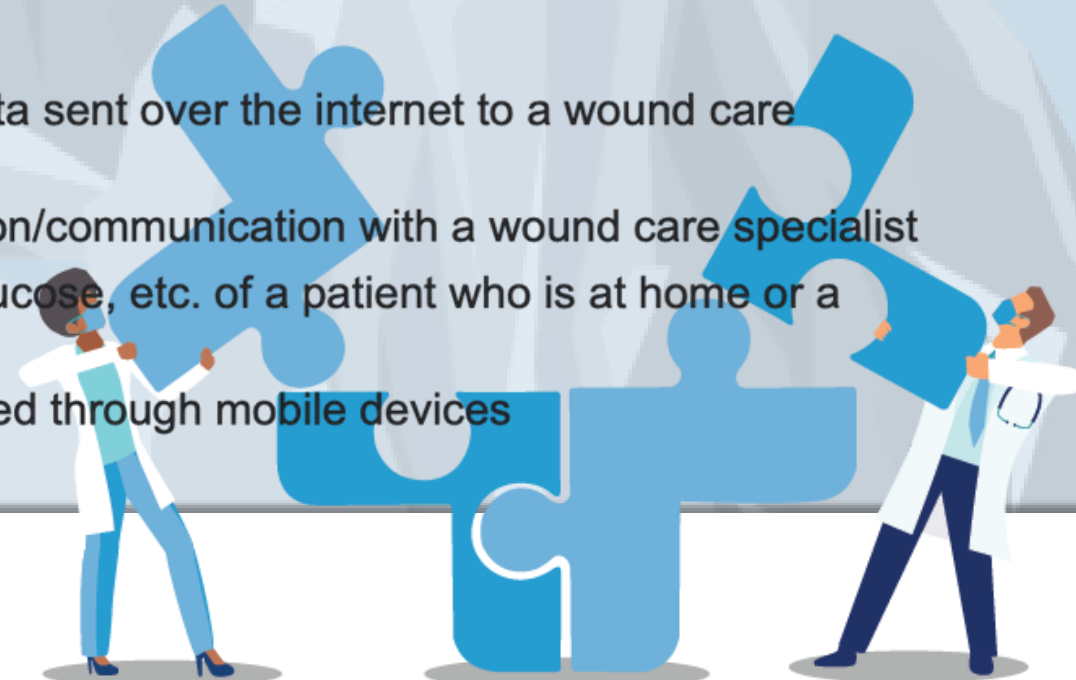


Wound Care and Telemedicine

- Market Size in 2019 was USD 45 billion. Expected to grow at a CAGR of 19.3% by 2026
- In essence, 89% of patients are preferring telehealth over physical hospital visits
- Annual revenue generated by Teladoc in 2020 is \$554.6 million
- World Health Organization (WHO): 58% of countries using telemed services

Types

- Store and forward (asynchronous): Digital photographs and clinical data sent over the internet to a wound care specialist
 - Real-time tele-video conferencing (synchronous) – Live interaction/communication with a wound care specialist
 - Remote monitoring – provider continually monitors vital signs, glucose, etc. of a patient who is at home or a remote care facility
- Mobile health/Digital- Health care and public health information provided through mobile devices



Wound Care and Telemedicine

- Place of service locations
 - Home health
 - Long term care/ assisted living locations
 - Direct to patient platform
- Wound documentation recommendations
 - Wound size (measurements)
 - Wound description (tissue type)
 - Wound location/exudate
- Business platforms
 - Patient volume-based model
 - Capitated model



