AI in Inpatient/Outpatient Rehab Services

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AI in Rehabilitation Therapy

- **Pre-Initial Visit**
  - AI Agents (intake form, triage, dx insight)
- **During Visit**
  - Ambient listening, specific digital tools (US MSK Imaging, Motion analysis, Balance Assessment, etc)
- **Between Visits (or After)**
  - Telehealth (with tools to assist with measurements)
  - Remote Therapeutic Monitoring (Home Exercise Performance and Adherence)
  - Phone Apps (Gait pattern, Balance, Exercise performance)
  - Wearables (Sensors, Prosthetics, Exoskeletons)
  - Agentic AI for Outcome Tracking and CPG alignment
  - Infrared tracking for fall prevention

Thoughts

1. **Many ways AI is used in Rehabilitation Therapy (Definition of AI)**
   - Technologies are not evenly distributed
     - Regional and institutional gaps, adoption barriers, Digital Health Divide, Resource Disparity
2. **Governance in Health Systems**
3. **Rehab Therapy Profession: Functioning and Disability—and the ICF**
   - Factors = Health, Environment, Personal
     - Status is 'fluid'
     - SSA vs ICF vs USCDI
   - Function matters
     - Context of 'disability evaluations' for SSA
     - Context of using data in the future
     - Context of Quality of Life "Give a person a life worth living"

References

1. World Health Organization. **The ICF: An Overview**. https://www.cdc.gov/nchs/data/icd/icfoverview_finalforwho10sept.pdf , retrieved 3/21/2026
2. American Physical Therapy Association. **The Digitally Enabled Physical Therapist: An APTA Foundational Paper.** Nov 2022
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Some Products by category AI in Rehabilitation Therapy

- **Pre-Initial Visit**
  - AI Agents
    - Triage/Intake Form/Pre-Appt Interview (*Therapha, CareAnalytica*)
    - Diagnosis insight (*Therapha, CareAnalytica*)
    - Scheduling and Reminders (*SPRY, PromptHealth, WebPT,* etc)

- **During Initial Visit**
  - Ambient Listening (*MS CoPilot, Abridge, NetHealth, WebPT, PromptHealth, HEMScap, Tapt Health*)
  - Specific digital tools (pressure plate-*VALD*; risk stratification-*CareAnalytics*; Ultrasound Musculo-skeletal Imaging-*Clarius*; Motion analysis-*ViFive*, *Kinotek*; Balance Testing-*UprightVR*)

Some Products by category AI in Rehabilitation Therapy

- **Between Visits (or After)**
  - Telehealth, with tools to assist with measurements (*Immergo, Zerapi.ai, EverFlex, Jintronix, Virtusense*)
  - Remote Therapeutic Monitoring, with Home Exercise Performance and Adherence (*Blue Marble Health, ViFive, EverEx, Medbridge*)
  - Wearables (Sensors) all with AI tools incorporated (*AgeWiser, Smart MS3, Motusi Smart Apparel, Motus Robotics*)
  - Phone Apps, with Activity tracking, Balance, Exercise performance, Gait pattern (*OneStep, ViFive*)
  - Agentic AI for Outcome Tracking and CPG alignment (*PromptHealth, MS CoPilot*)
  - Infrared tracking for fall prevention (*Virtusense, AvaSure*)
  - Fall Injury Prevention (*Tango Belt*)
  - Prosthetics, Exoskeletons (*ReWalk, Ekso Bionics*, etc)

AI in Clinical Physical Therapy:

Current and Upcoming AI Applications

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CEO, Doctor of Physical Therapy

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How AI Already Shapes PT Documentation

Currently Deployed

Ambient AI Scribing

Actively in use across our locations. Captures the full patient encounter in real time. Generates comprehensive clinical notes without manual typing. Providers review and refine AI drafts before final submission to ensure total accuracy.

AI-Assisted Documentation & Coding

Supports note generation, coding suggestions, and documentation completeness. AI can surface case-trend alerts when clinical progress stalls, influencing clinician attention and workflow.

Patient Monitoring Between Visits

AI-supported tools can track exercise adherence, symptom reporting, and communication between visits, extending the longitudinal record.

