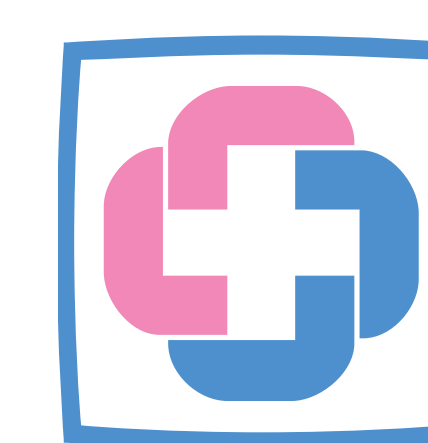




Singapore Healthcare  
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KK Women's and  
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## Advanced Practice Nurse-led Rapid Response Team (APN-led RRT)

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### Background

To the greatest extent, in the deterioration of patient's condition, medical personnel are activated to review and in the event of progression of deterioration while waiting medical team to arrive, code blue is usually activated. Hence, there is a strong need to have escalation process for urgent patient management that can prevent further deterioration and lifesaving. With that, a nursing survey in the institution was conducted and revealed that nurses are apprehensive about calling senior medical personnel even when a patient's condition warrants a senior's review, as nurses may not be comfortable or confident in speaking with the senior doctors. Nurses also prefer to consult APNs, as they are readily accessible, approachable and trustworthy as primary responders to review patients. Therefore, APN-led Rapid Response Team (RRT) was piloted in four gynaecological wards in December 2020 and three paediatric wards in January 2021. The team extended the service to all paediatric wards excluding COVID wards in July 2021.

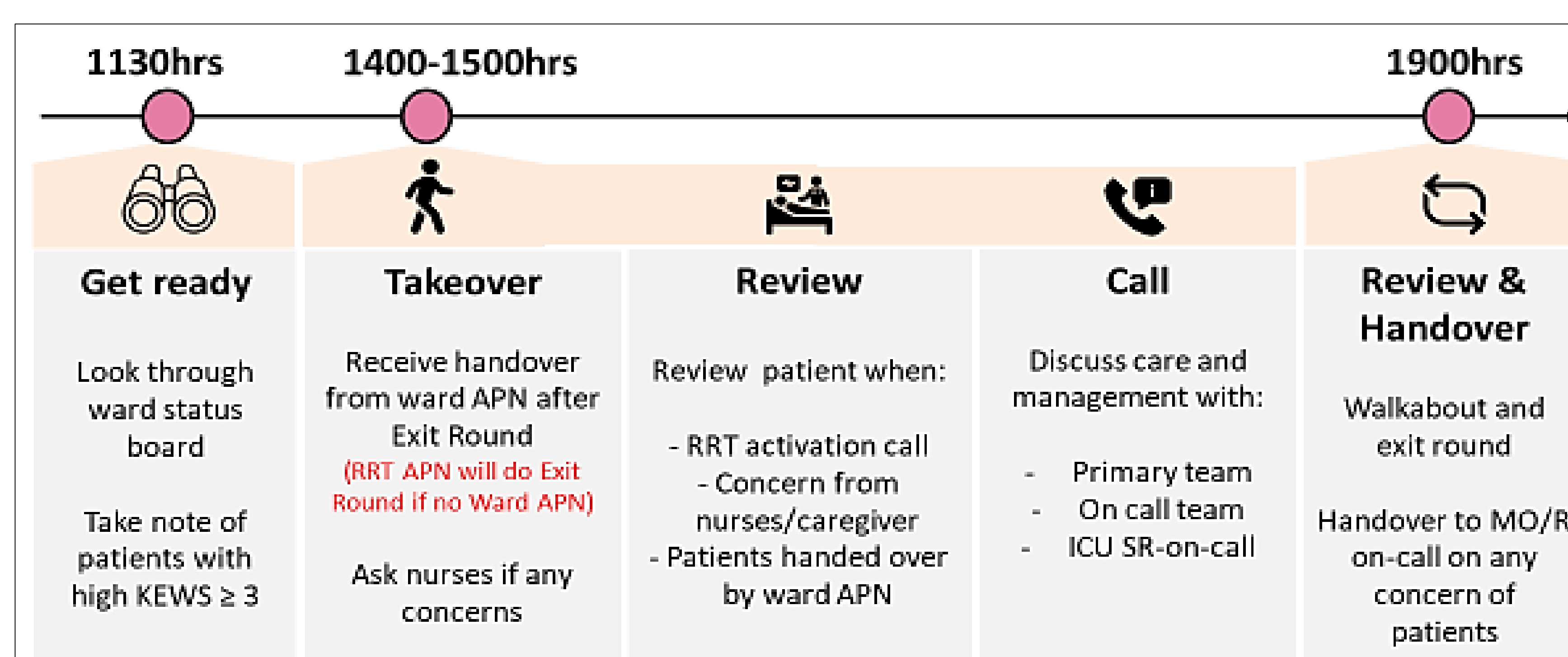
### Aim(s)

- To proactively identify unwell patients and initiate prompt treatment.
- To promptly respond to frontline nurses' concerns towards patients' condition and care.

