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Automated reporting and analysis of Service Quality & Patient Experience metrics through a dynamic visualisation tool

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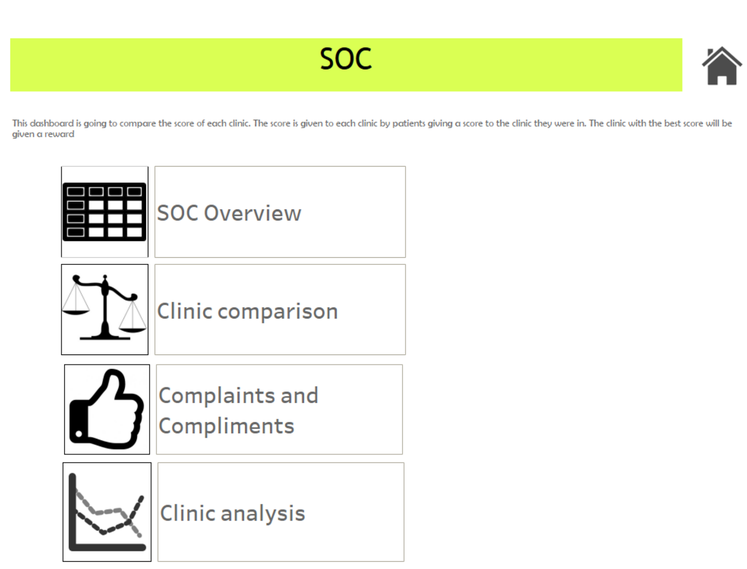
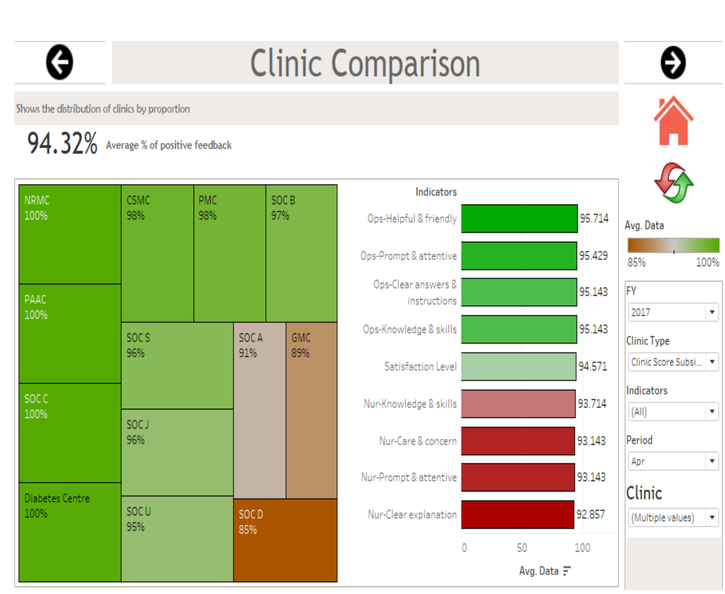
AIMS

Optimise the manual data collation process and automate monthly service quality reports creation, resulting in productivity gains and enhanced user experience for periodic review of service quality performance.

