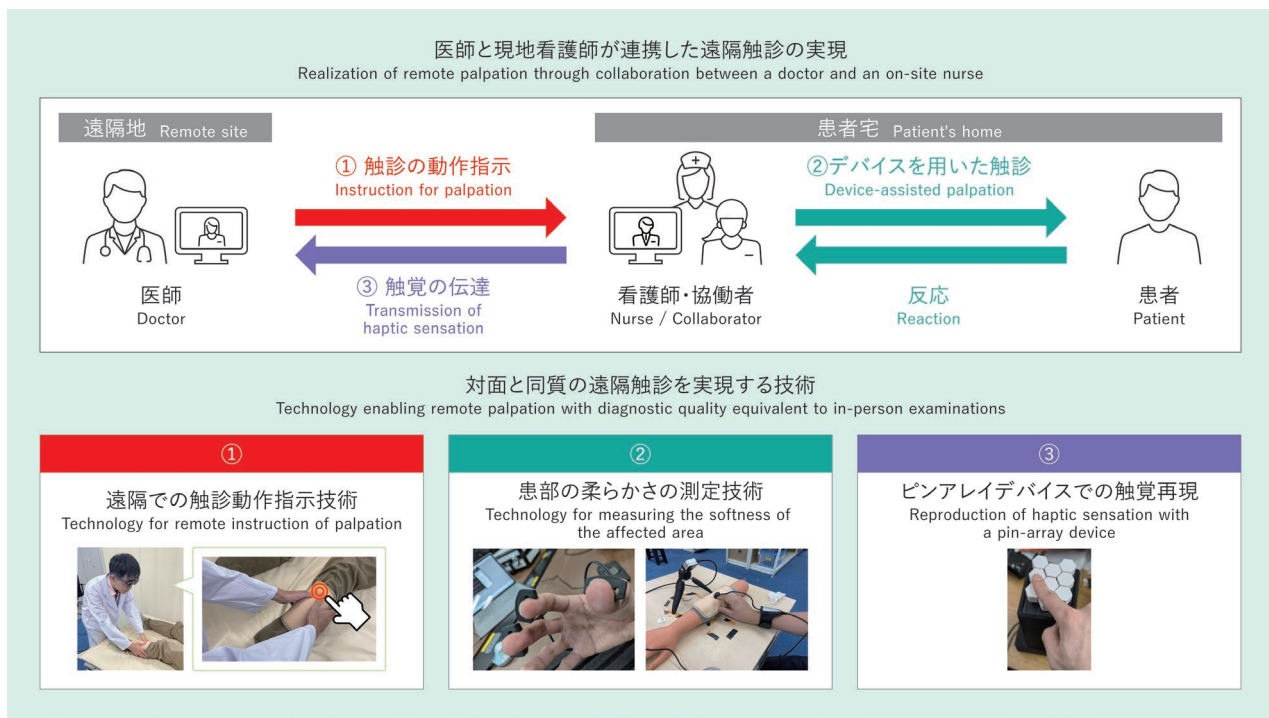


A remote doctor works with an on-site nurse to assess tissue stiffness

## Remote palpation with doctor-nurse link

### Background and Technical Challenges

The core of remote palpation is the transmission of haptic information, not just video or audio. It also requires methods for conveying a doctor's intent and instructing nurses in proper palpation.



### R&D Goals and Outcomes

This technology enables remote palpation of leg edema without in-person contact, improving access to daily medical care.

### Key Technologies

#### 01 Core Technologies

- Doctors remotely perceive stiffness via quantitative sensing and reproduction through nurses' hands.
- Nurses receive visual cues for palpation.

#### 02 Key Differentiators

Without requiring teleoperated robots, this method enables quantitative sensing and reproduction of haptic stiffness through the hands of novice nurses, guided by nonverbal cues of the doctor's intent.

**Use Cases** Healthcare

**R&D phase** Research

**Technology Schedule** FY27-29

**Commercialization Schedule** FY27-29

#### 【Exhibitors】

NTT Human Informatics Laboratories

#### 【Contact】

Cybernetics Laboratory

#### 【Co-exhibitors】

Niigata University (collaborative research)

St. Luke's International University (collaborative research)

#### 【Related Links】

<https://journal.ntt.co.jp/article/34729>