5G in healthcare

How is 5G impacting healthcare services and patients’ life?

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How can Deloitte help?

We translate business and industry needs into technical requirements delivering value added E2E 5G solutions that lead to meaningful business outcomes.

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How will 5G in healthcare impact services and patients’ life?

How can Deloitte help?

Select the areas to be improved with 5G use cases, ideating, identifying and prioritizing the top 5G use case opportunities.

Formulate the operational benefits of the 5G use case(s) defined and associated business case value proposition.

Define and design use case technical solution architecture and requirements, considering deployment strategies and application requirements.

Start with a PoC first to monitor and evaluate the 5G use case(s) performance and then proceed with global rollout.

Define overall governance, operating model and procedures to ensure the sustainability in BAU.

Healthcare 5G Use Cases

- Clinical data collection and diagnostic screening equipment
- AR/VR training and therapeutics
- Telemedicine mobile health worker
- Connected ambulances & paramedic equipment
- Remote robotic surgery

Real-time location tracking of people and assets

Smart hospital in-campus connectivity

Smart room/home aging in place

mMTC

Connected hospital home devices, applications and robots, will increase battery life for the equipment’s, and connect thousands of devices in a health system.

uRRLC

Ultra low latency will demand high network performance, bringing connected ambulances, remote surgery and AR/VR to the reality of the healthcare industry.

5G use cases achievements and predictions

- 88% of providers are researching, planning, piloting or remotely monitoring patients with IoT
- 66% of healthcare providers are on track for the development of telehealth programs
- By 2024 20% of consumers used tech to measure and share medical data with their providers
- 10ms latency allows remote driving to deliver first aid and drugs

How will 5G in healthcare impact services and patients’ life?

<table>
<thead>
<tr>
<th>Use Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart hospital</td>
<td>Tackles challenges of smart hospital care, improving efficiency, reducing human error, enabling faster and more efficient patient care, reducing costs and improving outcomes.</td>
</tr>
<tr>
<td>Smart room/home aging in place</td>
<td>Improves the quality of life for older adults by providing them with smart home technologies that can help manage their daily living needs.</td>
</tr>
<tr>
<td>Connected ambulances &amp; paramedic equipment</td>
<td>Enhances emergency response times, improving patient outcomes, and increasing healthcare efficiency.</td>
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<tr>
<td>Remote robotic surgery</td>
<td>Enables surgeons to perform complex operations remotely, reducing the need for invasive procedures and improving patient outcomes.</td>
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<tr>
<td>Telemedicine mobile health worker</td>
<td>Enables healthcare professionals to provide care to patients in remote or underserved areas, improving access to healthcare services.</td>
</tr>
<tr>
<td>Clinical data collection and diagnostic screening equipment</td>
<td>Facilitates the collection and analysis of clinical data, enabling better patient care and improved health outcomes.</td>
</tr>
</tbody>
</table>

Sources: Deloitte TMT Predictions 2021, Huawei, IDC, Gartner, The Business Research Company

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How can Deloitte help?

IDEATE AND PRIORITIZE

Select the areas to be improved with 5G use cases, ideating, identifying and prioritizing the top 5G use case opportunities.

DEVELOP THE BUSINESS CASE

Formulate the operational benefits of the 5G use case(s) defined and associated business case value proposition.

DESIGN TECH REQUIREMENTS

Define and design use case technical solution architecture and requirements, considering deployment strategies and application requirements.

BUILD AND EVALUATE

Start with a PoC first to monitor and evaluate the 5G use case(s) performance and then proceed with global rollout.

OPERATE AND MAINTAIN

Define overall governance, operating model and procedures to ensure the sustainability in BAU.

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Deloitte TMT Predictions 2021