

Introduction

Sidra Medicine, a newly established tertiary referral hospital in Qatar specializing in pediatric and women’s healthcare, has recruited a highly diverse team of nurses from over 90 countries. Many of these staff have received training in leading healthcare systems such as the USA, UK, Australia, Ireland, Canada, and the Philippines. This rich diversity in educational and clinical backgrounds brings valuable perspectives but also presents unique challenges in standardizing laser safety training. To ensure the safe implementation of laser services, it is essential that all personnel involved in laser procedures receive comprehensive and consistent training.

Aim

The primary goal of this poster is to share our experience in developing and implementing a laser safety training program and resources designed to reach a diverse audience, ensuring both patient and staff safety by minimizing the risks associated with medical laser use in clinical settings and evaluate the impact of this training program to incidents related to laser use.

Methods

A comprehensive review of training and safety guidelines from leading international professional bodies—including the American National Standards Institute (ANSI), Laser Institute of America (LIA), and the Association of periOperative Registered Nurses (AORN) was conducted to inform the development of our program. Additionally, accreditation requirements set by the Joint Commission International (JCI) were carefully considered to ensure compliance with global standards and best practices. Incidents related to laser use will be monitored via Datix.

Results

Training Program Framework

The framework and content of the laser safety training program (see Fig. 1) were thoroughly reviewed by the Perioperative Department Laser Safety Training Scientific Planning Committee. The training module was adapted from the American National Standards and received approval from the Laser Safety Committee.

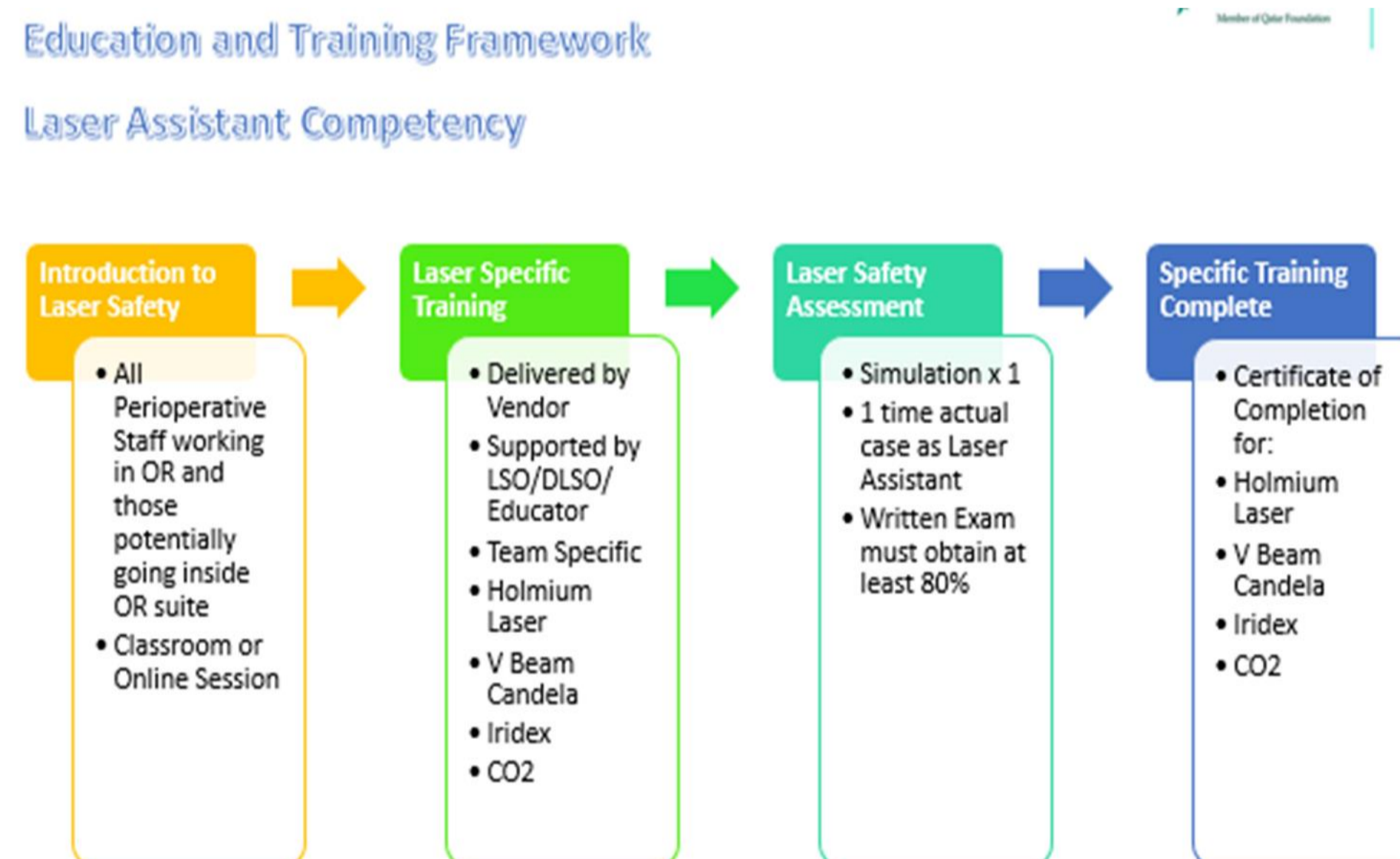
Laser Safety Training

Accreditation for Continuing Professional Development was granted by the Department of Healthcare Professions. The laser safety training officially began on June 3, 2020, and was met with an overwhelmingly positive response from perioperative staff. Multiple sessions were conducted to ensure that all Operating Room nurses completed this mandatory training, which is valid for three years. As of now, training compliance stands at 100%.

Datix Report

From 2020 to 2025, there have been zero incidents related to laser use. This outcome reflects the strength of our laser safety program and our strict adherence to best practices for preventing laser injuries.

Figure 1: Training Framework



Conclusion

The implementation of a standardized laser safety training program at Sidra Medicine has proven to be a pivotal step in fostering a culture of safety and excellence within our perioperative environment. By establishing clear, evidence-based guidelines and ensuring that all staff—regardless of their diverse educational and clinical backgrounds—receive consistent, high-quality training, we have successfully bridged gaps in knowledge and practice. This comprehensive approach has not only empowered our multidisciplinary team to confidently and safely manage laser technologies but has also directly contributed to a flawless safety record, with zero reported incidents related to laser use since the program’s inception.

Lessons Learned

- Establishing the laser safety program from the outset was essential for embedding best practices in laser care.
- Ongoing education and regular updates are necessary, as staff may not immediately retain competency for assisting in laser procedures after initial training.
- Providing protected time for both preparation and delivery of training is important to ensure its effectiveness and sustainability.

Acknowledgements

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