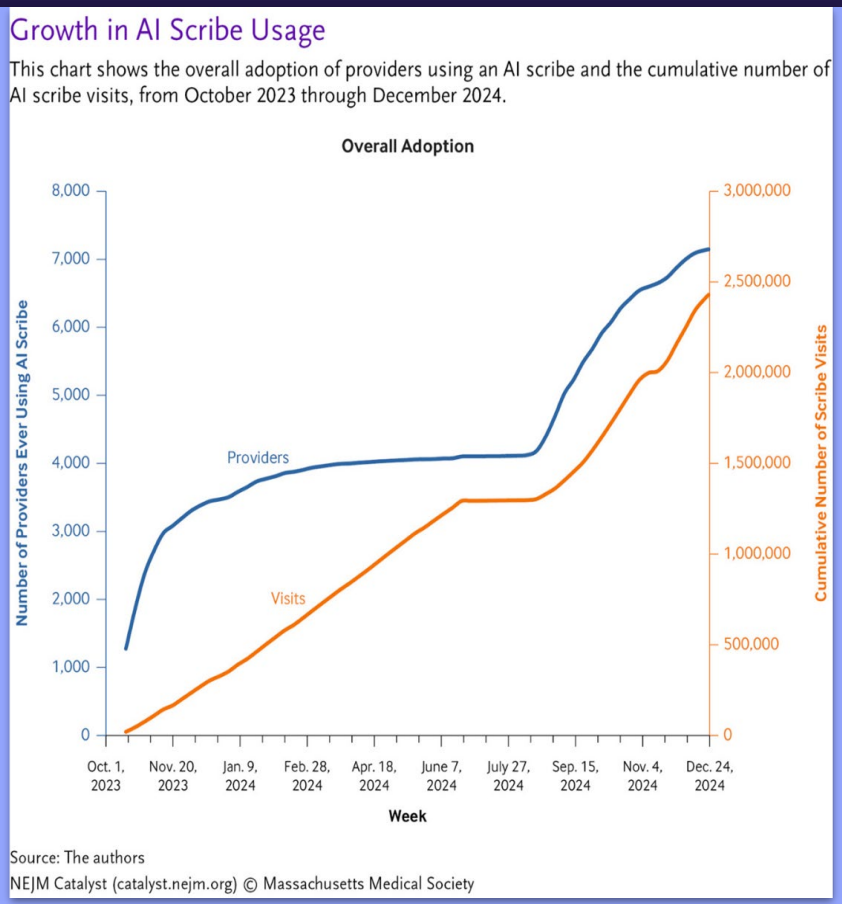
AI for Record Review & Legal Prep

AI can organize large cross-specialty records, identify function-relevant findings, and help translate raw documentation into hearing preparation and testimony themes.

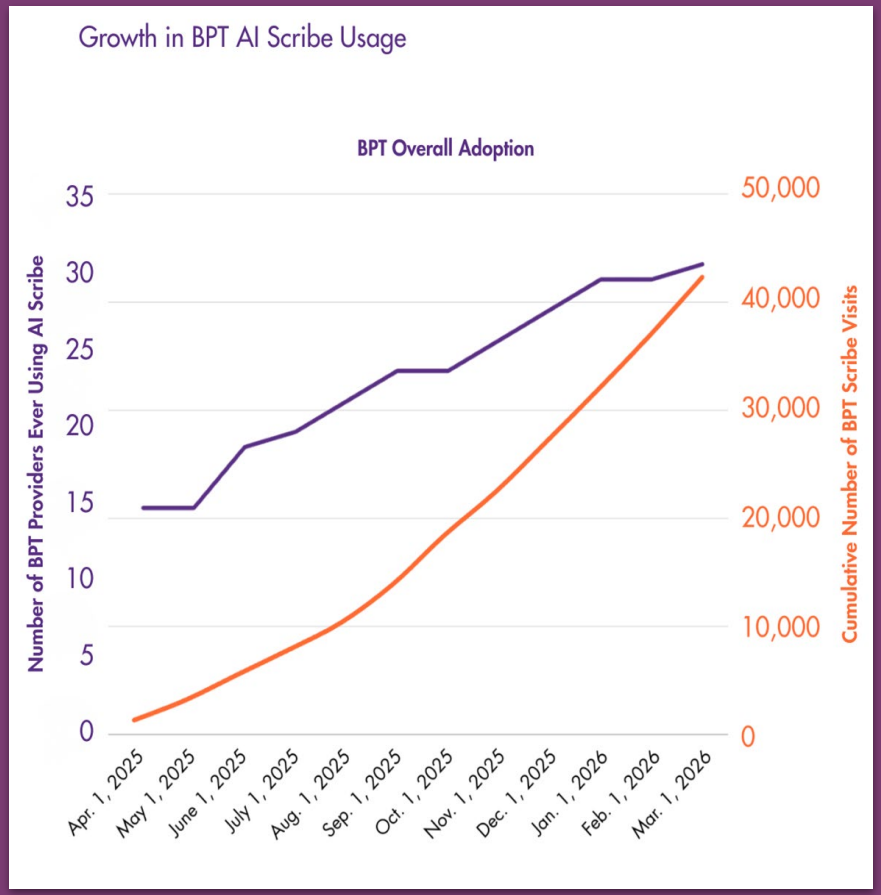
Research: Duggan et al. (JAMA Netw Open, 2025): Ambient scribing reduced manual clinician input by 29.6% while increasing note length by 20.6%: the record may be longer and less clinician- filtered.

