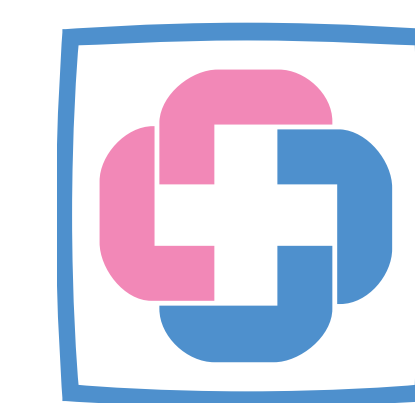




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Optimising nutrition screening to improve dietitian referral rates for timely intervention in paediatric oncology patients.

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Introduction

Children with cancer are at higher risk to suffer from the impact of cancer and its treatment due to their limited nutrient reserves and additional requirements for growth and development. Those whom are under nutrition were more likely to have decreased treatment tolerance, increased risk of infections and reduced survival¹. Therefore, it is imperative to step up the nutrition screening among children with cancer for early identification of under nutrition patient to initiate timely intervention.

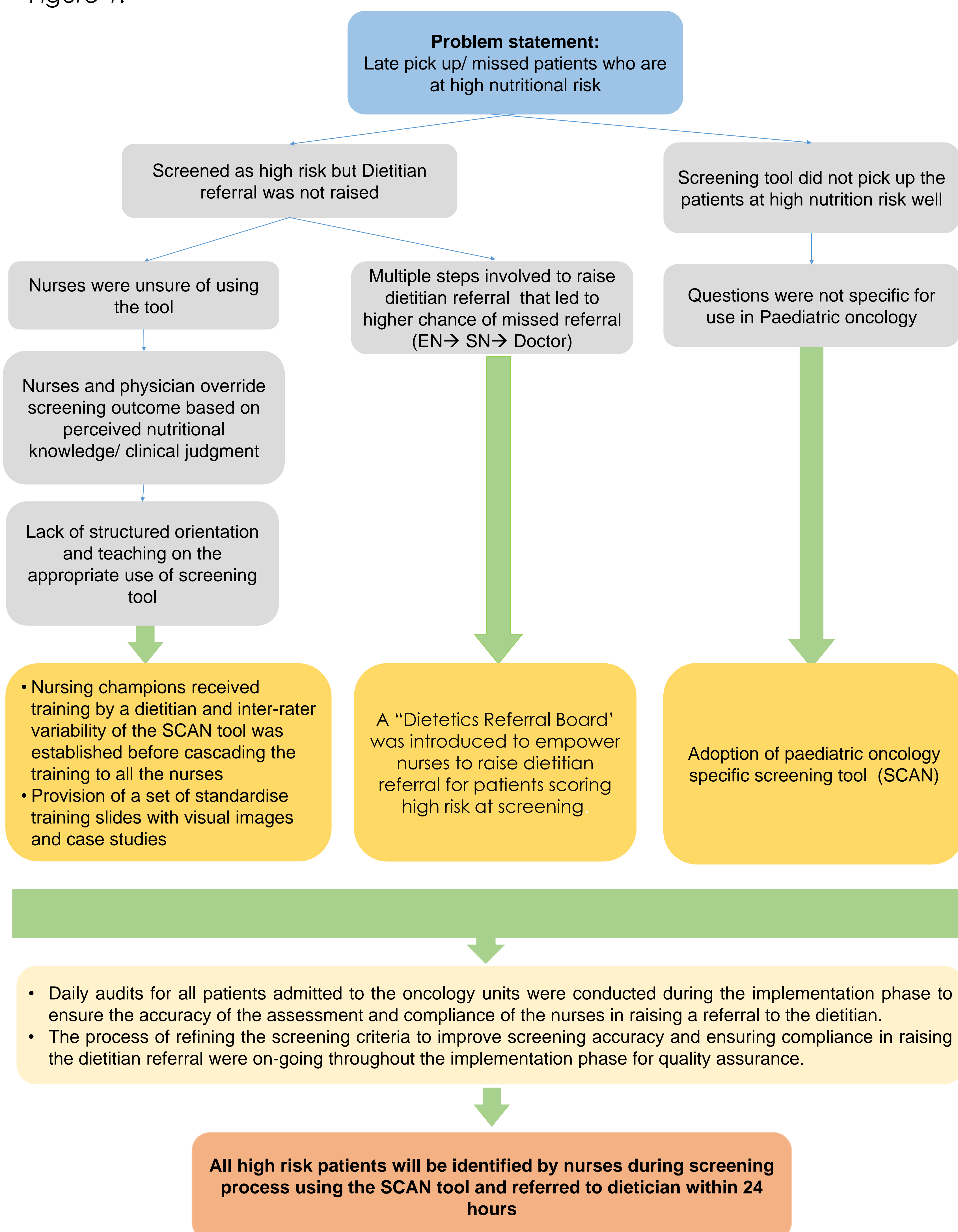
Aim

To improve the identification of high-risk patients by screening using the oncology-specific screening tool (SCAN), and increase dietitian referral rates to initiate timely dietetic intervention.

