Initial Best Practices for Ambient Listening Technology for Clinical Documentation

This document summarizes early learnings for best practices for ambient listening technology for clinical documentation. It is intended as an initial resource to support thoughtful, responsible, and effective implementation of this rapidly evolving technology in clinical settings. As ambient listening technology becomes more integrated into clinical workflows, establishing clear best practices is essential for ensuring accuracy, usability, and clinician trust. This guide outlines key considerations for implementation, workflow review, training, vendor collaboration, and long-term adoption to support the successful deployment and continued sustainable use of ambient clinical documentation tools.

Ambient listening tools powered by artificial intelligence offer new opportunities to reduce documentation burden and improve clinician workflow. However, as with all emerging technologies, best practices are still developing. This guide, Version 1.0, captures early insights and general recommendations to inform current use. It is not meant to serve as a comprehensive user manual, but rather to provide high-level guidance that can be adapted to a variety of organizational needs and environments.

As this technology continues to mature and its impact on clinical documentation becomes better understood, this guide will be updated and expanded. We view this as a living document—iterative in nature and shaped by ongoing experience, innovation, and feedback from users across disciplines.

Version 1.0
Oct 2025

Assess Model Validation Information

- Make sure the ambient listening technology is/has been validated (internally and/or externally) for usability and accuracy using a large cohort of care providers in a *variety of specialties* and patients in a *variety* of clinical settings.

Note Review Patterns and Workflows

- Recommend actively reviewing and accepting or editing AI-generated content before moving on to the next patient

System Implementation Considerations

- Enable In-application, non-interruptive (passive) EHR notifications/alerts when notes are ready for review
- Assure a quick turnaround speed of the applications, as it reduces the need for complex notification systems
- Assure early and seamless integration of ambient documentation into EHRs (even during pilot phase) as it is critical to usability. Studies are demonstrating poor technology acceptance with systems that are not seamlessly integrated.

Quality Assurance and Trust Building

- Source link (within the non-interruptive/passive alert) between summary and original content referencing the original transcript, keywords, and medical entity highlighting capabilities.
    - This functionality is particularly valuable if available from the vendor, though not all vendors may currently support this level of traceability or technical integration.
- Originating clinicians need to review and accept the ambient voice-to-text draft before the content populates in their notes

- As the system and the end users mature, this will become a more efficient process

Content Accuracy

- Gather end-user feedback to understand if and how frequently corrections were needed in the ambient documentation.
  - This will need to be continued until the accuracy meets a predetermined level, after which random reviews should be implemented
- Provide accuracy assessments to the vendor to continuously improve the product's accuracy
  - This can be accomplished via system-native accuracy assessments or by Likert scale assessments of end users (the former is preferred if available)

Note Length and Content Management

- As you integrate an ambient voice text solution, evaluate and optimize your existing note documentation tools and workflows to take full advantage of the capability.
  - Continually integrate the ambient dictation capability into new documentation tools/upgrades from the EHR vendor
- Existing documentation practices influence content lengths at the outset.
- Vendors/clinical champions/trainers can assist with practice, feedback, and best practices (prompt engineering) for desired conciseness both before and after implementation.

Vendor/System Setup and Configuration

- Verify note quality with end users and monitor capabilities
- Vendor provides clear information about the features, functionality, testing, and ability to customize one's ambient listening product

- Discuss customization options for individual/specialty and organizational needs
- Review notes design/template optimization opportunities
- Establish clear metrics for success (e.g., clinician satisfaction, cognitive burden, and time savings reduction, net promoter score assessment, lack of abandonment of ambient listening technology)

Training and Adoption

- Instruct clinicians on the collection of patient consent (system and regulation defined) and education of patients to build and maintain trust in the tool.
- Focus on building provider trust through demonstration, training, and practice in a workflow setting
- Consider phased implementation to build confidence (integrating system into the EHR before the earliest phase, if possible.)
- Maintain the ability to easily access original transcripts during initial adoption, and maintain access via user-configurable links as long as the capability is available (EHR-dependent)
- Focus on note conciseness as part of the training and via ongoing feedback by trainers/clinical champions
- Build optimized note designs and tools that maximize the capabilities of the ambient listening application, and include those as a component of the training
- Build optimized note templates for each specialty and care setting, placing information in standard locations across the organization.
    - This will make it easy for all team members to find information quickly and accurately, reducing cognitive burden and improving patient safety.

Long-Term Best Practices for Organizations

- Roll out the technology to all care settings and providers beyond the initial pilot user base.
- Regularly review ongoing metrics such as time savings with documentation, provider satisfaction, and administrative/cognitive burden reduction.
- Periodic evaluation of template effectiveness and optimization, to include workflow-supporting EHR vendor upgrades to note templates
- Continuously monitor system performance (both speed and accuracy)
- Monitor for technology abandonment, and query about reasons for doing so
- Implement and maintain a governance process for implementing new capabilities and note designs to support broad adoption and use by various specialties
- Standardize note templates to support future capabilities to search and aggregate information for clinician review and clinical decision support capabilities.
- Obtain periodic free text (e.g., adding comments to regularly scheduled end user satisfaction surveys) user feedback to help vendors improve their systems and help both vendors and organizations tailor workflows to better align with ambient documentation.