Ambient AI Scribing Scale

Current Reality



Research: Tierney et al., NEJM Catalyst (2025): Over 63 weeks, ambient AI scribe use expanded to more than 7,000 providers and 2.5 million encounters, indicating that AI is already participating in documentation at a scale large enough to matter for downstream record review.



BPT: Over 52 weeks, ambient AI scribe use expanded across more than 31 providers and 42,000 encounters, growing from 1,341 AI-assisted notes in April 2025 to 5,317 in March 2026.

Case 1: Disability Hearing Prep

The Information Asymmetry SSA Should Know About

1

Patient Denied Disability

The attorney requested that I provide witness testimony at the reconsideration hearing.

2

Scale of the Record

Spanned thousands of pages across multiple specialties.

3

AI-Assisted Preparation

AI used to organize the record, identify the most relevant functional evidence, spot gaps and vulnerabilities, and connect objective findings to work-relevant limitations.

4

Key Reality

We were able to efficiently prioritize the most pertinent evidence. AI use was invisible in the record SSA received. It existed entirely in preparation, not in the underlying documentation itself.

Why This Matters for SSA

Claimants and attorneys are also using AI to synthesize and prioritize the most function-relevant parts of a medical record.

SSA adjudicators reviewing the same voluminous records may not have equivalent synthesis tools.

AI used in hearing preparation may be completely invisible in the records SSA receives: no disclosure, no provenance signal.

The same kind of AI-assisted synthesis could help adjudicators navigate volume, but only with strong guardrails and keeping the human-in-the-loop.

Case 2: AI Scribe Capture

Attorney Requested Removal of AI-Generated Content

⚠ **A first in 18 years of private practice: it followed ambient AI scribing.**

What Happened

During a session captured by our ambient AI scribe, the patient mentioned she provides full-time care to her grandchildren: driving them to football and basketball practices. The scribe documented this verbatim in the clinical note.

The Attorney's Response

The patient's attorney called and asked us to remove the content. They did not believe it belonged in a PT note, and felt it directly undermined their claim. We refused.

Why SSA Should Care

Activities of daily living, which are essential for SSA RFC determinations, are now being captured by AI scribes in ways that manual documentation often would not have surfaced. That changes what may surface in records used for disability review.

Disclaimer: Portions of the record may have been created with voice recognition software. Please excuse any minor errors in transcription that may be present. Please call for questions/ clarity.

Diagnosis

SSA Implication: Ambient scribing may surface ADL information beyond what manual documentation historically captured, yet there is no clear, standardized framework for disclosure or for handling requests to remove AI- captured content.

What SSA Should Expect

6 Takeaways

01 AI is in PT records now

Ambient scribing is live in some independent outpatient practices, not just health systems.

02 More detail, not less

AI captures patient-reported activities that manual notes historically omitted. Records will be more rich and functionally descriptive going forward.

03 No disclosure standard exists

A note may be substantially AI-assisted with zero indication of that in the record. APTA issued its first advisory on this in August 2025.

04 The information asymmetry is real

Claimants/attorneys are also using AI to prioritize the most function-relevant evidence before SSA ever sees it. SSA's IMAGEN system is a start, but the gap is growing.

05 Record integrity guardrails are needed

Who can request removal of AI-captured content?
What are the legal and ethical standards?
These questions have no clear answers today.

06 AI errors carry no disclosure signal

When a clinician signs an AI-drafted note, professional accountability does not change, but SSA has no way to know whether an error originated with the provider or the AI.

Key Resources and References

Selected References on AI in PT Documentation and Medical Record Integrity

1. APTA Practice Advisory: Emerging Technology| AI-Enabled Ambient Scribe Technology in Physical Therapy Documentation (August 2025)

   First APTA guidance addressing documentation responsibility, legal and regulatory considerations, and clinical use of ambient AI scribes in physical therapy. (apta.org/your-practice/practice-models-and-settings/practice-advisory-emerging-technology)

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