Centralising Dental Chair Allocation

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Introduction

Aim: To improve chair allocation coordination through the centralisation of chair allocation.

Dental chair allocation to individual clinicians at NDCS was previously conducted de-centrally by the clinic executives of the individual clinics (of which NDCS has 5 different outpatient clinics) whereby each clinic executive was responsible for the allocation of the dental chairs to clinicians at their clinic. This was done by individual clinic executives in addition to their regular clinic operational and clinical responsibilities. As a high degree of coordination was required, longer term planning proved to be a challenge.

In order to facilitate the optimisation of the dental chair resource allocation, a centralised chair allocation system was instituted whereby a centralised unit is responsible for the allocation and long term planning of dental chairs.

107 Dental Chairs

190 Clinicians

Full-Time
Part-Time
Visiting Specialists
Residents
MOHH DOs

Methodology

Map out original process → Engage stakeholders to understand pain points → Co-develop new process → Engage Heads of Departments for buy-in → Trial new process

Results & Benefits

New Process

1. Leave Forecast
Bi-annual forecast cycles for the clinicians.

5. Unplanned Changes
URGENT
The Electronic Clinical Resource (eCR) form can be used to notify any unplanned changes.

2. Block Sessions
Block clinicians' appointment calendar.

4. Chair Allocation
The Centralised Dental Chair Allocation System facilitates long term chair allocation plan.

BIG DATA

3. Data Extractions
Obtain data from Electronic Health Intelligence System (eHIntS).

Better Predictability
The system is able to generate the allocations accurately for up to 6 months, which empowers different departments to make many important downstream decisions.

Enhanced Transparency
The chair allocation status of all clinic levels are made visible to all stakeholders via an Excel chair allocation file stored in the shared folder.

Reduced Near-Term Rescheduling
The reduction in rescheduling at short notices resulted in improvements in patient experience.

Going Paperless
Eliminated non-value added processes, such as scanning and transfer of hardcopy forms by designing a more user-friendly eCR form.

Conclusion & Suggested Future Improvements

The centralisation of the chair allocation helps to streamline the processes and provides a consolidated view of chair allocation status for long term planning. Suggested future improvements include automated rules-based algorithm allocation capabilities and predictive capabilities for allocating dental chairs. Additionally, interfacing with Outpatient Administrative System (OAS) and Human Resource Information System (HRIS) to facilitate leave applications, appointment sessions booking and rescheduling will further streamline the processes.