# Singapore Healthcare Management 2022

Reduced preparation time for Yag Laser Procedure using Visual Cue as educational material.



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## Introduction

The Laserex Tango Nd:YAG is the machine that can be use for both Selective Light Amplification by Stimulated Emission of Radiation (LASER) Trabeculoplasty (SLT) and Neodymium-Doped: Yttrium Aluminum Garnet (ND:Yag). Doctors that chooses Laserex Tango to do YAG often are unfamiliar with the machine therefore unable to proceed with YAG laser and require assistance from the nurses thus delaying time for patients which increases other patients waiting time.

Patient's anxiety level with the doctor increases as the doctor are unfamiliar with the machine and hence view them as unprofessional with regards to the process.

#### PDCA 2

The Team realized that after putting the requisites, the view of the visual cue was blocked. So the team decided to change the visual cue to the board as shown in Picture 3 and 4.

Picture 3: The visual cue placed onto the board.



### Purpose

To allow doctors independency and productivity with the usage of the Laserex Tango.
Decrease patients' waiting time and less anxiety for YAG laser.

## Methodology

PDCA 1 (Plan-Do-Check-Act)

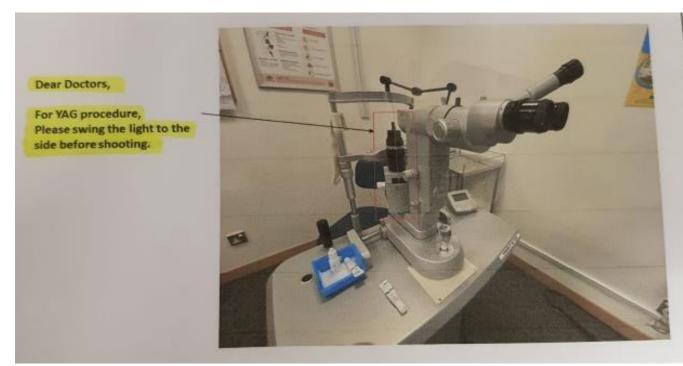
**Plan** - To create a visual cue with pictures to prompt the doctors to swing the slit lamp light to the side before shooting the laser.

**Do** – Create the visual cue by taking picture of the Laser machine in different form.





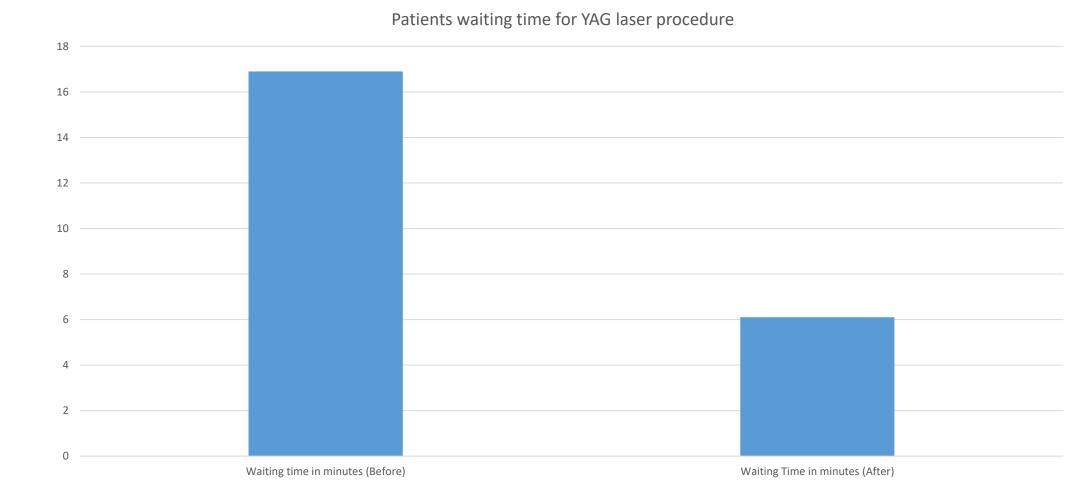
**Check** – Checking that the visual cue is visible enough for all to see.



Picture 4: The whole view of the visual cue.

<u>Result</u>

Data shown significant decrease of average waiting time to 6.1 minutes (36%) after implementation of visual cues shown in Figure 1.



Act – Putting the visual cue onto the laser machine. By putting together Picture 1 and 2 to help the doctors visualise how to swing the slit lamp light to the side.



Picture 1: The front view of the slit lamp light swing to the side.

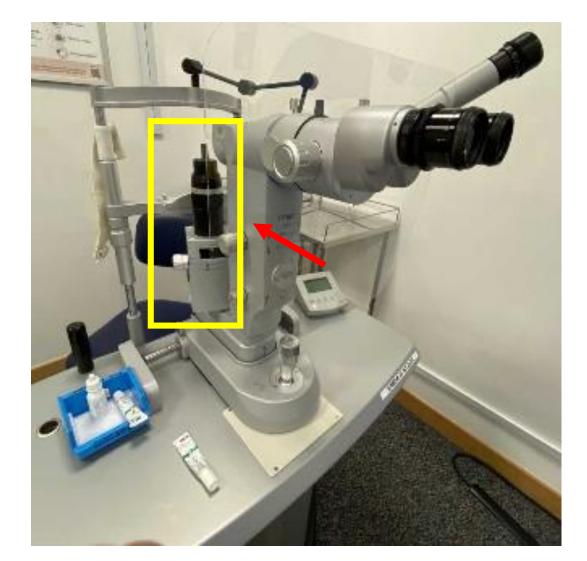


Figure 1: The average waiting time before and after implementation of visual cue.