Methodology

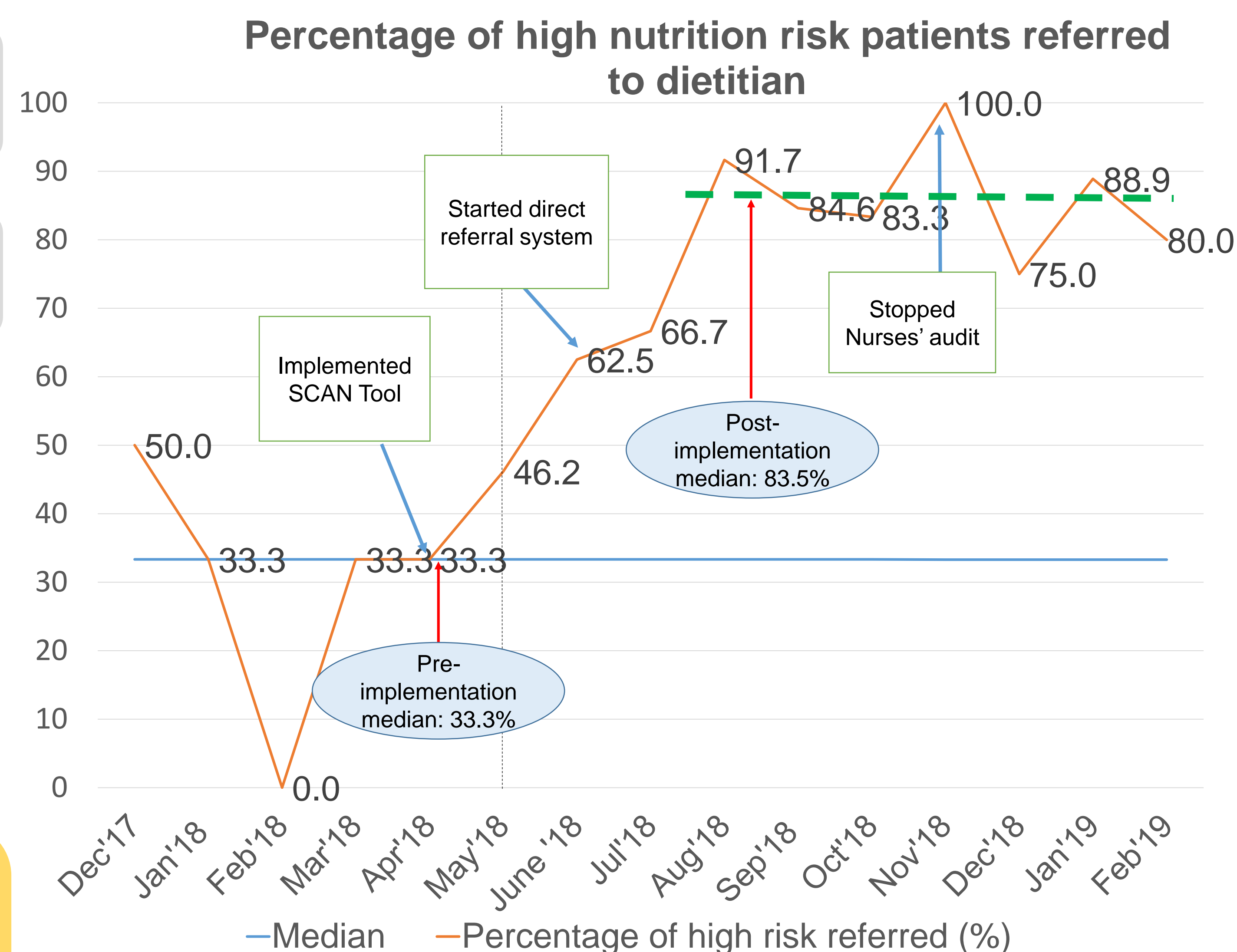
A team of nursing champions and dietitians was formed to map the existing process of the dietitian referral system. Several gaps were identified and analysed using the 5 whys and Tree Diagram (Figure 1) that led to the implementation of the SCAN tool and to pilot a seamless referral system in the paediatric oncology inpatient units.

Figure 1.



Results

A total of 288 screenings from July to December 2018 were performed and have demonstrated a marked improvement from the baseline median of 33.3% to 83.5% (Figure 2). On average, high risk patients were seen by the dietitian within 24 hours from admission as compared to 72 hours prior to the project. The accuracy of screening these patients using the SCAN tool was maintained above 80% with average kappa value of 0.74 suggesting good inter-rater reliability.



Conclusion

It is imperative to step up nutritional screening and refer to dietitian for timely intervention to optimise nutritional status. The adoption of a direct referral system from nurses had significantly reduced delays in dietitian referral. However, dietitian referral rates may still be affected by human errors. The team will consider an automatic trigger/ alert to the dietitian if patient is screened as high risk in the system to ensure sustainability of the project. Nonetheless, this project has allowed the healthcare team to identify patients at risk of developing nutritional deficit and provide timely dietetic intervention in meeting the nutritional needs of these patients.

¹Co-Reyes et al. "Malnutrition and obesity in pediatric oncology patients: causes, consequences, and interventions." *Pediatric blood & cancer* 59.7 (2012): 1160-1167.