

Project Title

Nurse-led Intravitreal Injection (IVT) Team

Project Lead and Members

Project Lead: Zhao Yinqiu

Project Members: Ong Wan Qiu, Zhao Yinqiu, Jia Lin, Darius Seow Zhi Wei, Pauline Lua Qiu Xuan, Liu Qin, Chow Peck Foong, Catherine Wong Shue Wei, Chen Shu Yee, Cheong Sok Yee

Organisation(s) Involved

Tan Tock Seng Hospital

Healthcare Family Group Involved in this Project

Medical, Nursing

Applicable Specialty or Discipline

Ophthalmology

Project Period

Start date: Not Provided

Completed date: Not Provided

Aims

- High acceptance rate for ophthalmic nurse to perform IVT injection.
- Through one of the patient survey, 100% of them feedback their satisfaction and reflected they felt comfortable and experienced minimal or no pain during the injection.
- They also reported that they felt the nurse was friendly, approachable and sensitive to the patient's needs and were satisfied with the nurse who gave the injection.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

See poster appended/ below

Conclusion

See poster appended/ below

Additional Information

NHIP 2023 – Excellence Champion Medal

Project Category

Workforce Transformation

Job Redesign, Upskilling, Workforce Performance, Workforce Productivity

Care & Process Redesign

Value Base Care, Clinical Practice Improvement, Job Effectiveness, Patient Satisfaction

Keywords

Ophthalmic Nurses, Intravitreal IVT injection, Upskilling, Competency, Workforce Transformation, Job Redesign

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Nurse-led Intravitreal Injection (IVT) Team

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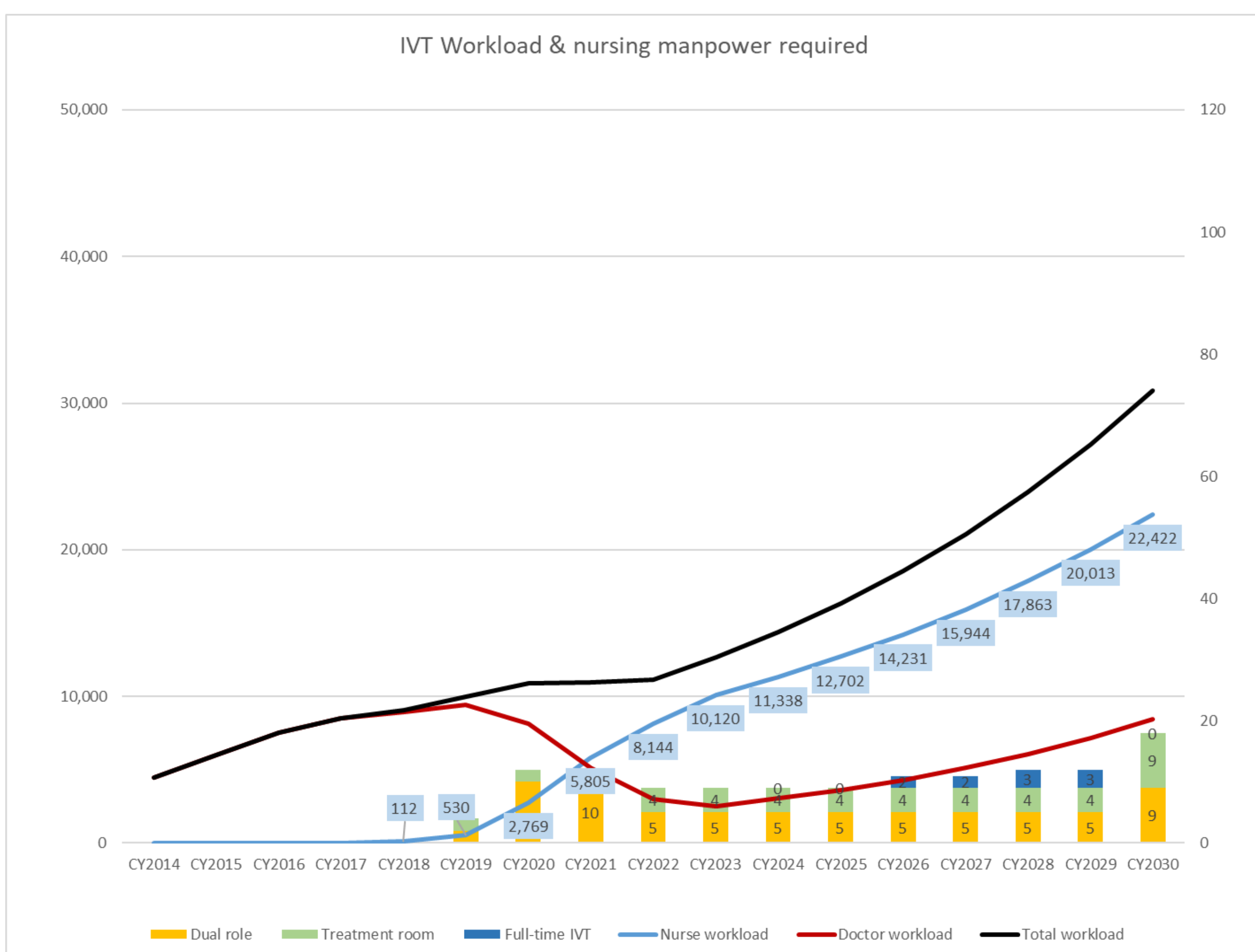
Tan Tock Seng
HOSPITAL
National Healthcare Group