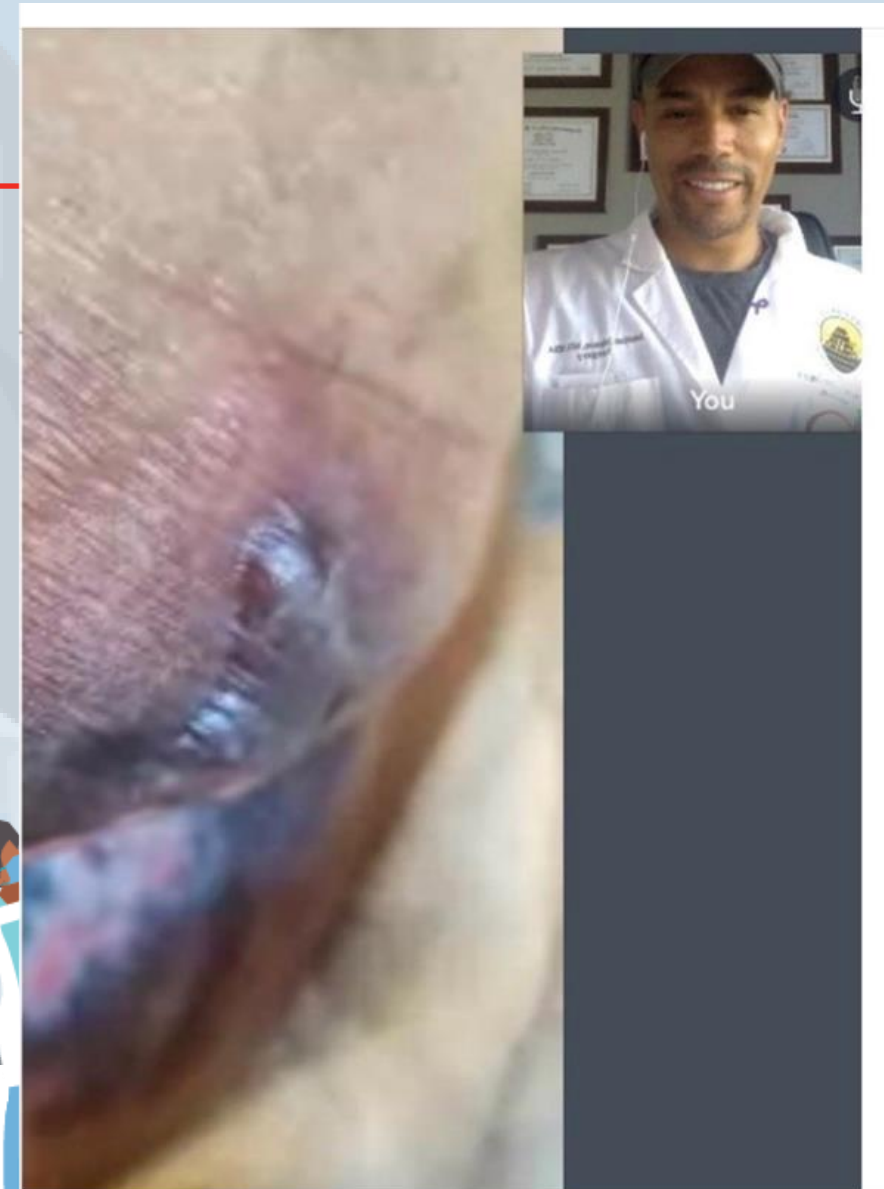
Trends in Telemedicine/Telewound Care

- Increase patient utilization
- Increase in chronic care management
- Improved user experience
- Integrated data sharing
- Wearable technology remote patient monitoring
- Increased investments



Wound Apps/Technology

- Digital Imaging/Assessment Resources/Platform
 - Swift Medical
 - Ekare
 - Teladoc
 - WoundMatrix
 - SnapMD
 - Silhouette
 - MolecuLight i:X™
 - TA
 - Doxy.me



The Future of Telemedicine in Wound Care

- **The future is here!**

- Remote diagnostic equipment
- User-friendly sensors
- Robotic applications
- Artificial intelligence
- Machine learning
- HIMSS – Healthcare Information and Management Systems Society Conference, Orlando, FL
- ATA – American Telemedicine Association, Boston, MA
- Direct to patient wound care platforms



THANK YOU!

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Aging in Place



- As the population becomes older, maintaining independence for as long as possible becomes essential
- Technology and mobile care allow for the delivery of both preventative care and early intervention
- Peek et al (2019) discussed the importance of monitoring individuals closely as technology use can change over time



Improving Patient Experience

- Contact prior to the appointment
 - Send step-wise instructions on how to connect
 - Call to ensure technology is compatible
 - Family or caregiver support may need to be present to assist with technology or wound visualization
 - Plan B in case of connectivity challenges



Do Clinicians Want Digital Healthcare?



