

# TELEHEALTH IN EXAMINATION AND TREATMENT AT HANOI MEDICAL UNIVERSITY HOSPITAL

Speaker: Assoc. Prof. Nguyen Lan Hieu MD. PhD 16th November 2023



# **Telehealth in Vietnam Today**

Glok

**Global Perspective** 

• USA (2017) - (1 in 10) 76% use telemedicine; 5.5% among the elderly



Vietnam's Uptake

• 22.5% young & <54 years embrace modern tech



**Digital Vietnam** 

• 73.2% use internet (2022) – new info & trends.



**National Initiatives** 

 National Digital Transformation Program approved until 2025 with orientations up to 2030.



**HMUH's Role** 

• At the forefront of digital healthcare in Vietnam

# **Technological Reforms**

Spearheading this transformation are various initiatives:

Robust administrative reforms to streamline healthcare processes

- Electronic Medical Records Implementation:
- 2019-2023: First-class hospitals to integrate technology; others prepare for the transition.
- 2024-2028: Nationwide transition from paper to electronic medical records.
- Electronic Health Book: "So Suc Khoe Dien Tu"
- Hospital Management System
- Remote Medical Examination: Enhancing telemedicine capabilities
- Health Insurance Appraisal



# Hanoi Medical University Hospital's Vision

# **Our Foundational Belief**



In-House R&D



At HMUH, we believe in blending traditional healthcare with forward-thinking solutions, ensuring every patient receives cutting-edge care.

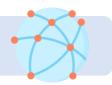
Dedication to researching and developing in-house solutions tailored for our patient demographic and regional needs.

#### **HMUH Value**

# **Strategic Innovation**



**Global Collaboration** 



Instead of just adopting new technologies, our focus is on integrating those that align with our core values and patient needs.

Prioritizing sustainable and scalable solutions.

Partnering with global tech leaders and healthcare institutions to bring world-class solutions to our community.

"HMUH's vision is not just to embrace technology but to mold it in a way that best serves our community."

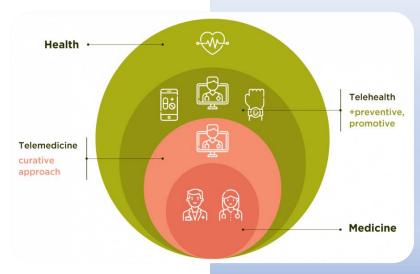
# **Telehealth**



# **#** Telemedicine

- Broad scope encompassing all health services provided remotely.
- Includes preventive, promotive, and curative health services.
- Utilizes various tools from simple phone calls to advanced wearable health tech.
- **Continuing Medical Education**

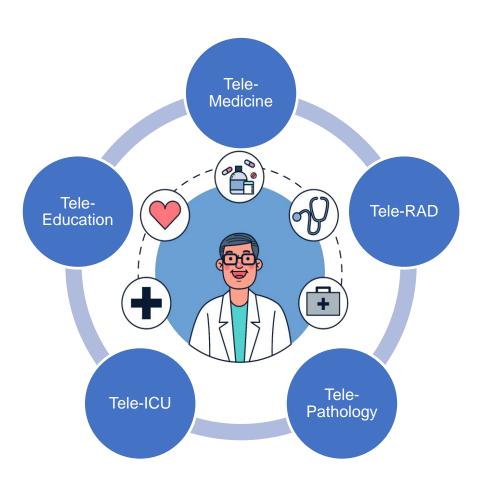




- Specific segment of telehmedicine focusing purely on clinical services.
- Enables remote doctorpatient consultations, diagnostics, and treatment planning.
- Often involves secured video conferencing or specialized medical software.