Who is the nurse-led IVT team?

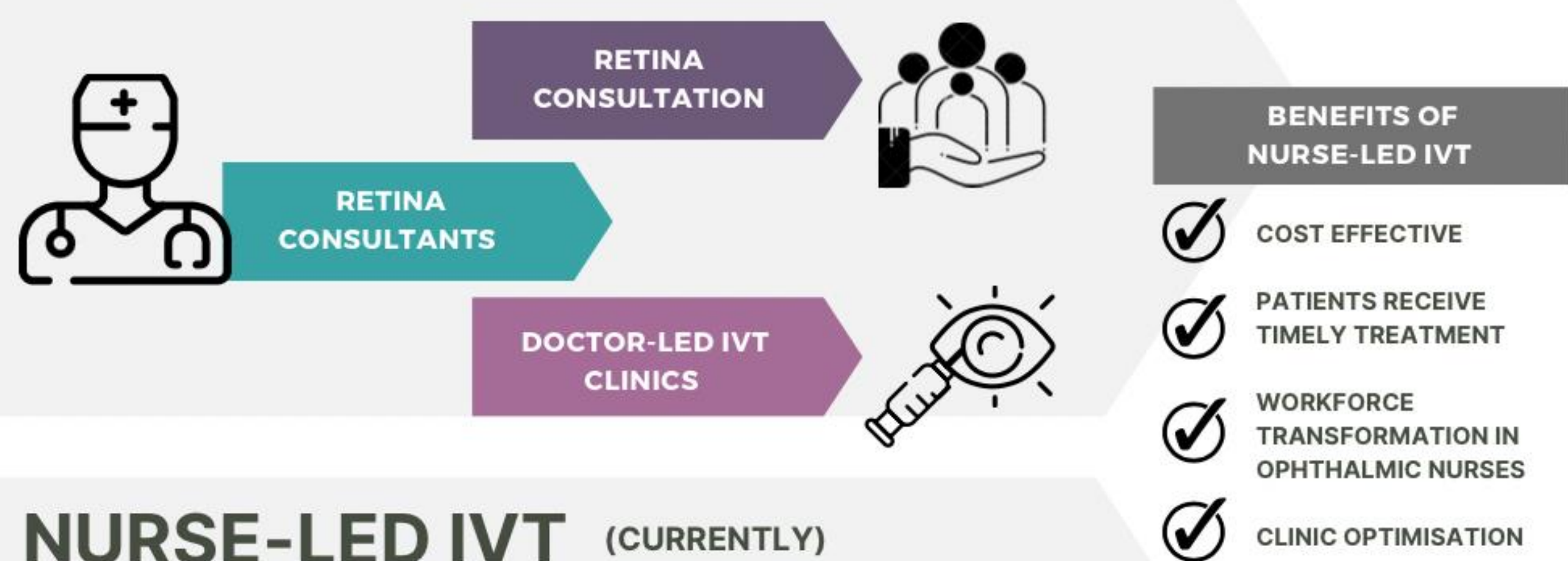
- A team of 10 accredited nurses who could administer intravitreal (IVT) injections to the eyes of our patients, form the nurse-led IVT team in TTSH Eye Centre and Clinic 1A.

Workforce Transformation of nurse-led IVT team

- The demand of IVT injections continually increases over the years and the number of doctors was not growing at the same rate as the number of injections required.
- Annual compounded growth rate, from CY2014 to CY2022 is 12.04.
- Total IVT workload in CY2022 is 11,136.