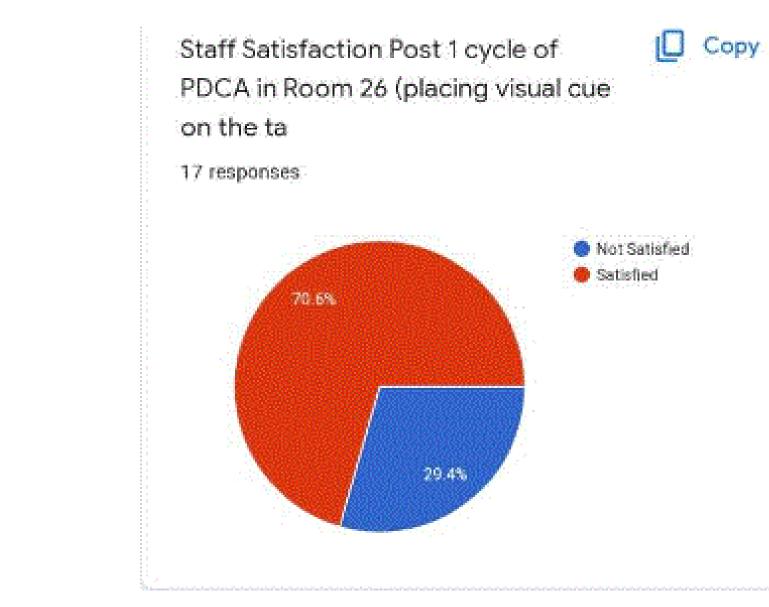


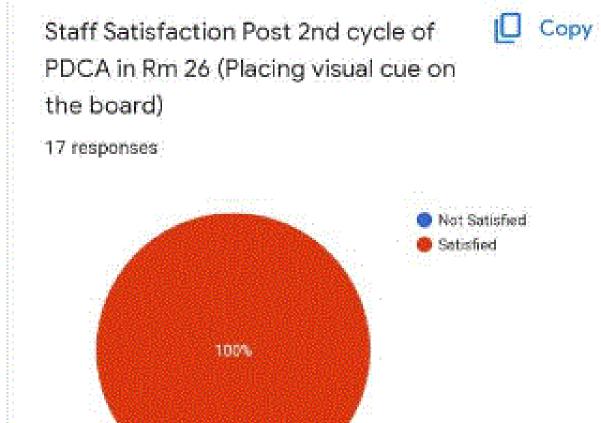
Figure 2: The result of staff satisfaction post 1st cycle of PDCA 1 survey

The team feedback of 17 responses that it was 100% satisfaction for PDCA 2 in Figure 3.

The team feedback of 17 responses that it

was 70.6% satisfaction for PDCA 1 in

Figure 2.



Picture 2: The side view of the slit lamp light swing to the side.

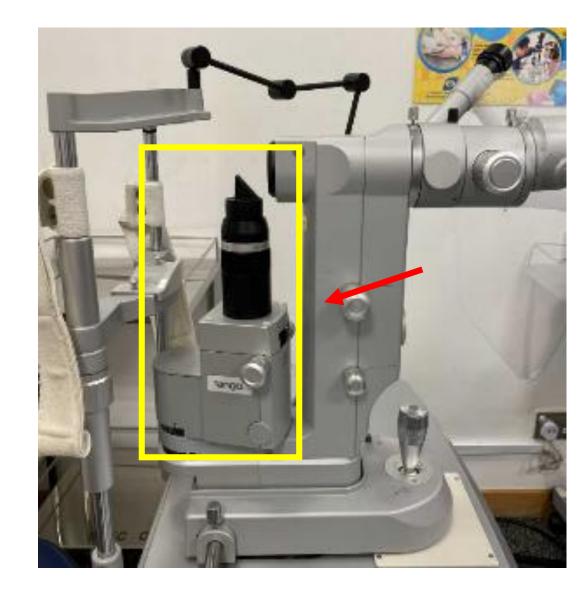




Figure 3: The result of staff satisfaction post 2nd cycle of PDCA 2 survey

## **Discussion**

In order to allow doctors independency and to increase their productivity with the usage of Laserex Tango ND:YAG as it is 2 in 1 LASER machine, creation of a visual cue with pictures to prompt the doctor on how to operate the machine independently if they want to use for YAG laser.

## Conclusion

Implementation of visual cues help in reducing waiting time and provide less anxiety for patients and increases doctors independency and productivity.

No potential conflict of interest and relevant financial to be disclose.