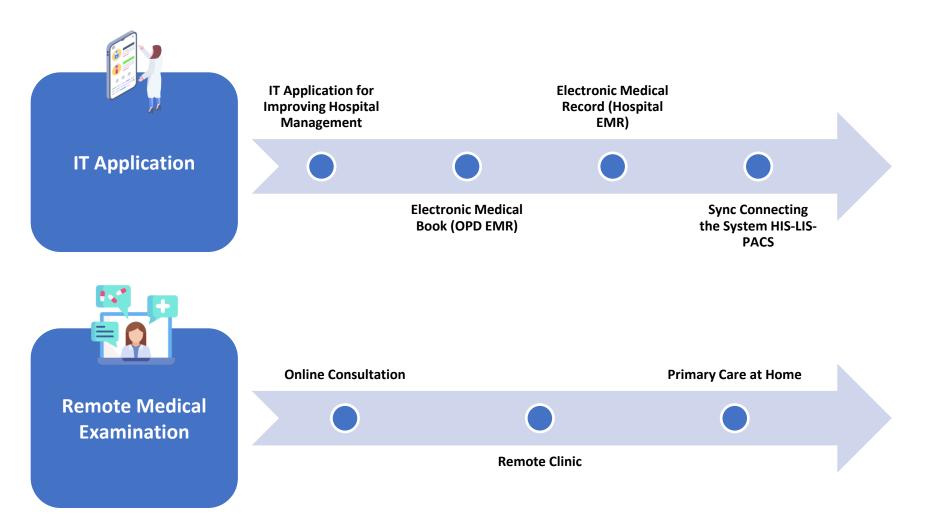


# **HMUH Offerings**





# **Telehealth Development Roadmap at HMUH**



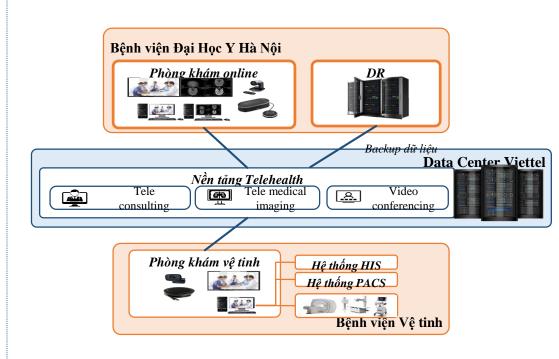




April /2020 First center of Telehealth in HMUH



Telehealth every Tuesday and Thursday from 4/2020



**Telehealth System of HMUH** 



# Remote Consultation & Care at HMUH

# "Taking Patient Care Beyond Hospital Walls"

## a. Remote Consultation

- Online healthcare services at HMUH allow patients to receive consultations without stepping out.
- Expert diagnosis through secured video calls or dedicated mobile applications.

#### b. Online Care Plans

- Customized treatment plans delivered digitally
- Informative content for patients regarding their condition, medications, and care routines
- Continuous remote health monitoring support ensuring patient well-being

### **Benefits**

- ✓ Reduced travel and wait times.
- √ Immediate access to specialized care.
- ✓ Enhanced patient satisfaction and increased healthcare reach.











