



Enhancing business with AT&T Connected Wearables

2024

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Impact | AT&T Connected Wearables

To businesses

\$167.0 billion

total cost of work injuries in 2021

<https://injuryfacts.nsc.org/work/costs/work-injury>



52% year-over-year

reduction in workplace injuries by wearables

<https://axaxl.com/fast-fast-forward/articles/the-zero-injuries-aspiration>

To society

3m nurse shortage

by 2025 in the US alone

<https://www.mercer.us/content/dam/mercer/assets/content-images/north-america/united-states/us-healthcare-news/us-2021-healthcare-labor-market-whitepaper.pdf>



80% accuracy of symptom change

before illness develops with smartwatches

<https://www.verywellhealth.com/wearable-health-technology-detect-illness-5204814>



Value | AT&T Connected Wearables

Wearable technology has evolved from a consumer play to a valuable enterprise tool - benefitting businesses and employees.



Optimized resource allocation



Improved communication



Improved wellbeing of employees



Enhanced workplace safety



Increased productivity



Increased brand presence



Comparison | AT&T Connected Solutions

● Included
⊘ Unavailable

Reliance on mobile phones as a unified monitoring, tracking and assistance tool has its limitations.

	Connected wearable	Mobile phone
Automatic fall detection	●	⊘
One-button emergency calling	●	⊘
GPS tracking (mobile users)	●	●
Battery life	Up to 2 weeks	Days
Health and vital tracking	Available	Limited
Geofencing	●	⊘
Centralized monitoring	●	⊘
Group reporting	●	⊘
Connectivity	LTE, Wi-Fi, BLE	Wi-Fi, 5G
Software customization	●	⊘

Key capabilities | wearable devices



Location tracking

track movements, set-up perimeters and safe zones to trigger alarms when breached



Wellness management

body fat, skeletal muscle, body water, basal metabolic rate and Body Mass Index



Emergency contacting

push one button to contact family, friends, or caregivers



Communicate anywhere

call, text or email a coworker, client or patient and more



Health monitoring

track activity and monitor any sudden changes



Stay connected

LTE connectivity means you can stay connected even with no phone or Wi-Fi



Use cases by sector



Construction | **protect from injury**

Early warning system for workers are showing signs of physical fatigue or over exertion.



Foreman issues staff connected wearables.



Alerts trigger if the readings exceed a pre-defined threshold.



Site worker triggers an alarm.



Worker told to take a break—bring his vitals within safe parameters.



Foreman sees a reduction in the number of injuries and sick days.

Construction laborers experienced **3,950 nonfatal injuries or illness** resulting in at least one day away from work due to overexertion.

<https://www.bls.gov/spotlight/2022/workplace-injuries-and-job-requirements-for-construction-laborers/home.htm>

Residential care | **improve independence and patient safety**

Enjoy independent living while maintaining personal safety with monitoring and alerting functions.



Healthcare professionals look after numerous elderly patients.



Residents' smartwatches monitor vitals and health signals.



Professionals can focus time on patients who need assistance.



Smartwatch/PERS assists with automatic fall detection alerts.



Staff gets notified of any incident triggered by either the alert or request for help.

Every second, an older adult (65+) suffers a fall in the U.S.

Source: <https://www.safely-you.com/blog/state-of-falls-report/>

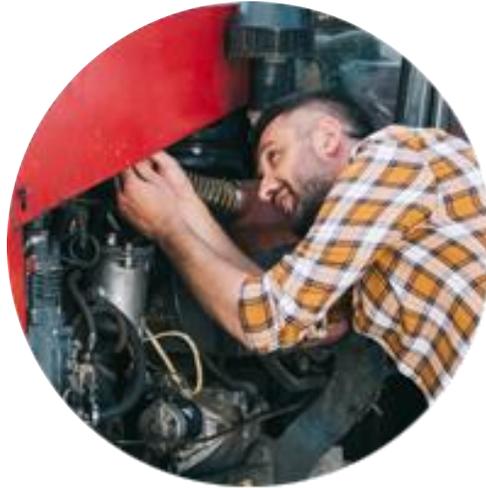
Each year, **\$50 billion** is spent on medical costs related to non-fatal fall injuries;

Agriculture | **reduce the risk of isolated injury**

Dispersed workers over large distances, on their own for large periods of time may need aid.



Remote worker—miles away from anyone else.



Machinery problem—worker attempts to fix.



Equipment slips, trapping worker—requests help via connected wearable.



Response teams quickly pinpoint the using GPS and communicates help is on the way.

Nonfatal injuries, including both lost-time and no lost-time accidents, occur to about a **third of the farm population annually.**

Source: <https://nasdonline.org/716/d000510/farm-accidents-in-the-united-states.html>

Utilities | minimize delays to work projects

Often alone in the field should incident occur, workers are isolated.
When help is required mobile phones may not be able provide it.



Lineman repairs power cables.



Lift breaks and worker becomes stuck.



He uses his connected wearable to call for assistance, and location tracking via GPS.



An engineer is sent out to help fix the lift.

1.7% of utility workers experience job restriction, transfer or days away from work because of injury or illness.

Source: <https://www.bls.gov/iag/tgs/iag22.htm>

Law enforcement | **reduce the risk of reoffending**

Tracking and monitoring low-risk parolees remotely when in an open prison or local community environment.



Upon release, former offenders issued a connected wearable device.



Device is set with a geofence perimeter and GPS tracking.



Parole officer remotely monitors via the reporting dashboard.



Wearer moves outside the geofence which triggers an alarm.



Parolee is contacted through the device telling them to return to home.

