

ROTARY PROPOSAL 2022

Surgical equipment motivation for laparoscopic stack



**Dept of surgery
Victoria Hospital
Wynberg**



Surgical services & training at Victoria Hospital, Wynberg

At 130 years old, Victoria Hospital is one of the oldest health institutions in the country. Throughout this rich history we have always taken pride in our reputation as a centre of teaching excellence, especially so in the department of surgery. Our surgical unit currently forms a 3-month rotation for junior surgical registrars from UCT/GSH, as well as a 1-year post rotation for newly FCS-qualified junior consultants. Victoria Hospital remains one of the most requested sites by medical students, interns and surgical registrars each year, and sees a continuous stream of visiting foreign elective students wishing to enhance their surgical experience and training abroad. Additionally, we maintain a service output far higher than similarly sized hospitals, offering a wide range of specialist services from ENT to urology to gynaecological surgery. Our hospital serves the southern tip of the Western Cape peninsula providing healthcare to a population of about 800 000+.

Supporting Victoria Hospital, Wynberg

Almost without exception, our patients are at the lowest end of the income scale. Due to a range of circumstances, they are desperate and in need of our help. Irrespective of their background, our patients share one common characteristic: they are completely dependent on us for healthcare.

Patients live in the 'Southern Tip' of Cape Town. This includes sub-economic areas like Grassy Park, Lavender Hill, Retreat, Capricorn, Redhill (Simonstown), Masiphumelele (False Bay), Ocean View (Kommetjie), Imizamo Yethu and Harbour Heights (Hout Bay). This means that our patients are not residents of affluent suburbs who can access private health care.

Victoria Hospital prides itself on its record of managerial and clinical excellence. Our hospital is acknowledged as one of the best administered hospitals in the province, and we have had multiple clean audits and awards for managerial excellence. This is only surpassed by our clinical excellence. For over 130 years, we have cared for the community surrounding our hospital, and we have done this through high standards, hiring the best people, and an unwavering commitment to improving the health of our patients.

Funding proposal

Item	Cost	Purpose	Teaching/training
Laparoscopy stack	R 783, 853.15	Laparoscopic surgery & training	Yes

Laparoscopic surgery has become the gold standard minimally invasive technique for many surgical procedures performed today and is constantly developing with advancements in its technology. It is a critically important skill for surgical registrars to acquire during their specialization time, and rotations at Victoria Hospital. The department of surgery at Victoria Hospital currently performs a number of emergency and elective laparoscopic procedures, including: appendicectomies, total extraperitoneal inguinal hernia repairs, cholecystectomies, oncological colonic resections, laparoscopic-assisted colostomies, diagnostic laparoscopy, and ventral hernia repairs. These



procedures easily amount to more than 300 cases per year. In order to ensure an adequate case load for service delivery and training purposes, we require 2 fully operational & modern laparoscopic stacks within our theatre complex.

Motivation for equipment

We have 3 active operating theatres in our theatre complex at Victoria Hospital, with OT3 functioning as an emergency theatre on most days. This allows us to run simultaneous general surgery, orthopaedic, gynaecology, urology, and ENT lists on any one day, often requiring laparoscopic facilities for both lists. With minimally invasive laparoscopic



techniques for most surgical procedures becoming the gold standard, we cannot afford to limit our adoption and use of these procedures due to limited availability of components. This requires us to have a minimum of two fully functional laparoscopic stacks in our theatre complex in order to ensure that patients are receiving this current standard of surgical care and our surgical trainees are being adequately exposed to achieve this accepted level of competency.

Our recently acquired Covidien laparoscopic stack has satisfied all clinical requirements during my time as HOD in the department of surgery and I am fully satisfied with its performance up to now. It is very competitively priced (compared to its far more expensive Karl Storz, Olympus, Stryker counterparts) and the after-sales technical support we have received from Medtronic, the distributor, has been very good. Unfortunately, our second Stryker laparoscopic stack has now become outdated and impossible to repair (or replace individual elements) – the bulb failure has meant that we have had to use a separate portable light source as a makeshift temporary solution prior to it being condemned (as advised by the clinical engineering technical report). For this reason, I would like to strongly motivate that we acquire a second Covidien laparoscopic stack for the purpose of ensuring that our surgical service is not hindered due to this aging and failing equipment. We are currently faced with a daunting and ever-growing backlog of elective/semi-urgent surgical procedure lists following the COVID-19 pandemic and its multiple waves. Many of these procedures are performed laparoscopically (gallbladder and hernia surgery) and require a full complement of working laparoscopic facilities in our theatre armament if we are to ever catch up and ensure adequate service delivery is maintained during this recovery period and into the future.

Investment

R783,853.15

Beneficiaries

Approximately 8 junior surgeons, registrars and medical officers would receive training in laparoscopic surgical procedures annually. Over 300 patients would benefit from this less invasive surgical technique per year, with lower morbidity and a shorter length of stay (due to reduced postoperative pain and a faster recovery), further benefitting surgical service efficiency, patient days, and return to work.

Investment return

Victoria Hospital maintains itself as a laparoscopic training site for training and junior surgeons. We would contribute to improving the skills of surgeons across the country by ensuring the proficiency of all qualifying specialists (having rotated through our unit) in the gold-standard operative approach to appendix, gallbladder, hernia, and colorectal surgery.

Every year Victoria hospital has to prioritise their spend of its equipment budget, often having to forgo the replacement of critical equipment to fit within its small, allocated budget. A donation of the surgical laparoscopic stack will allow the hospital to enable other areas to receive the equipment they require to further benefit patients requiring urgent treatment.

Sustainability

The lifespan of a laparoscopic stack in terms of technological requirements and expected durability is approximately 8-10 years.

All equipment donated to the hospital is placed on its asset register and a maintenance plan put in place to ensure it is well maintained and any repairs are completed in a timely fashion.

Any consumables required for the laparoscopic stack are included in the budget planning process to ensure its continued use and access for the patients we treat and doctors we train.

The surgical consultants maintain their training to enable them to teach other doctors on the safe use of the machine, further extending it's lifespan.

Summary

Victoria Hospital Wynberg has had a long standing and fruitful relationship with the Rotary. Through your various donations, you have made a tremendous impact on the lives of our patients and staff. We believe that the item requested will continue to contribute positively towards improving the skill of our staff and the health of our patients. Thank you for considering our request.