- American Medical Association (AMA) compared survey results between 2016 and 2022
 - 8% increase in the number of physicians who thought it helped patient care (85% vs 93%)
 - Telehealth visits increased from 14% to 80%
 - Remote patient monitoring device use more than doubled from 12% to 30%



Patient & Caregiver Perspectives

I prefer waiting at home to dealing with traffic

Instead of spending all day in waiting rooms, I have less pain & anxiety

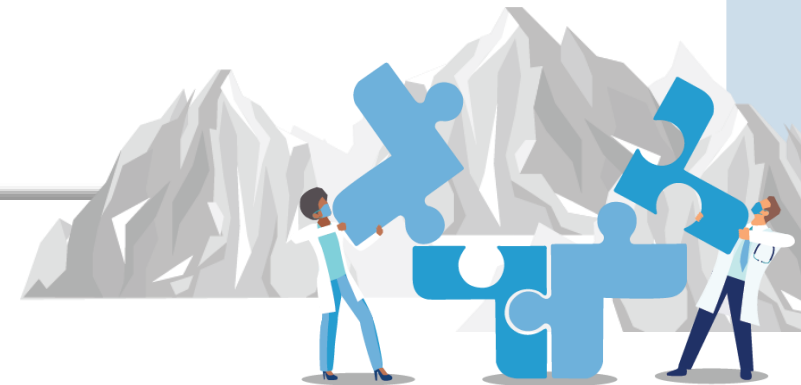
Co-ordinating care is easier this way but I like a mixture of visit types

Technology is too hard for me and I want to see people in person



Pros & Cons of Digital Wound Care

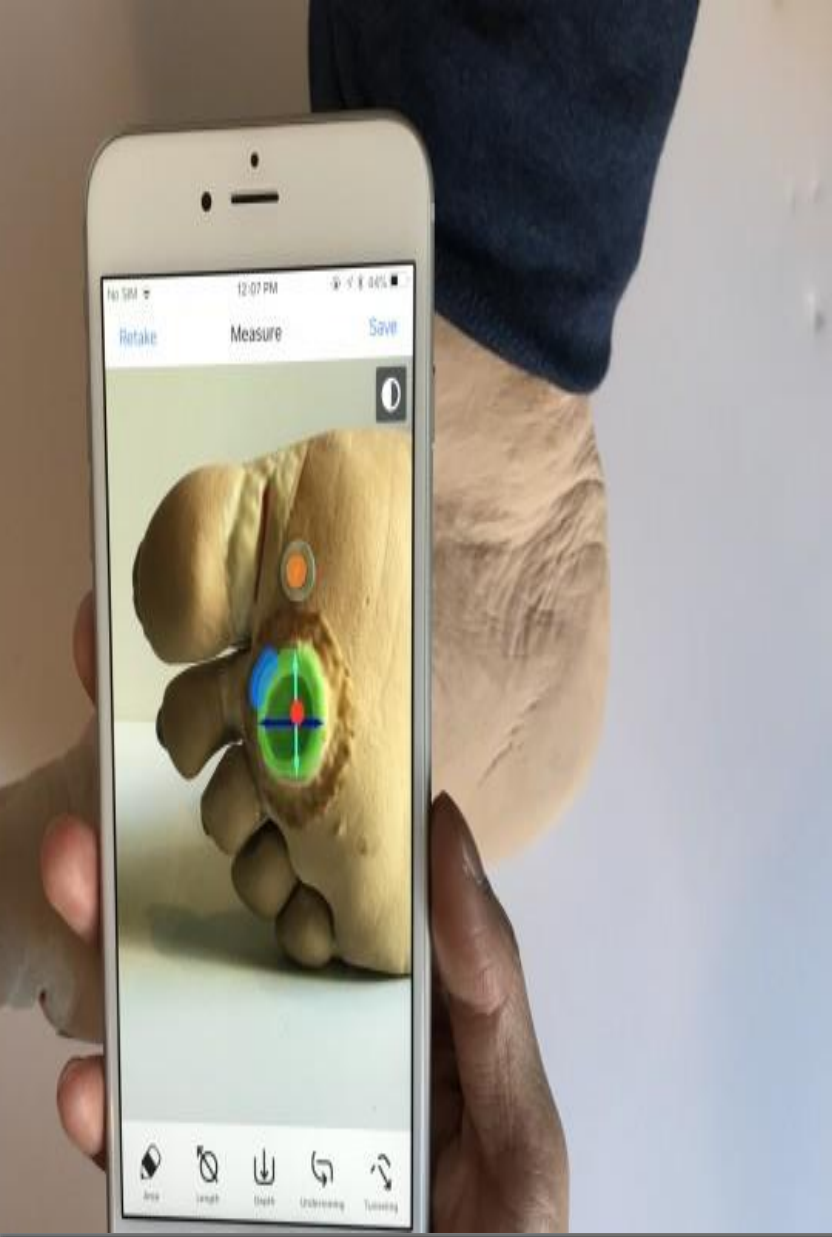
- No appointment wait time
- Decrease in ER visits
- Post-surgical and chronic wounds
- Convenience from patient's home
- Streamlined care plan
- Less pain for patient (ride to appointment)
- Cost effective
- Wound care supplies delivered to home
- Enhanced quality of life
- Improved clinical outcomes
- Lack of hands-on wound assessment (palpation, depth)
- Odor issues
- Learning curve for patient & clinician with technology
- Diagnostic accuracy, depth/undermining/tunneling
- Complex wounds may need to be referred for debridement, procedures, etc.
- Risk of disparity in available technology