Electrocardiogram with Wifi Link



Handle-handed Ultrasonic Device Connecting Smart Devices



**Ear Endoscopic Hand Tool** 

## **New Device at Home**



**Bluetooth Connected SPO2 Meter** 





**Bluetooth Connection Stethoscope** 

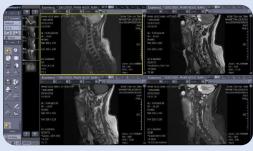


# Tele-RAD – CĐHA > 2.000 cases/month

# Tele-ICU > 70 cases

# **Tele-Pathology 315 Specimens**





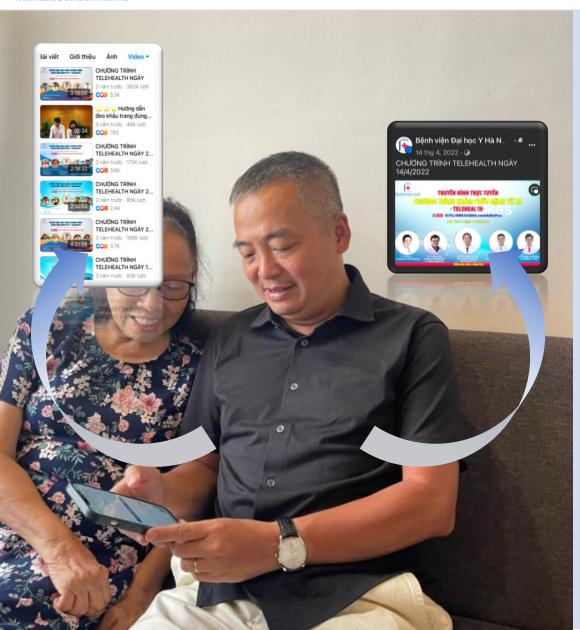








# **Telehealth Engagement on Fan Page**







# Results Achieve 2020-2023

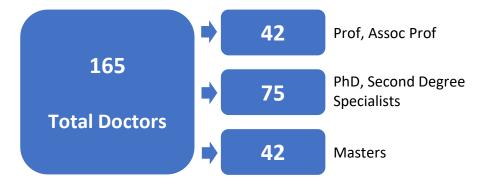
# **Medical Facilities Participation**

- **268** Medical facilities Proposed Participation
- **213** Medical facilities did survey
- **136** Medical facilities connected
- 12 Medical facilities performed primary healthcare
- **02** Medical facilities in Lao and Cambodia

# Human Resource Participating in Remote Medical Examination

- **287** Total number of Video conference sessions
- **2.436** Total number of Online consultation cases
- **356** Total number of Scientific Reports
- **1.061** Total number of primary care cases







# **Tele-Education: The Move to Online CME**

- Equip healthcare professionals with the latest knowledge and techniques.
- Address the ever-evolving challenges in medical science and patient care.

- Fun: Gamified modules and interactive simulations.
- **Efficacy:** Tailored content to individual learning curves.
- Free: Remove cost barriers; focus on free or affordable

resources.

- Redefining CME by partnering with industry leaders like Z-waka
- Modernized, interactive, and efficient learning modules.

(z-waka

a. The Imperative of CME

b. Limitations of **Traditional CME** 

c. Innovative Learning with FEF

Collaborative Learning

> e. Innovation **Partner** "Z-waka"

- Geographical constraints: Not accessible to all.
- Time-intensive: Fixed schedules often clash with healthcare duties.
- Limited interactivity and engagement

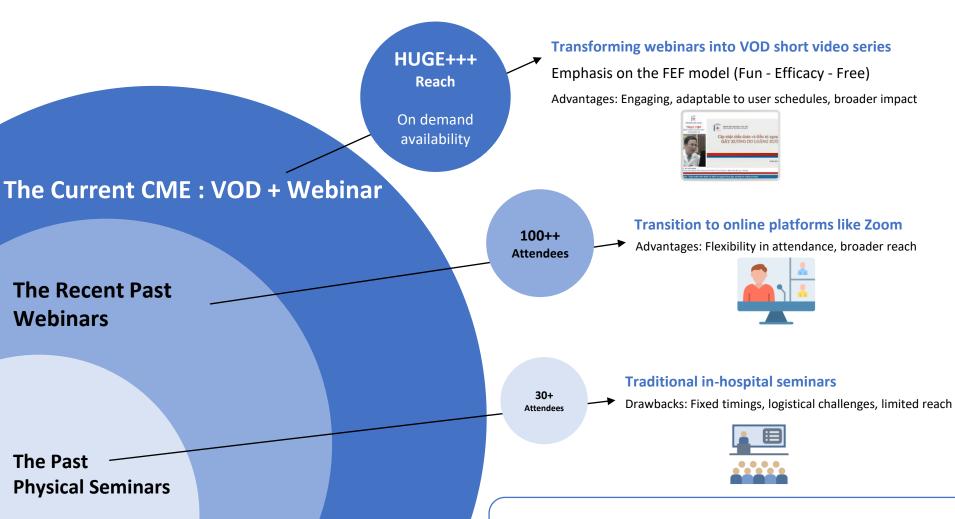


- Engage third parties, including pharmaceuticals, for a broader perspective.
- Go beyond classic theoretical teaching; practical, real-world scenarios.

"Medical education is not just about knowledge; it's about accessibility, engagement, and real-world applicability"



# From Seminar Halls to Handhelds "A New Era of CME"



Adapting to change multiplies impact. Join us in revolutionizing medical education.

