
Voice dictation in a non-digital Emergency Department

Initiative Type

Service Improvement

Status

Sustained

Added

31 October 2024

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10 November 2024

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<https://www.clinicalexcellence.qld.gov.au/improvement-exchange/voice-dictation-non-digital-emergency-department>

Summary

Prolonged waiting times are a common source of patient dissatisfaction and complaints. As most Emergency Department (ED) patients are discharged from ED, the time required for documentation can lead to delays in disposition and contribute to patient access and flow issues. Reducing time spent on clinical documentation allows clinicians to spend more of their workday on clinical care. Non-

digital hospitals have limited tools to improve documentation quality. The use of Dragon Medical One voice dictation software allows clinicians to create clinical documentation significantly faster than typing alone, and the use of auto-text templates supports a more comprehensive documentation process. Over a six-month period, the project team introduced dictation software and workflow at Gladstone ED with local medical, nursing, and administrative support. Clinicians saved 83 hours in June 2024, with improvement in timely documentation completion rates, improvements in consistency of documentation, reduction in clinicians staying late to complete notes, and overall improved quality of clinical records, particularly in clinicians who spoke a language other than English at home.

Key dates

Nov 2023

Jul 2024

Implementation sites

Gladstone Hosiptal

Partnerships

Clinical Excellence Queensland – Healthcare Improvement Unit

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Aim

- Reduce documentation time
- Improve documentation quality
- Improve staff satisfaction with the documentation process

Benefits

Improvements in clinician satisfaction, documentation efficiency, and quality measures. Reduction in documentation time from nine to five minutes per episode. Increased clinical note completion within 30 minutes of discharge. Increased GP letters at time of discharge. Increased Documentation Quality scores. Clinician time released - 83 hours in June 2024. Clinicians surveyed reported high satisfaction with the voice dictation process (over 90%), reduced burden of documentation, and reduced need to stay late to complete notes, contributing to improvements in well-being and job satisfaction. The benefits of voice dictation were increasingly apparent in clinicians that spoke a language other than English at home, with lower baseline typing speeds and spelling error reduction.

Background

Gladstone ED is a regional hospital ED that treats approximately 38,000 patients per year. As demand for ED care continues to grow, departments face the challenge of providing high-quality care with limited ability to increase staffing at a similar rate. Quality documentation of each of these patient episodes can take up a large part of clinicians' workdays and has been raised as a significant burden that affects clinician wellbeing. Dragon Medical One (DMO) dictation software has shown improvements in clinical documentation and efficiencies within digital (ieMR) hospitals, reducing documentation time per patient episode. As a non-digital hospital, our project aimed to reduce time spent on documentation, improve documentation quality, and reduce the burden of documentation on clinicians through dictation and additional functionality of templates.

Solutions Implemented

DMO dictation software workflow and templates were introduced to 20 frontline clinicians over a six-month period. This initiative allowed clinicians to dictate clinical notes and discharge letters, significantly reducing documentation time and improving documentation consistency and quality. The additional functionality of templates not previously available for use in EDIS, provided useful prompts for clinicians and improved consistency of documentation, particularly for common procedures. Voice commands also facilitated quicker navigation to frequently used resources, enhancing overall efficiency and releasing clinicians for patient care.

Evaluation and Results

The evaluation included clinician surveys, typing tests, time-motion studies, chart and EDIS audits and Nuance Performance Analytics.

- Clinician time released - 83 hours in June 2024 (\$15,391 estimated saving)
- Documentation time reduced from nine minutes to five minutes per episode (44% saving)
- Documentation quality score improved from 74% to 78%
- Clinical notes completed within 30 min of discharge improved from 80% to 85%
- GP letters at discharge improved from 70% to 73%
- More than 90% of clinicians reporting high satisfaction

Lessons Learnt

Mapping workflows, preparation of templates and creation of local training and support materials, along with the empowerment of local champion clinicians enabled the team to overcome initial challenges in adoption. IT issues such as network latency or disruption do pose a risk. The project's success demonstrated the potential for broader application, highlighting its value in improving efficiency, quality, and overall operational effectiveness in a non-digital ED.

References

[Dragon Medical One \(DMO\) Voice to Text in the Emergency Department | Improvement Exchange | Clinical Excellence Queensland | Queensland Health](#)