Future Considerations

- How do we vet new technologies?
- Will reimbursement continue for various sites of service?
- Challenge of adoption and buy-in



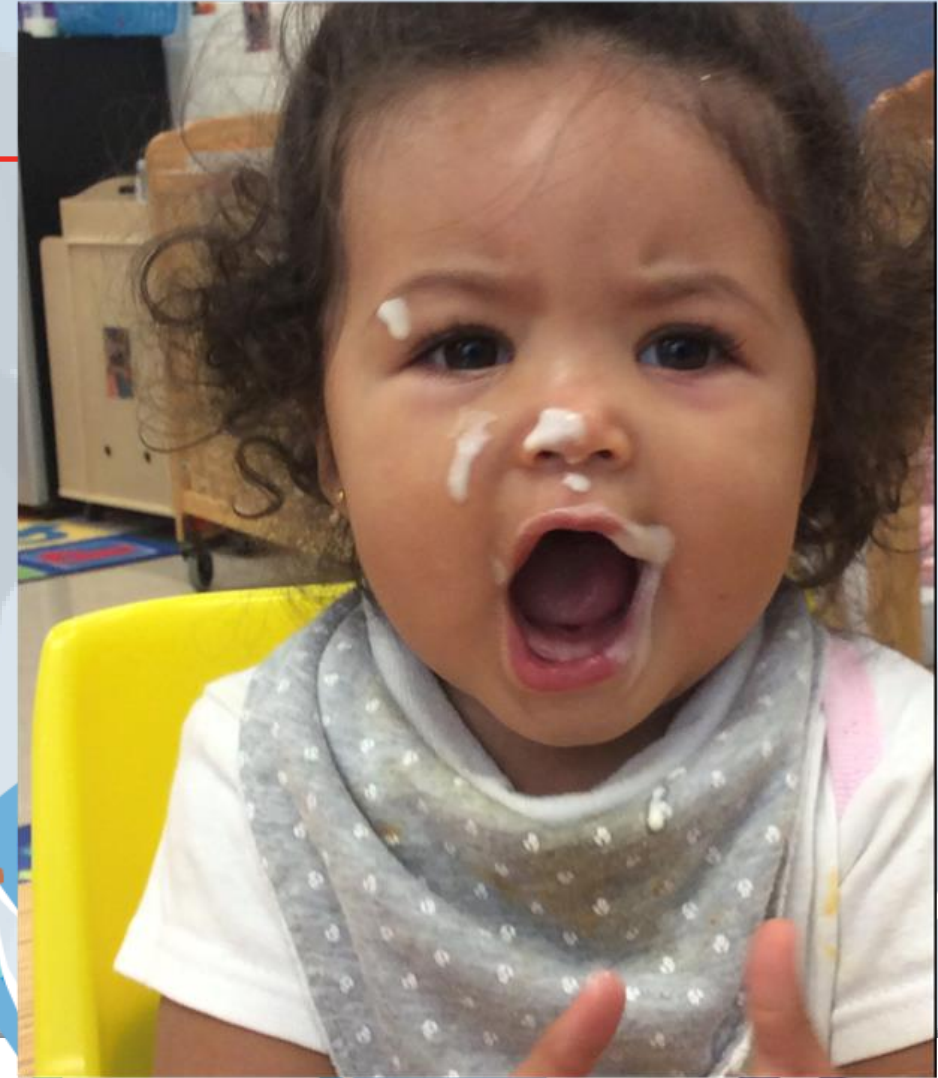


- Do you have any experience in mobile care?
- How do your patients feel about health technology?



Your Turn!

- What are your experiences in telewound care?
- What are your experiences with digital health resources?
- What are your experiences with wound imaging resources?



References & Resources

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