# **Some of our CME Programs**



# UPDATE ON DIAGNOSIS AND TREATMENT OF HYPERTENSION







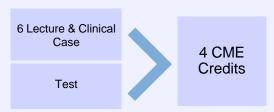
# UPDATING DIAGNOSIS AND TREATMENT OF COPD







# DIAGNOSIS AND TREATMENT OF SOME BASIC EMERGENCIES







A Phát sóng trực tiếp trên Z-wak

#### **Cardiac Arrhythmia Program**

# Ongoing with 700 Participants



# And Many More .....







# **Testimonials from Our Medical Community**



Vũ Văn Hùng

cảm ơn BS bài giảng rất hay dễ áp dụng

#### Phản hồi



Nguyễn Thị Thúy Dung 30 Sep 2023

thank you

#### Phản hồi



Trương Khánh Hùng

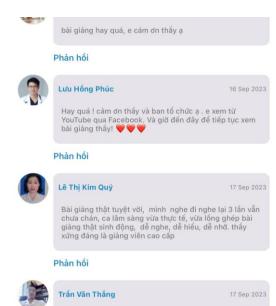
01 Oct 202

29 Sep 2023

cảm ơn bài giảng của Thầy. Trong trường hợp BN shock nhiễm khuẩn nhưng tại cơ sở không có noradrenalin thì sử dụng adrenalin được không ạ? Nếu được thì cách sử dụng như thế nào ạ?

chương trình này của BV ĐHY HN

#### Phản hồi







Nguyen Anh Hoang

Chung em cam on Thầy, bai hay qua a

#### Phản hồi



**Minh Tung** 

Rất mong quý thầy cô sẽ có nhiều bài giảng như thế

#### Phản hồi



Trần Phương Nhuận

16 Sep 2023

15 Sep 2...

15 Sep 2023

Em chân thành cám ơn thầy và Ban tổ chức. Tình huống cụ thể, rất hay và thiết thực. Rất mong được thầy chia sẻ nhiều tình huống khác.

#### Phản hồi



Nguyễn Thị Hương Quỳnh

16 Sep 2023

Bài giảng rất thực tế và hữu ích a.

#### Phản hồi





# Nguyễn thị Huệ

03 Oct 2023

Đây đúng là một hình thức đào tạo trực tuyến mà từ trước đến nay chưa có, rất linh động và rất hữu ích, phù hợp khi bài thầy cô giảng mình đang bận ,có bệnh nhân, chưa nghe được, khi rảnh có thể xem lại và học, lúc đó tính time như trực tuyến. xin chân thành cám ơn bạn lãnh đao , các quý thầy ,cô, đôi ngũ Adm và ê kíp thực hiện



cảm ơn Thấy Hải.

# Nguyễn Văn Diện

25 Sep 2023

đây là một hình thức đào tạo trực tuyến linh động và hay nhất e từng thấy, rất phù hợp khi có thể xem lại và tính time như trực tuyến, xin cảm ơn các thầy cô, đội ngũ ad và ekip thực hiên.



# **Challenges in Telehealth & Our Solutions**

# **Challenges**



# **Solutions**

#### Infrastructure Hurdles

Limited and inconsistent technological resources

#### **Training Limitations**

Unfamiliarity with telehealth tools among staff initially

#### **Patient Adoption Barriers**

Reluctance, Habits and capabilities varying among users

#### **Doctor's CME Engagement**

Doctors not consistently updating through CME

**Upgraded infrastructure** 

Regular workshops

**User-friendly interfaces/ Awareness campaigns** 

Making CME more engaging and tracking doctors' progress and feedback

Ongoing Challenges



## **Legal Gaps**

Ambiguities in telehealth regulations



#### **Provincial Hospital Constraints**

Limited facilities and equipment in provincial hospitals



#### **Financial Mechanism**

Unclear financial pathways for telehealth



## **Collaboration**

Partner with innovative firms and invest in R&D for cutting-edge solutions

## Innovation

Introduce AI and Machine Learning for smarter diagnostics and treatments

# **Expansion**

Broaden telehealth services to underserved areas



# **Patient Empowerment**

Develop tools to engage patients more actively in their own health journey



# **Policy Advocacy**

Advocate for clearer, more supportive telehealth policies



# **The Road Forward**

# THANKYOU FOR YOUR ATTENTION!

Associate Professor Ph.D Nguyễn Lân Hiếu