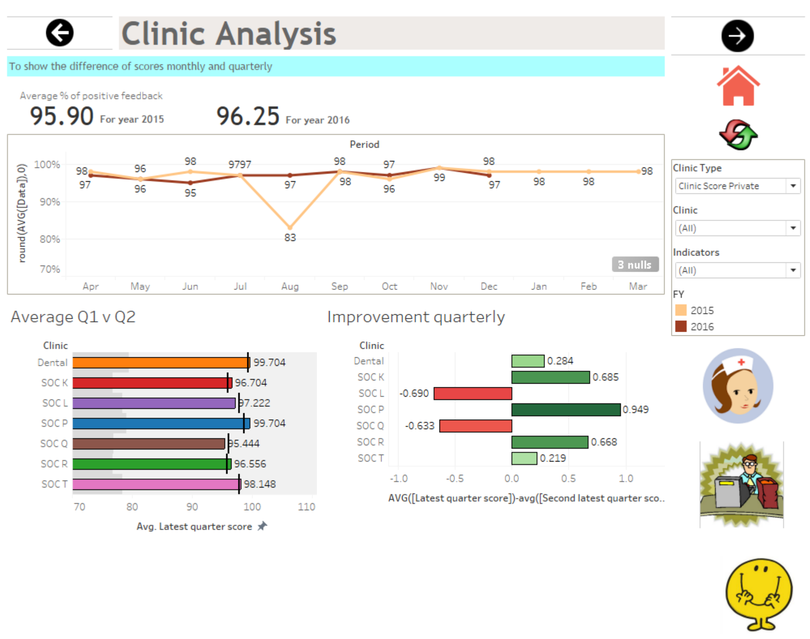




METHODOLOGY

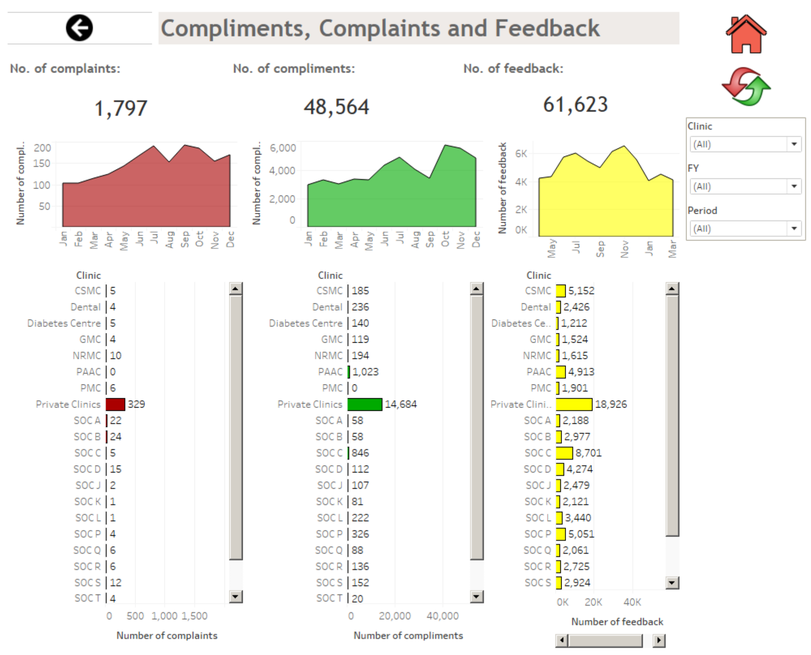
On-going monthly data extraction and consolidation of monthly patient feedback reports for Specialist Outpatient clinics was a time consuming effort. The need to automate this monthly report using a visualisation tool was discussed with the stakeholders and it was agreed to design and build an in-house dynamic dashboard with an enhanced user experience. Data integration from multiple source systems was done using R programming with the Tableau visualisation tool. Drill down of patient feedback text data (complaints and compliments) to each speciality, location and the individual case level allows users and respective stakeholders to review and take the appropriate corrective and preventive actions. In addition, customised visuals for service quality training metrics and participant feedback were designed for continual improvement and monitoring training effectiveness.

Enhancement of this visual tool to incorporate Inpatient and the Emergency department datasets is currently in progress. The dashboard will subsequently be interfaced with the MOH Patient Satisfaction Survey results and the Customer Satisfaction Index of Singapore (CSISG) annual survey results for the healthcare sector.



RESULT/OUTCOME

The new patient experience dashboard allows for prompt refresh of monthly data, with significant time savings of 30 manhours per month, enabling quicker production of monthly reports and faster action for service improvement. Overall annualised FTE savings realised in FY16 was 0.2 FTE and with minimal capital cost to design and build this tool. Dynamic visualisation with drill down features enables quick user insights, improves effectiveness of service quality reviews.



CONCLUSION

Dynamic visualisation supports prompt service quality performance reviews across all care settings and helps staff identify areas for improvement based on the voice of our patients thus enabling effective delivery of care that matters.

Changi General Hospital

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