AI in Healthcare: US vs Europe Survey

Adoption, Impact, and Barriers in Hospitals (N = 100)

Cross-sectional online survey of frontline professionals in US (n=60) and Europe (n=40) 65% clinical roles | 35% non-clinical (administration, IT, operations)

2025 | 100 Hospital Professionals | US & Europe

Executive Summary — Key Findings

Adoption Rates

72% of hospitals report using AI in routine practice (US 78%, Europe 63%)

Where AI is Used

Clinical AI led by radiology (74%) and CDSS (59%); non-clinical led by scheduling (61%) and billing/coding (54%)

Impact

Positive effects on time to diagnosis/throughput (74%), diagnostic accuracy (69%), and overall quality (66%)

Barriers

Data/EHR integration (58–62%), regulatory uncertainty higher in Europe (67% vs 39% US), training gaps (~50%)

Regional Pattern

US prioritizes ROI, burnout relief, GenAI pilots; Europe emphasizes regulation, interoperability, equity

Future Outlook

Most respondents expect AI use to increase over 3–5 years

Study Objectives and Methodology

Primary Objective

Assess how AI solutions in clinical and non-clinical hospital practices are changing care quality, efficiency, and workforce experience in hospitals in the US and Europe.

Secondary Objectives

- Compare AI adoption patterns between US and European hospitals
- Identify perceived benefits (diagnostic accuracy, time savings, cost efficiency, patient experience)
- Identify key barriers (data quality, integration, regulation, trust, skills)
- Explore differences between clinical staff and non-clinical staff

Study Design

Cross-sectional online survey of frontline hospital professionals

- N = 100 respondents
- Europe: n = 40
- 35% non-clinical
- US: n = 60
- 65% clinical roles

Respondent Profile & Adoption Snapshot (Table 1)

Characteristic	Overall (N=100)	US (n=60)	Europe (n=40)
RESPONDENT ROLES			
Clinical roles (physicians, nurses, allied health)	65%	63%	68%
Non-clinical roles (admin, IT, operations, finance)	35%	37%	32%
AI ADOPTION RATES			
Hospital uses any AI in routine practice	72%	78%	63%
Uses clinical AI (diagnostics, CDSS, etc.)	68%	73%	60%
Uses non-clinical AI (admin/ops/finance)	65%	70%	57%

Note: Values represent percentage of respondents in each category. Sample consists of frontline professionals across various hospital types in US and European healthcare systems.

AI Adoption Rates — US vs Europe

Any AI in Routine Practice

US: 78% Europe: 63%

Combined: 72%

Clinical AI

US: 73% Europe: 60%

Combined: 68%

Non-Clinical AI

US: 70% Europe: 57%

Combined: 65%

Clinical AI Use Cases

Radiology / Imaging Decision Support

74% of AI users

Clinical Decision Support (CDSS)

59% of AI users

Pathology / Lab Interpretation

41% of AI users

Triage / ED Prioritization

37% of AI users

Non-Clinical AI Use Cases

Among hospitals using non-clinical AI (percent of those users)

Appointment Scheduling & No-Show Prediction

61% Adoption

Billing & Coding Automation / Denial Management

54% Adoption

Bed Management & Patient Flow Prediction

46% Adoption

Supply Chain & Inventory Optimization

33% Adoption

Perceived Impact of AI (Users; n≈72)

Outcome Domain	US (%)	Europe (%)	Combined (%)
Diagnostic accuracy (clinical AI)	71%	66%	69%
Time to diagnosis / throughput	76%	70%	74%
Reduction in administrative workload	63%	58%	61%
Patient access & experience	55%	52%	54%
Staff burnout / cognitive load	49%	45%	47%
Overall quality of care	68%	64%	66%

Note: Percentages represent respondents reporting "positive" or "strongly positive" impact among hospitals actively using AI solutions. Findings align with empirical evidence showing incremental improvements in diagnostic confidence, workflow efficiency, and operational throughput without replacing clinical staff.

Barriers and Risks to AI Adoption

Barrier / Concern	US (%)	Europe (%)
Data integration / EHR interoperability	58	62
Lack of transparency / explainability of models	45	53
Regulatory / legal uncertainty	39	67
Concerns about algorithmic bias & equity	42	50
Upfront cost and unclear ROI	47	44
Lack of training / digital skills	51	48

Note: Multiple responses allowed. Percentages represent proportion of all respondents (N=100) who identified each barrier. Key findings: Europe shows higher concern about regulatory uncertainty (67% vs 39%), while data integration challenges are consistently high across both regions (58-62%).

US vs Europe: Perspectives and Priorities

United States

1. Rapid experimentation with EHR-integrated tools (ambient documentation, summarization, note drafting)
2. Focus on operational ROI (throughput, revenue cycle, staffing optimization)
3. Priority on tackling clinician burnout through AI-assisted documentation and workflow automation
4. Large health systems piloting and scaling generative AI solutions across multiple sites
5. Emphasis on speed to market and competitive advantage in AI deployment

Europe

1. Steady uptake with strong emphasis on safety, ethics, and compliance under EU AI Act
2. Priority on interoperability across regions and healthcare systems
3. Focus on equity and patient safety as central regulatory requirements
4. Public health systems emphasize capacity planning, resource allocation, and population health
5. Strong interest in virtual care and telemedicine supported by AI technologies

Key Insights and Conclusions

AI Adoption is Mainstreaming

~7 in 10 hospitals report AI use in routine practice; US adoption leads Europe with more widespread implementation across health systems

Concentration in Specific Use Cases

Clinical AI concentrates in imaging/CDSS; non-clinical AI focuses on scheduling and billing — targeted adoption rather than broad deployment

Incremental, Workflow-Centric Benefits

Measured benefits are incremental and workflow-focused, not clinician-replacing; AI augments rather than automates clinical decision-making

Greatest Near-Term Gains

Throughput, diagnostic confidence, and revenue integrity show strongest improvements; operational efficiency drives current ROI

Thank You

Do you have any questions?

+91-959-915-8047

info@sperresearch.com

https://www.sperresearch.com

Corporate Office:
#303-304, Tower B, Noida One, Sector 62, Noida, India