### Methodology

Surveys using the 10-point grading scale on ward nurses' experience of RRT were done at 3, 6, and 12 months after implementation. Clinical outcomes including the number of reviewed patients, Code Blue data, Medical Review and Serious Reportable Event (SRE) in the participating wards were evaluated 1 year before and after implementation.

### RRT Activities



### Results

In 2021, 189 patients were reviewed (*Ref. Chart 1*). The main reason for review in the gynaecology wards were an unwell patient being identified by the RRT-APN during physical round, whereas for the paediatric, the main reason for review were high KEWs and unwell patients being identified during rounds. Code Blue cases have decreased by 22% in gynaecology wards from 2020 to 2021, with only one Code Blue from April to December 2021 which was a chronic pseudo seizure. The Code Blue numbers also remained low in the paediatric wards. There was no Medical Review/SRE reported in both towers since implementation. The survey results (*Ref. Chart 2*) on nurses' perception of RRT were promising and has shown steady progression at 3, 6, and 12 months' post-implementation except at the 6 months survey for Children's tower due to extension service to new wards. All these have demonstrated that APNs were approachable, the service is trustworthy and has helped to improve patient's safety and outcomes.

Chart 1

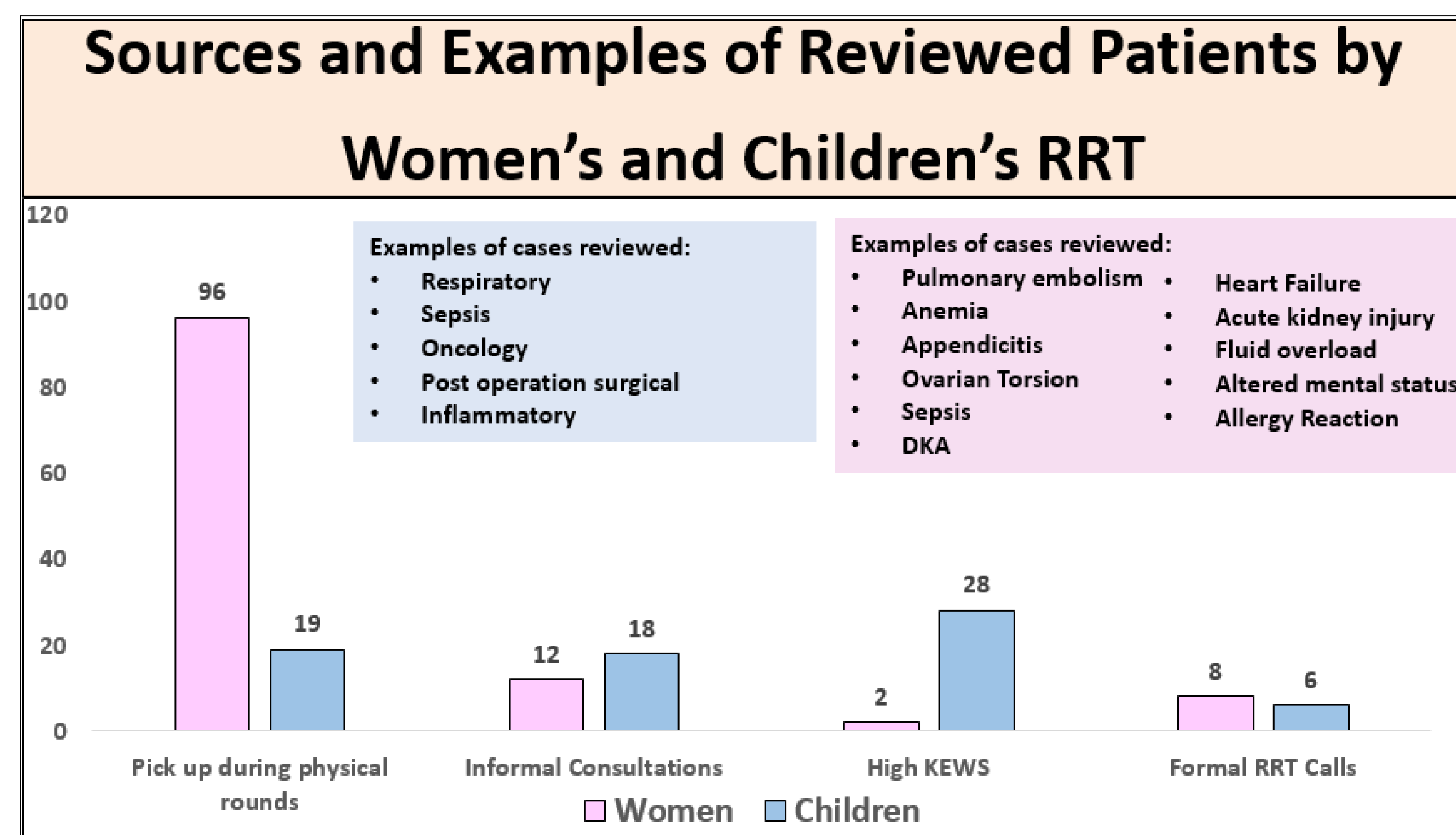
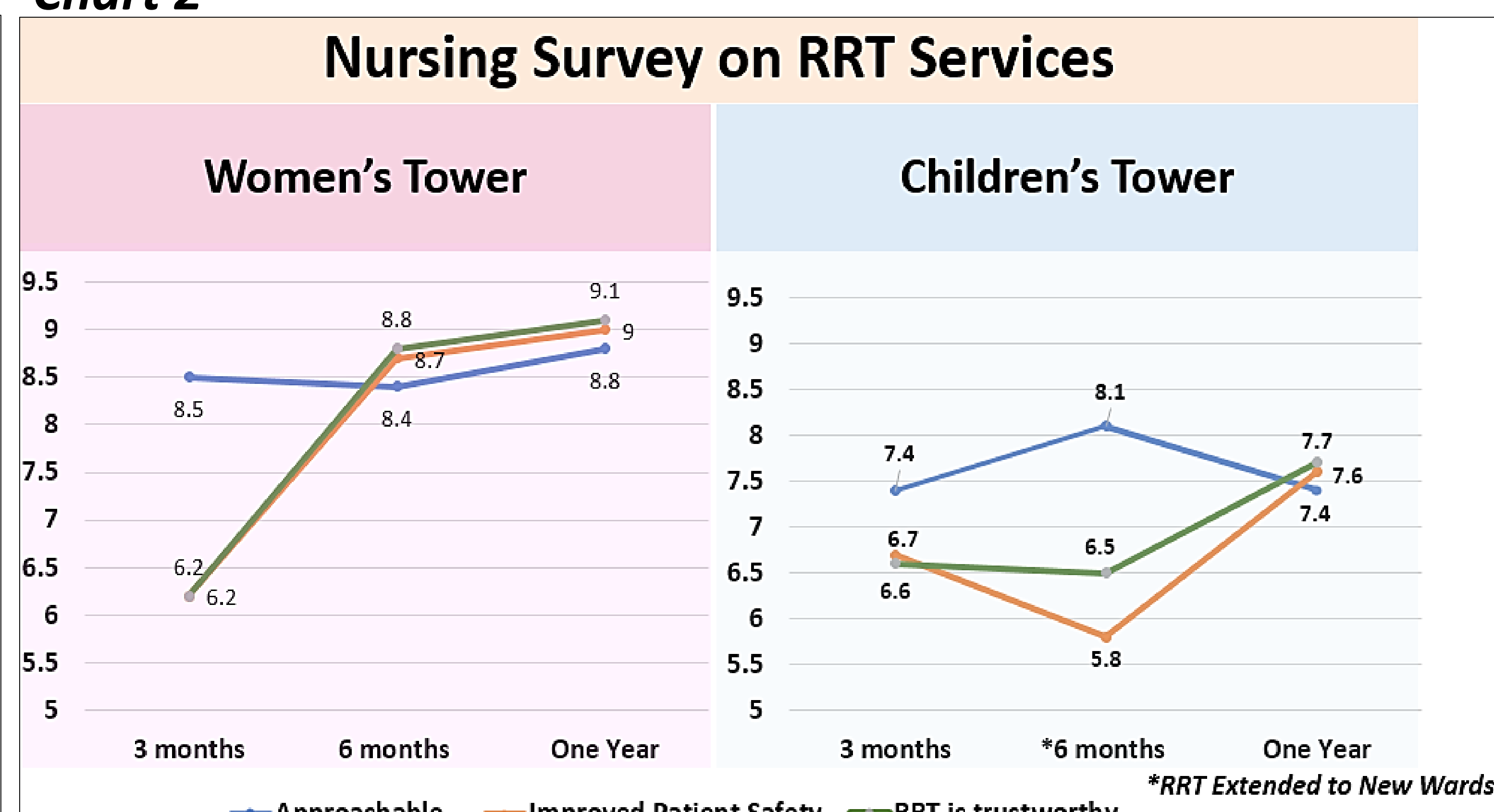


Chart 2



### Conclusion

The APN-led RRT has supported frontline nurses in provision of care. RRT-APNs have managed to successfully identify patients before their condition deteriorated, thereby preventing critical events and improving patients' outcomes.