

BEYOND TELEMEDICINE

From connected intelligence to
connected intervention in the 6G era

When we talk about connected healthcare,
why do we still mostly imagine a doctor
speaking to a patient through a screen?

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Connection should lead to clinical action

A three-stage view of connected healthcare

01

CONNECTED INTELLIGENCE

Distributed evidence, data
and validated AI models

02

CONNECTED DEVICES

Sensors and diagnostic systems
working around the patient

03

CONNECTED INTERVENTION

Clinical expertise and treatment
coordinated across distance

Simple connectivity is only the beginning.

The real goal is coordinated, trusted clinical action.

Research should not end at publication

Thousands of medical AI studies are published.
Too few become usable, governed clinical resources.

AI-DSS connects:

Scientific paper
Relevant dataset
Trained AI model
Technical + clinical validation

*A governed bridge from scientific production
to clinical decision-making.*



An e-nose needs both AI and communication

Gas sensor arrays capture patterns.
AI turns those patterns into clinical meaning.

Our multimodal example

Odour data

- + Intraoral images
- + Clinical information

Support for viral / bacterial
tonsillitis differentiation



Conceptual prototype

Expertise can travel even when specialists cannot

A primary surgeon may retain control while remote specialists provide:

Image interpretation
Navigation support
Expertise at a critical stage

*Shared control requires explicit authority,
control transfer and accountability.*



Healthcare needs more than peak speed

What 6G must help deliver

PREDICTABLE	Latency for urgent clinical action
RELIABLE	Resilient links and rapid recovery
SYNCHRONISED	Devices, imaging and edge computing
SCALABLE	Distributed AI and medical ecosystems

**A single device may not need 6G.
A connected healthcare ecosystem might.**



Trust must be designed with the network

In healthcare, an intelligent network that cannot be trusted is not an intelligent network.

**CLINICAL
VALIDATION**

**PRIVACY +
CYBERSECURITY**

EXPLAINABILITY

**HUMAN
ACCOUNTABILITY**

These are not features to add after deployment.
They are conditions for deployment.

The device senses.

The AI model predicts.

AI-DSS validates and supports.

The clinician decides.

THANK YOU !

6G can provide the connectivity fabric that allows the whole ecosystem to work and learn together.