

Using technology to address the high Failure To Attend rate within Fairfield Hospital Diabetes Centre

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Background

- Fairfield LHD has one of the highest prevalence of T2DM within NSW (1)
- Despite this high demand for diabetes specific medical advice, the rate of attendance to Fairfield Hospital diabetes outpatient clinic averaged only 68% between 2022 and 2023, decreasing to 55% in the last trimester of 2023.
- High rates of failure to attend (FTA) are strongly associated with poorer clinical markers of diabetes management (such as higher HbA1c, poor lipid profiles, higher blood pressure) (2)
- International data suggests that despite the significant role of nutrition in T2DM management up to 52% of patients missed one appointment, and up to 12% missed >30% of appointments. Patients missing >30% of appointments had HbA1c values 0.7mmol/L higher relative to patients who did not miss appointments. (2)
- As well as poorer health outcomes, missed appointments pose significant financial burden with the average cost per FTA being \$60 AUD, increasing up to \$128 AUD if the consumer required a health care interpreter. The current estimated cost of FTAs this financial year alone for Fairfield Hospital is \$14 000 AUD.

Objectives

- Improve the attendance rate within Fairfield Hospital Diabetes Centre
- Investigate barriers to attendance and improve consumer satisfaction
- Improve the current text reminder system to incorporate Arabic and Vietnamese languages to improve attendance of NESB consumers

Methods

Systematic Audit

Audit of Fairfield Diabetes clinic from 2021 to 2023 inclusive regarding attendance rates/patient demographics

Interviews

Patients that failed to attend appointments from May-July in 2022 were contacted and interviewed to investigate reasons for missing appointments.

Updating reminder system

Introduction of individualised text messages including a description of the service and differentiating it from other appointments (see figure 1)

Reviewing reminder system

Attendance rate reviewed including demographics of consumers who failed to attend and feedback on the text message system

Translation of reminders

Implementing feedback and translating reminder messages to Arabic and Vietnamese with help from HCIs to target demographics with poor attendance

Results

- Total attendance rate increased significantly from 68% to 78.3% after introducing individualised text messages differentiating Dietitian appointments from Diabetes Nurse Educators. Attendance rate for NESB consumers remained poor and did not change after implementing the text message system.
- The attendance rate was statistically significantly different when comparing English speaking to NESB consumers
 - Rate of attendance for NESB consumers was 67.5%, whilst amongst English speaking was 82.1%.
- 38% of consumers who failed to attend were NESB and required an interpreter
 - Likely minimally affected by introducing direct text messaging as these messages were only sent in English.
 - Often difficult to contact for impromptu reviews due to language barriers and requiring interpreters.
- Statistics have not yet been finalised for the impact of introducing reminders in Arabic and Vietnamese on the NESB attendance rate, however, anecdotal evidence suggests the attendance rate has improved.



Figure 1. Example of new text message reminders in English and Arabic.

Conclusions

The introduction of a text message reminder system significantly improved attendance of English-speaking consumers to Dietitian appointments within Fairfield Hospital Diabetes Centre. Further work is required to improve the attendance for NESB consumers, however, preliminary data on the use of text messages translated to Arabic and Vietnamese is positive and presents a potential solution to the problem of high FTA rates.

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References

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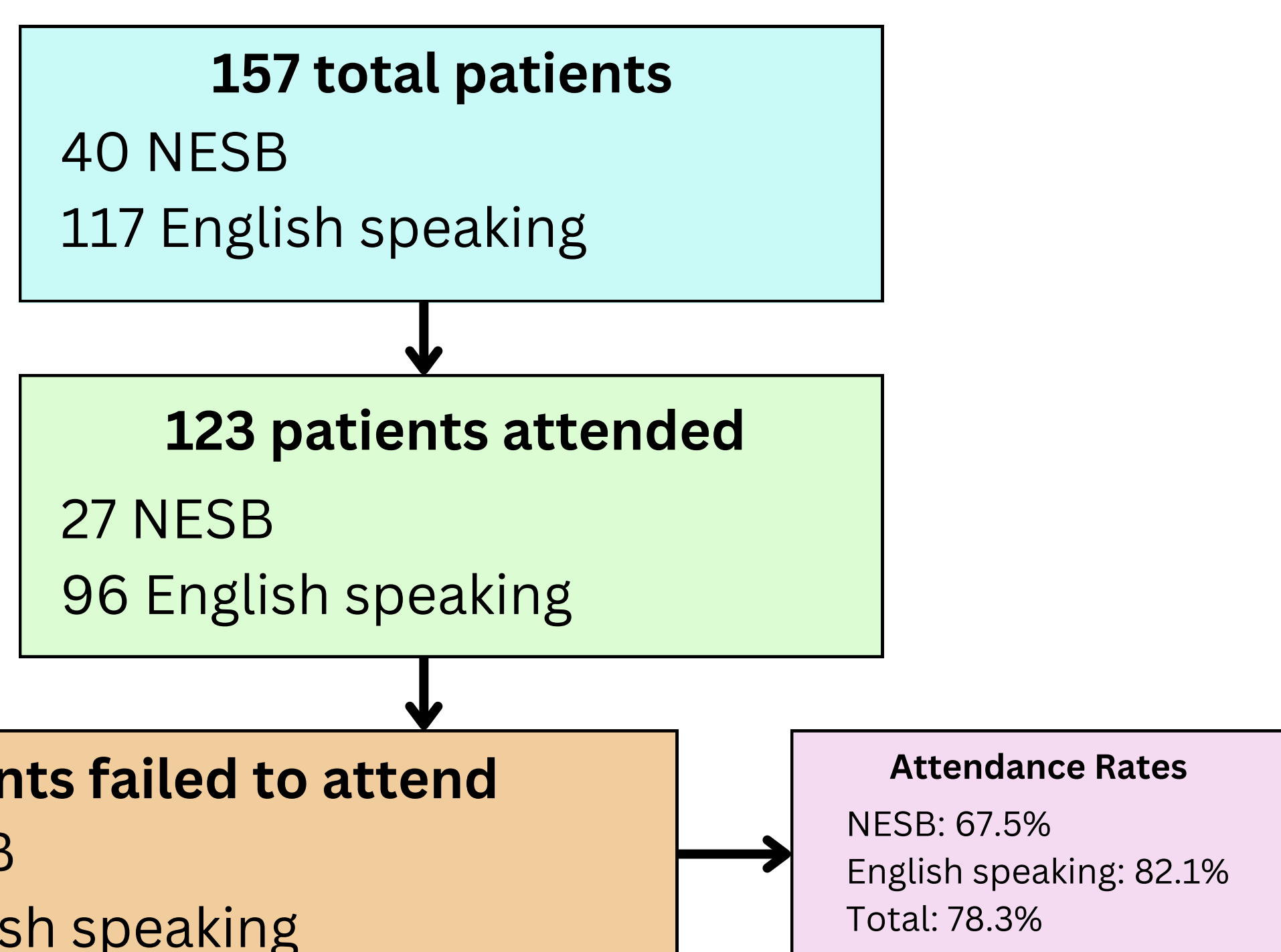


Figure 2. Breakdown of patients attendance rates after updating text reminder templates. Includes comparison in attendance of NESB to English speaking patients.