The United States has some of the **highest recidivism rates** in the world, almost **44% of criminals** released return before the first year out of prison.

Source: National Institute of Justice

Victims | increase protection for vulnerable people

Left vulnerable, with either limited access to raising a plea for help or being too scared to do so.



Vulnerable individuals known to police are issued a connected wearable.



Person feels threatened-unsafe to use their mobile or taken from them. Use wearable to call for help.



Device is registered to known vulnerable person and police are notified.



The police instant respond to the alarm using GPS tracking.

Each day in the United States, **over 20,000 calls** are placed to domestic violence hotlines by individuals **reporting incidents**.

Source: <https://www.planstreetinc.com/quick-facts-about-domestic-violence-in-the-united-states/>

Childcare | promotes wellness and stimulating education

Providing a centralized dashboard to optimize resources to focus on stimulating educational activities for the children as well as ward off potential spread of illness.



Connected wearable device tracks the children's movements and monitors vitals.



Devices are centrally monitored—optimizes resources.



A child is recording a high temperature which triggers an alert.



Child's guardians are contacted to pick-up child.



Nursery isolates incident and reduces the risk of further illness.

104,000 people missed work in October 2022 because of childcare problems, surpassing even early pandemic levels.

Source: Bureau of Labor Statistics data

Pharma trials | **improving clinical trial accuracy**

Enhancing pharmaceutical trials' accuracy, efficacy and cost efficiency



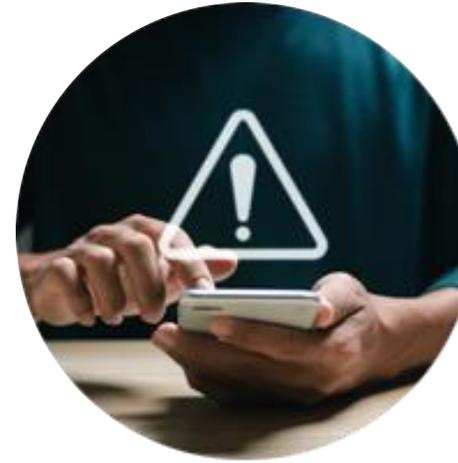
Participants of clinical trials provided with connected wearables device



Clinical organization continuously monitors health data of participants for duration of trial



Participants health and wellness data indicates deviation from trial boundaries



Researchers send real-time alert to instruct participants on right course of action



Participant safety and clinical trial data accuracy improves

Delays in clinical trials can cost anywhere between \$600,000 to \$8 million per day.

Source: <https://pharmasols.com/news/april-2021/the-cost-of-delaying-a-trial/>

Hospital discharge | **empowering patient care post-discharge**

Bridging the gap between hospital care and independent home recovery



Patient is provided with connected wearable upon discharge from hospital and returns home



Caregivers monitor physical health parameters like heart rate, respiratory rate and sleep patterns



Health data detects early adverse health changes



Alert is sent to patient and caregivers and triggers response healthcare provider



Patient is provided with instant action to remedy situation and prevent readmittance

2/3 of patients re-hospitalized within 3 weeks of discharge could have been prevented.

Source: <https://psnet.ahrq.gov/primer/readmissions-and-adverse-events-after-discharge>

Disabilities | **improve independence and safety**

Improving the quality of life for people living with disabilities



Person with disability is given a Navigil wearable device



Person with disability is given independence and can access immediate 1-2-1 care at the click of a button



Caregiver monitors location and wellbeing indicators



Device alerts caregiver that person has exited safe zone



Caregiver locates person and returns them to safe zone

Up to 27% of adults in the US suffer from a disability.

Source: <https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html>

Home healthcare | **improve staff safety**

Improving workplace safety for healthcare staff in unpredictable situations



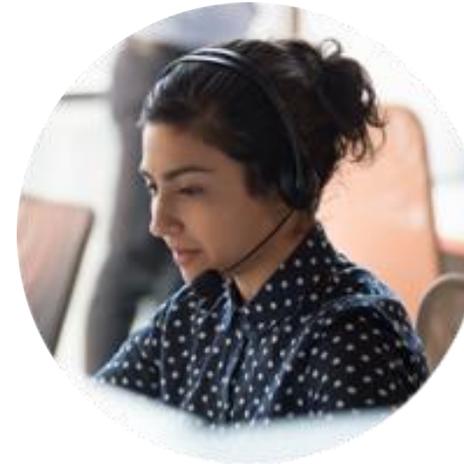
Healthcare staff are issued with an AlertGPS device and app



Staff attends to high-risk patient



Staff requires assistance and pushes alert button



Response center receives location data and can contact emergency services if required



Alerts are sent to designated colleagues and recipients

Healthcare workers are 5x more likely to experience workplace violence than an average worker.

Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9206999/#bib4>

Transforming connected wearables to enterprise solutions

Why AT&T Connected Solutions



Easy management

Deploy, manage and analyze all your IoT solutions from one portal.



Full compliance

With the robust and highly secure AT&T Network and industry accreditations.



Single vendor accountability

One point of contact for hardware, software, connectivity, strategic partners, and professional white-glove services.



Connect securely

Get the 5G network you depend on to stay securely connected,¹ IoT-optimized Low Power Wide Area solutions, and the best global coverage.²



¹ 5G/5G+ service requires a compatible device and data plan. Service is not available everywhere. See att.com/5Gforyou for details

² Based on comparison of carrier owned & operated networks. No AT&T on-net coverage in select countries, including Canada. See details at <https://www.att.com/international/>. See destinations covered at att.com/globalcountries



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