DOCTOR -LED IVT (TRADITIONALLY)



NURSE-LED IVT (CURRENTLY)

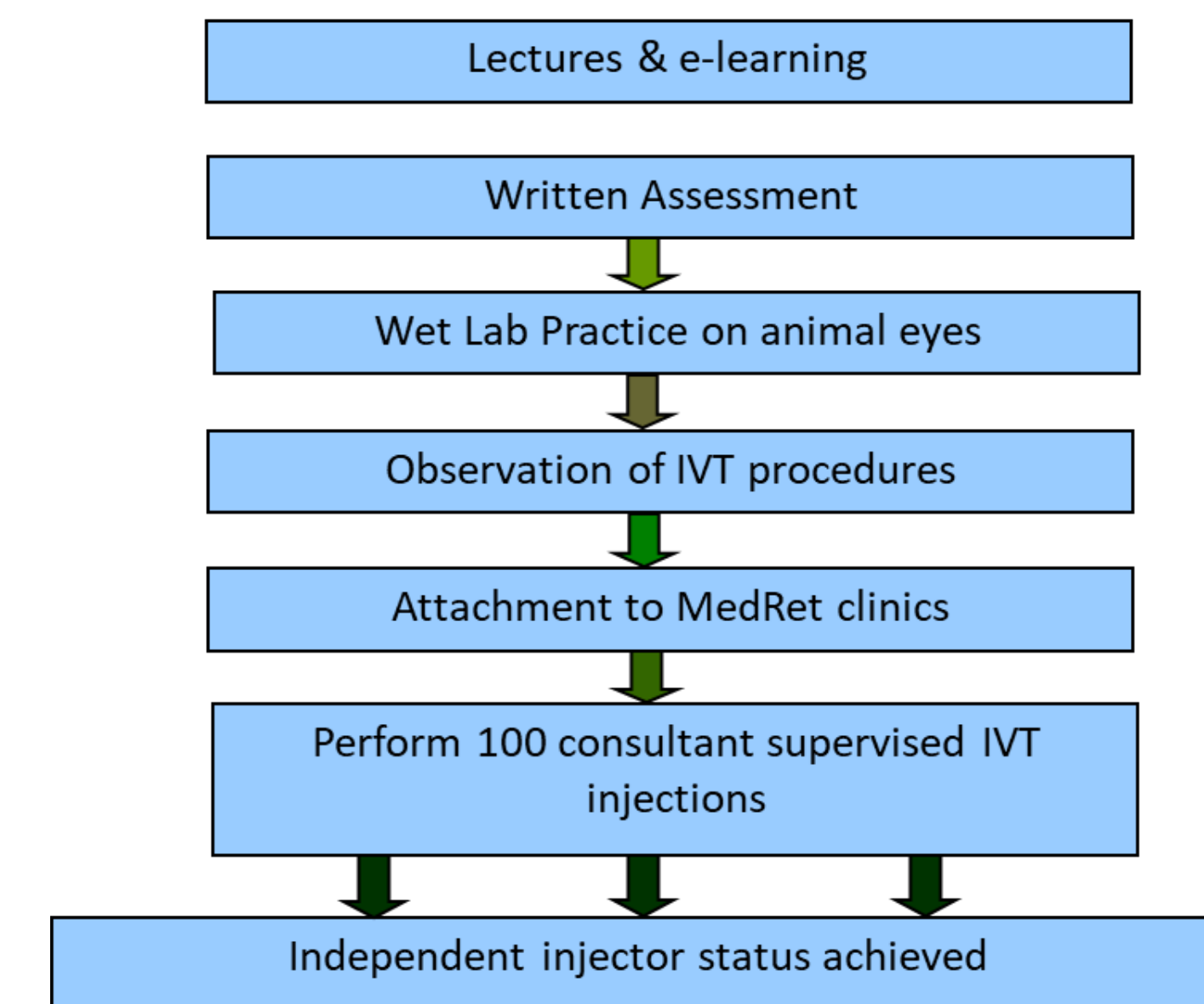


Upskilling our Ophthalmic nurses Selection criteria include:

- registered nurse who assisted intravitreal injection clinic with at least 2 years of working experience in eye clinic
- completed either the hospital's Ophthalmic Nursing Course or obtain an Advanced Diploma in Nursing (Ophthalmic) and
- successfully pass the written IVT modules exam. The selected registered nurse would need to undergo a 3-month rigorous training with training modules, which are listed below.

Establishing a 3-months training programme for our Ophthalmic nurses

- Our well-developed training programme accredited and equipped ophthalmic nurses to handle the IVT administration independently and confidently.

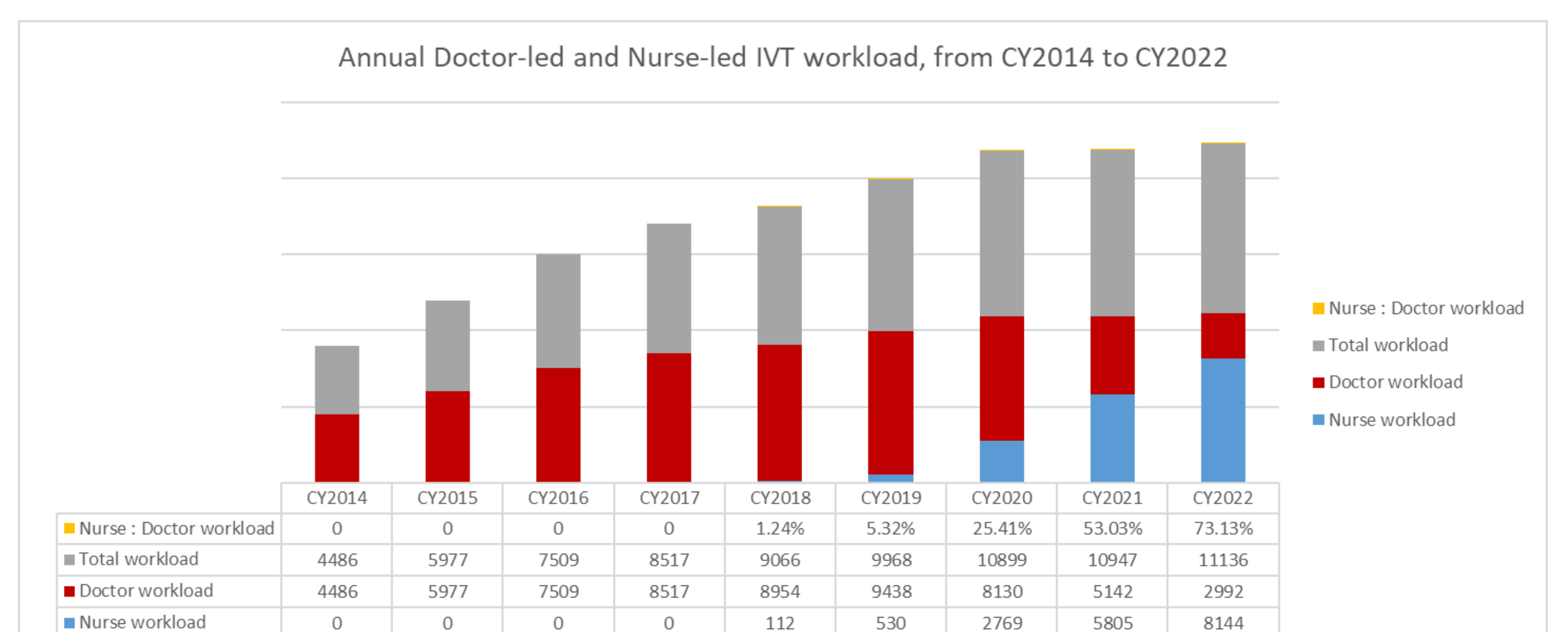


Outcome of nurse-led IVT

| Visit Experience | Not satisfied | Fairly satisfied | Satisfied | Very satisfied | Extremely satisfied | Total | % from satisfied onwards |
|--|---------------|------------------|-----------|----------------|---------------------|-------|--------------------------|
| 1. Detailed instructions and advice was given sufficiently for the eye injection procedure | | | 5 | 7 | 3 | 15 | 100% |
| 2. I felt comfortable and experience very minimal or no pain during the injection | | 1 | 6 | 5 | 3 | 15 | 93.3% |
| 3. The nurse is friendly, approachable and sensitive to my needs | | | 5 | 6 | 4 | 15 | 100% |
| 4. How satisfied were you with the nurse giving the injection | | | 4 | 9 | 2 | 15 | 100% |

- High acceptance rate for ophthalmic nurse to perform IVT injection.
- Through one of the patient survey, 100% of them feedback their satisfaction and reflected they felt comfortable and experienced minimal or no pain during the injection.
- They also reported that they felt the nurse was friendly, approachable and sensitive to the patient's needs and were satisfied with the nurse who gave the injection.

Comparison between doctor-led and nurse-led IVT



- Nurse-led IVT grew at a rate of 43.5% from 2021 to 2022
- In CY2022, the nurse-led IVT team accounted for 71.8% of the annual workload.
- Overall, the team supported the growth of IVT workload, which increased by 13%.

Conclusion

Nurse-led IVT team is a successful implementation of workforce transformation and job-redesign.