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Roster planning, or rostering, in healthcare is not simply about allocation of teams, calls and the dreaded duties on public holidays (PHs) or weekends. Challenges include the variation in work duties each day, high manpower turnover rates, varying levels of work experience and prevention of burnout.

Effective rostering can and should strive to achieve fairness, optimised productivity and better healthcare delivery. Fairness applies to manpower distribution, including fair distribution of the daily workload and work on PHs, weekends or calls. Departments should consider prioritising leave according to certain principles (eg, prioritising training leave for doctors taking examinations that determine progression in residency, or time off for the Singapore Medical Council Physician's Pledge Affirmation Ceremony).

In striving for optimised productivity, it is important to remember that healthcare manpower is not just numbers on paper. Other considerations include identifying strengths and weaknesses of teams and individuals, so as to leverage on certain skillsets, or intentionally developing a particular skill further. Departments should also be able to support those who are struggling (eg, by buddy-pairing

them with colleagues who can help, or by allocating them to teams that can help them learn).

To have an overall better healthcare delivery, a fair, optimised roster should provide adequate rest for healthcare workers, which hopefully reduces burnout and improves decision-making each day.

We provide below six suggestions for roster planners and their teams on factors that should be considered when planning the roster. These suggestions are based on a brief literature review, an informal surveying of past and present roster planners, and anecdotal experiences shared by healthcare workers in Singapore.

#### Be transparent and systematic

Transparency can go a long way in assuring people that work is being distributed fairly. It also enables systematic rostering and helps build trust among colleagues in the same department.

For rostering of work beyond one's regular weekday office hours (eq, PHs, weekends, nights and calls), planners can consider factoring in a transparent point system, where points are allocated based on an agreed weightage. For example, this could involve recognising that having a call on a Thursday is not the same as a call on a Friday, Saturday, Sunday or PH. With that in mind, a possible point system could value a weekday call from Monday to Thursday at 1 point, while a Friday call could be worth 1.5 points (because the rostered person loses some of his/her weekend post-call), and all weekends and PHs could be worth 2 points. Transparent tabulation of points allows everyone to keep track of the duties they have been allocated, and helps avert any suspicion of unbalanced rostering.

Departments could consider enhancing transparency in the application and approval process for leave, call or shift requests. The department rules for these should be made known well in advance, and requests should be able to be seen by all (eg, by using platforms such as Google Sheets or Workforce Optimizer). Having leave projections submitted earlier than the typical one month in advance may also be helpful. If the nature of the leave application is sensitive, there should also be appropriate privacy regarding the reason of request. This provides the opportunity to deconflict requests early on, if it becomes clear that too many

people are requesting leave for similar dates. Early approval and allocation helps ease stress for those involved, as does transparent decision-making.

# Impartiality + accountability = credibility

Roster planners in healthcare have been called "roster monsters" for various reasons, which can be unfair at times. Some wonder if the roster is planned for the planner's own interests and those of their friends, and may be wary of the perceived power that roster planners wield over the lives of others. This can occur even if the roster planner means well, and even despite his/her best attempts to roster fairly.

Ideally, a roster planner should be more senior to the group and not be involved in the roster plan himself/herself, to better avoid conflicts of interests. But in departments where this is not the case. there should still be senior oversight regarding roster planning. Senior support for roster planners should be provided, while ensuring seniors do not unfairly influence the established systems (eg, consultants making requests to the roster planner to avoid being assigned juniors whom they consider less competent).

Roster planners should be individuals who have the bandwidth to take on what is essentially extra work, and have good principles to roster fairly in everyone's interests. All roster planners should be able to report to a more senior colleague who checks in regularly, but not in an overbearing or micromanaging way. This oversight should be balanced with providing roster planners sufficient autonomy and independence to function efficiently. Impartiality and well-balanced oversight together can help produce a credible, reliable rostering team.

#### **Maximise rest**

Those whose leave days are being approved should have priority for being assigned post-call or post-night shifts leading into the start of their leave, giving them sufficient time to reset prior to their leave. There should also be consideration to block out adjacent weekends when combined with weekday leave requests. Sufficient rest is also important between calls and other longer shifts such as emergency department night shifts. Insufficient rest can translate into numerous negative outcomes such as fatigue, poorer decision-making and compromised patient safety.

## **Teamwork makes the** dream work

Day-to-day rostering takes time and effort. Do not rely on one person to do all the work as everyone, including roster planners, needs rest and off days. Build a solid team (eg, with at least three people) as healthcare chugs on 24/7 and people may call in for sick leave at any time on any day. This means that the rostering team needs to be constantly on standby to be able to re-juggle manpower in the event of unforeseen changes.

## **Enable efficiency and upskilling**

Roster planners should have a good grasp of basic spreadsheet skills and/or be given free access to tools that will allow them to learn and use the basics. Rostering for an entire department can be a nightmare otherwise, both for the planners as well as those trying to interpret their roster. More complex tools such as Microsoft Copilot and other artificial intelligence-driven rostering models can also be explored, though not at the expense of the roster planners' welfare or rest. Any upskilling undertaken should ideally be funded for the roster planner, as they are putting these skills to the benefit of their workplace. Likewise, time taken to upskill could also be considered under training leave, so that roster planners may be given the time off to learn.

## Recognise and reward good rostering work

Rostering is not an enviable job. It is tedious, time consuming and can be thankless. The good work put in this area needs to be recognised. Some departments have used various ways to recognise and reward roster planners, including giving them an additional day off each month (ie, providing roster planners an administrative off-in-lieu day) and adding their rostering work

to their achievements in performance assessments for consideration in their posting grade. Rewarding good work helps incentivise more good work, including fair rostering. Roster planners should not be self-serving, but neither should they be expected to be wholly altruistic and selfless.

#### **Closing thoughts**

In closing, strategic approaches to rostering can help better its effectiveness and in turn improve the quality of healthcare for our patients. We hope that these recommendations serve to help roster teams develop systematic, fair and productive rosters that can better support our healthcare workers and patients. •

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