

The Life Support Foundation wishes you all one Merry Christmas and a Happy New Year!

This is being written on December 9th, the day after Syrian rebels surprised and stunned the world. Are events like this a "game changer" or just more of the same old show? I prefer to wish and hope that this will be a turn for the better for Syria and the rest of the world, and don't want to be cynical and play it down.

In our less spectacular world and everyday life, we can now look back on another memorable year for Life Support Foundation. In 2024, we have consolidated Life Support Foundation and delivered on our work where we have found it best suited. Almost all our work has been the result of initiatives and ideas generated within the foundation's *'Endorsed Projects'* and the parts of Life Support Foundation in Malawi *"Malawi Working Group"* and in Tanzania *"Tanzania Chapter"*. We also have the continuing growing *"EECC - Essential Emergency Critical Care"* initiated and led by Dr Tim Baker. At the end of the Christmas letter, you can read more about the excellent efforts in each project in 2024.

The foundation's new logo has now established itself in 2024 and will be a useful asset for our future communication. I would like to warmly recommend that you spend some time getting to know the foundation's modernized website, which you can find at www.lifesupportfoundation.org.

Finally, I would like to thank you for your particular commitment and contribution to improving emergency and critical care in the part of the world to which our foundation's commitment is directed. We can see that more organizations, such as the Swedish TV show "Musikhjälpen", this year highlight

parts of the same problem under the theme "Everyone has the right to survive their pregnancy". I think it goes without saying, and if you, and those you know, choose to continue giving your contribution to the Life Support Foundation, you are really helping to save lives!

Thank you for your dedication and contribution to making this part of the world better by improving emergency and critical care!

Many thanks!

Claes Frostell

as Chair of the Board
Life Support Foundation

Stories from the past year:

About SESAC ("endorsed project"), our board member Jonna Idh says:

SESAC (Sweden Ethiopia Surgery Anesthesia Collaboration) was formed in May 2023 with the purpose of strengthening and improving surgery, critical care and anesthesia in both Ethiopia and Sweden through bilateral knowledge transfer via mainly an exchange of healthcare personnel between the countries. In Sweden, members consist of anesthesiologists and surgeons from southern Sweden, and partners in Ethiopia are colleagues from Gondar University Hospital and Black Lion Hospital, Addis Ababa. Despite the Ministry of Foreign Affairs' travel advice to Gondar, SESAC has maintained contact with anesthesiology and surgeon colleagues on site in Gondar and we hope to invite our new anesthesiologist colleague **Dr. Gashaw Awoke** to Sweden in 2025. Three vascular surgery colleagues and a thoracic anesthesiologist from Black Lion Hospital, who via the International Medical Program (IMP), Region Östergötland, had the opportunity to participate in the clinical work at the Thoracic and Vascular Surgery Clinic, US Linköping. The visit to Västervik hospital has been a valuable complement to the stay at in Linköping in order to get a better overview of the hospital logistics that our Ethiopian colleagues find great value in studying. Two of SESAC's members have now completed the ADC (Anaesthesia in developing countries) course in Uganda, to increase our competence in the field of global anesthesia and intensive care, and surgeon Johan Svensson is currently in South Sudan on assignment for the Red Cross and will thus also contribute valuable expertise to SESAC. In 2024, SESAC has applied for, and been granted funding from IAES (International Association of Endocrine Surgeons) for an "IAES/ INTEREST program" where endocrine surgeons at the Black Lion Hospital will be visited by two internationally renowned colleagues in endocrine surgery for a week of lectures and workshops for to strengthen local competence. The event will take place in March 2025 and SESAC will contribute through Dr. Kenth Johansson, Docent and endocrine surgeon from Västervik. Two grant applications have been prepared by Dr Peter Andersson and Dr Mensur Osman to the Biltema foundation and Electa for an extensive project concerning colorectal cancer. Both SESAC colleagues in Sweden and Ethiopia have solid competence in the field and as cancer care in Ethiopia has major shortcomings, the collaboration around this diagnosis is considered valuable and with the potential to be of great benefit. Through Jonna Idh, SESAC has also contributed to two articles that both highlight the importance of anesthesia for global health. (SFAI newspaper and Läkartidningen). SESAC has not yet received any grants and all expenses have been covered by members' private fund.



SESAC members in Västervik with guest Dr. Tsigereda, Black Lion Hospital, Addis. From right: Lina Wiesel, Jonna Idh, Richard Jansson, Pelle Nilsson, Tsigereda, Johan Berkius, Kenth Johansson

About ZEP ("endorsed project"), our board member Pelle Conradi says:

ZEP --- Zanzibar Education Program 2024. I recently returned from Zanzibar and Mnazi Mmoja Hospital, where ZEP now has its 10th doctor from Sweden placed at the time of writing. Siri Mårtensson from the Anesthesia and Intensive Care Clinic at St. Göran's Hospital in Stockholm arrived at the hospital in mid-November and will stay for 3 months as part of her ST (resident) training. Siri participates in the daily work at the department, in close collaboration with the local anesthesia staff. She recently gave a lecture on acute trauma care for the department, and when asked what her placement in a resource-constrained hospital like Mnazi Mmoja contributes to, she replies: It's incredibly educational and challenging! The placement at Mnazi Mmoja gives perspective, humility and at the same time gratitude for the system we work in at home in Sweden. I am learning pragmatism, flexibility and working with limited resources. So far, I have gained a deeper understanding of the tools and medicines I use on a daily basis at home, as tools such as infusion pumps, sampling, ultrasound, etc. are not at hand here.

Hopefully my stay in Zanzibar can contribute to increased patient safety thinking and the importance of routines and preparations. It is difficult but instructive to find the role in teamwork - when I can speak up and when not... - what is constructive and what is not...

Once I get home, my department will have an ST doctor who has grown in her professional role and gained some new perspectives, who better understands how to solve problems when not all resources are at hand. As having worked in another part of the world, under completely different conditions, in a new culture with new approaches - which is incredibly challenging and developing both personally and professionally on many levels!





About KEEP, Gunilla Björling tells us:

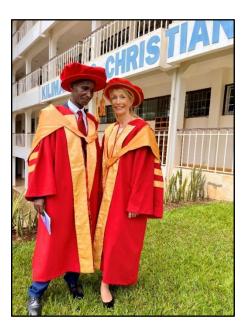
Kilimanjaro Educational Exchange Program KEEP 2024. The board of KEEP, together with Claes Frostell, has during the year obtained a 'letter of intent' for cooperation between Life Support Foundation and the Kilimanjaro Educational Exchange Program. Kilimanjaro Christian Medical Center (KCMC) is excited about the collaboration and looks forward to the exchange of knowledge that will take place for the staff. In March 2025, Enna Sengoka, midwife and doctoral student and coordinator for the gynecology and obstetrics department, as well as Dr. Happy Masenga, anesthesiologist and Head of the anesthesia, surgery and intensive care department, will come to Sweden to visit various care facilities for two weeks. In November, Enna received the prestigious Astrid Janzon scholarship for her doctoral project which deals with life-threatening complications in connection with pregnancy and childbirth. Gunilla Björling visited the hospital in November when it was the graduation ceremony and in February another trip is planned to complete a 'memorandum of understanding' for future collaborations. Equipment is available to a certain extent since after the Covid-19 pandemic resources were obtained in the form of oxygen production, beds, etc., but with around 100 anesthesiologists in a country of 60 million people, and in addition few specialist trained nurses, there is a lack of human resources and specialist skills. That's where the Life Support Foundation can make a difference!



Interior of the hospital at KCMC (Kilimanjaro Christian Medical Center)



Professor Gileard Masenga, Head of KCMC. as well as Enna Sengoka, coordinator midwives



Professor Gunilla Björling, Sweden, examiner Dr Pauli Kiday at KCMC

Life Support Foundation Log Book of activities 2024

TANZANIA (from Karima Khalid, interim Chairperson)

LIFE SUPPORT FOUNDATION TANZANIA CHAPTER ANNUAL REPORT 2024

INTERIM COMMITTEE

Karima Khalid, Suzan Mbonde, Rodgers Swai, Khamis Waziri

INTRODUCTION

Life Support Foundation (LSF) is an international, independent, medical organization aiming to prevent deaths due to acute, life-threatening conditions in low-income countries through improving the access to and quality of basic life-saving interventions. The Tanzanian Chapter aims to work on this mission locally and internationally.

LIFE SUPPORT FOUNDATION TANZANIA CHAPTER ANNUAL ACHIEVEMENTS 2024

PROJECTS

EECCIT SUPPORT

Our team has been instrumental in the EECC in Tanzania project with our members involved in its leadership and in the activities on the ground including development of capacity building materials, champions workshops and facility assessments

COLLABORATIONS WITH SWEDISH PARTNERS

RESEARCH GRANT

The 2 students selected to receive the research grant have successfully completed their studies and defended their dissertations. The grant will be used to support them with their publications once they complete preparing their manuscripts

MENTORSHIP PROGRAM

We initiated a mentorship program between Tanzania and Sweden last year and successfully selecting two residents based on merit. Collaborative discussions between our Tanzanian and Swedish teams have paved the way to a well-structured mentorship program. Presently, the mentees have been paired with their Swedish mentors and contact between the mentors and mentees was established in November 2023, with communication maintained regularly via WhatsApp and video calls. Initial discussions between them included introductions and exchanges about personal and professional interests. Communication occurred 2–3 times per month, focusing on academic updates and progress in the final year of a master's program. Guidance was provided in academic areas, including feedback on a research report and school presentations, as well as sharing career development resources. Insights into professional opportunities and personal encouragement were also offered, creating a supportive mentorship environment. Plans are currently being coordinated for observation trips to Sweden in March and May, 2025, including logistical arrangements and alignment with interests in anaesthesiology and critical care. This mentorship has been instrumental in supporting the mentees with academic and professional growth throughout the year.

Encouraged by the positive progress, we have now started plans to expand the program for the next year. Our two mentees will take on roles as members of the LSF Tanzania chapter, contributing actively to its operations and supporting the chapter's growth and activities in Tanzania.

MASTERS SUPPORT

This year we have also been able to support Dr. Rodgers Swai by funding his tuition fee for his masters program in critical care. Rodgers will be instrumental in moving forward the LSF especially so the EECC agenda upon his return to Tanzania.

As we look back on the past year's successes, we recognize that our work continues, and we stay committed to improving the care given to our patients. We are grateful to all Tanzanian and Swedish members for their dedication and support in making these achievements possible. Moving forward, we remain focused on our mission and excited about the impact we can create together in healthcare both locally and globally.

MALAWI (from Thomson Mbewe's reports)

LIFE SUPPORT FOUNDATION MALAWI WORKING GROUP 2024 ANNUAL REPORT.

Introduction

Life Support Foundation Malawi working group, was established in 2018 after observing the increase in number of preventable deaths in Malawi. The working group began its project with three members and its first was Queen Elizabeth central hospital. Over the years the working group grew and extend its services to other hospitals such us Kamuzu Central Hospital, Thyolo District Hospital and Balaka District Hospital. Due to a good number of improvements that the hospitals trained in critical care are doing they are setting as examples for other hospitals that were not trained and this is making the working group to receive huge number of funding applications from different parts of Malawian hospitals.

There is huge positive impart in these critical care trainings in the hospitals of Malawi little by little ABC approach is being used in the care of every sick patient in the hospitals and there is high expectations that the preventable deaths that are caused due lack of knowledge on how to manage ABC will be avoided should these trainings continue.

Projects planned in 2024

- Malawi College of Health Science Critical care workshop
- Mlambe mission critical care workshop
- Kamuzu Central Hospital refresher critical care
- Malamulo mission hospital critical care workshop
- Queen Elizabeth central hospital and Kamuzu central hospital retreat
- Mulanje district hospital critical care training
- Ncheu dictrict hospital critical care workshop
- Dedza district hospital critical care workshop
- Balaka district hospital refresher critical care
- Balaka exchange to queen Elizabeth central hospital

Projects that were funded and done.

Malawi College of health sciences critical care for the lectures

Malawi College of health sciences noticed that there was a gap in knowledge between academia and clinical as far as critical care is concerned so they thought of organizing a training that they should be trained so that they include critical care in their curriculum. During the training there was a lot of curiosity from the lectures as manifested by a lot of questions which were asked as well as more interest shown during practical sessions.

At the end of the training participants thanked Life Support Foundation for funding the training and they said the training saved as an eye opener in their day to day work (teaching) and also requested more trainings as well as more collaborations with the working group because they would also want to do more research in the near future so they might need funding as well.

Dedza District hospital Critical care workshop

Dedza district hospital is a long Malawi number one road which connects between two major cities of Blantyre (in the south) and Lilongwe (in the central) and this road is regarded as the busiest road in Malawi. As such there is an increase number of road accidents along this road and most of the casualties are taken to Dedza district hospital for stabilization before being referred to Kamuzu Central Hospital if the need be.

Training this hospital was very paramount as it saves as primary contact of casualties along Malawi number one road. During the training the participants showed interest to learn as they had asked a lot of questions during both session, theory and practical.

To assess the impact of the training a similar exam was administered for the purpose of pre-training and post-training evaluation. The pre test scores ranged from 50% the lowest and 87% the post-test scores ranged from 70% lowest and 100% highest this representing 88% improvement,

Feedback

All participants appreciated the workshop delivery and content. They indicated that they will apply in their various work stations to ensure improved patient care and reduced mortality among critically ill patients. And also suggested these types of trainings should be done frequently because of its relevant in relation to live saving.

Suggested plans

Participants thought it was wise to implement knowledge and skills they have gained during this workshop by planning to produce guidelines and protocols on departmental level and ask Life Support Working Group to have a supervision exercise so that they should appreciate the impact of knowledge and skills impacted on them.

Kamuzu Central Hospital (KCH) Refresher critical care workshop

Kamuzu central hospital is one of the biggest referral hospitals in the central region, with the growing number of people migrating from different areas of Malawi to Lilongwe due to urbanization, this makes Kamuzu central hospital to save a large population.

Due to this government deploys a number of nurses and clinicians at KCH every year to lender their services to the growing population.

The Resuscitation and Critical Care committee in KCH was established in the year 2018 with the purpose of standardizing and maintain good critical care given to patients within the hospital after noticing that gap of critical care among health care workers was too huge therefore, it organized its first critical care workshop in June 2019 with the financial support from Life Support Foundation. During this workshop the members realized the importance of the workshop and they recommended that all professionals at KCH need to undergo Critical Care Workshop. In this regard, KCH Resuscitation and Critical care Committee been organized other Critical Care Workshops though out these years, with the help of Life Support Foundation. The aim of the workshops has been aiming at improving knowledge and skills in critical and emergency care. The vision is to keep all KCH staff updated at all times in evidence based critical care knowledge and skills so as to improve critical patients' outcomes. The contents of the workshop has been comprehensive and practical in nature to address both knowledge and skills needs of the participants. The workshop included staff from different departments within the hospital, such us Casualty, Cancer Centre, paediatric HDU*s, Obstetrics and Gynecology, medical and surgical HDUs and the main ICU. The organizing committee was chaired by Mrs. Maria Nyirongo Ndola.

* = [HDU- High Dependency Unit]

Participants

The participants were recruited based on the care needs, as such the departmental managers were instructed to submit names of professional to take part in the workshop. 35 participants were recruited from different departments as mentioned above.

Knowledge assessment

Participants took a pre- and post- tests at the beginning of the workshop and after the workshop respectively. The average scores prior to workshop was 71% with standard deviation of 25.2 and the average score post workshop was 81% with a standard deviation of 19. This shows that there was an average knowledge increase of 10%.

Feedback

At the end of the workshop, the participants were asked to evaluate the workshop by answering the evaluation questions. On average, the participants rated the event very good (4.2/5) and the organization of the workshop was evaluated as very good (4./5) (1 being poor to 5 being excellent). Most participants indicated that the knowledge and skills gained from the workshop would be useful and applicable to their work place. 95% of the participants indicated that their exceptions were met while 5% indicated that somehow their expectations were not met. Using the ABCDE approach, Cardio pulmonary resuscitation, communication and the practical scenarios were the aspects of the workshop that most participants found interesting and useful. One participant said: "To me this workshop is an eye opener." Another participant said: "I will save the lives of the critically ill patients." Over 77% of the participants acknowledged the importance of the workshop and recommended more critical trainings for their colleagues to learn as well. Another participant commented: "Continue with these type of trainings to save lives."

Improvements and the way forwards

Participants felt the need for proper coordination of critical care and promised to work hand in hand with the coordinator of critical care. They proposed major areas to work on in order to improve critical care such as enhancing proper communication, sharing of critical care policies and guidelines,

formulation of critical care work improvement teams in their departments and developing of tools to monitor critical care services.

Projects funded but not done

- Balaka District hospital critical care workshop
- Mulanje refresher critical care workshop
- Balaka exchange visit to queens.

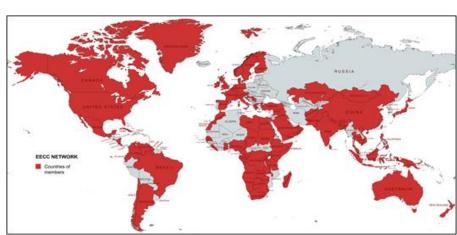
The above projects were funded but the working group has failed to implement them due fuel crisis that has heated Malawi for two months now, as our operations involves travelling, so due to this the working group decided to hold the implementation of the projects until the situation improves.

2025 Working group plan [Table submitted, with ambitious efforts outlined]

Report from EECC 2024 / Global (from Tim Baker)

• The EECC Network <u>www.eeccnetwork.org</u> now has 980 members from throughout the world – join us! #eeccnetwork





 POETIC Tanzania: The POETIC (Provision of Essential Treatment in Critical Illness) research team based at Muhimbili University in Tanzania work on EECC in Tanzania and globally, launched their new website www.poetictz.org



 The Integration of essential emergency and critical care including oxygen therapy, into primary health care services in Tanzania, the mainland, and Zanzibar (EECCIT) programme is underway in Tanzania. This large implementation work will take place in health facilities in 6 regions over the next 18 months and aims to increase EECC coverage and lead to a huge amount of learning that will be useful globally.





• **EECC Conference, KI, Sweden:** Two great days were held in November with 50 participants from all over the world discussing the EECC research agenda and the priorities for EECC research moving forwards. Special thanks to Karolinska Institute and Karolinska Hospital for hosting the conference, and to our Keynote Speakers, