From workforce promise to trusted deployment

Healthcare leaders see robotics as a way to support their people and improve care. But skills, trust, and data readiness will determine how far adoption can go.

https://www.intel.com/content/www/us/en/robotics/robotics-readiness-gap.html

People augmented

Two-thirds (67%) of healthcare leaders are confident that their organization will be ready to manage a mixed human–robot workforce by 2030. Yet only 45% have a formal strategy in place.

Importantly, leaders see robotics reshaping roles, not replacing them: 76% say entirely new roles will be required to manage and collaborate with robots, while 69% believe robots will make workers *more* skilled.

50% of leaders say human workers feel more valued following the introduction of robotics

43% say availability of skills and talent is blocking robotics at scale

Reskilling will be critical to meet evolving workforce requirements. Few organizations report strong capability in the areas critical to robotics deployment: robot operations and fleet management (19%), AI and machine learning (17%), and safety certification and regulatory compliance (14%).

Trust tested

Robotics could remove people from harm, but only if healthcare can establish trust in the technology itself.

Healthcare organizations recognize robotics' potential to improve safety, with three in 10 already reporting positive outcomes. Yet safety concerns are also holding adoption back: over half of leaders (53%) say safety concerns have directly delayed robotics deployment.

56% of organizations report having experienced a safety incident involving a deployed robot

49% admit they lack a formal safety standard for robotics deployment

Leaders believe many of these barriers could be addressed through clearer regulation.

Seven in 10 say clearer global safety standards would accelerate adoption, while 64% would deploy robots faster if liability for safety incidents were more clearly defined.

The story for healthcare



Integration required

Healthcare organizations may be building the operational capabilities to manage robots day-to-day, but scaling across clinical environments will depend on solving the less visible infrastructure challenges.

More than half of organizations report readiness in monitoring and incident response (51%), managing energy and charging infrastructure (54%) and software/firmware updates (52%).

However, readiness drops when it comes to integrating systems and unlocking data.

41% of organizations are ready to integrate robots with existing IT/OT systems

31% have the high-quality, task-specific data required

Primary readiness gaps:

Strategy Skills Safety Shape Scale

Robot types set to shape healthcare:

Autonomous mobile robots	Fixed industrial arms	Autonomous vehicles
Inspection and sensing robots	Exoskeletons	Drones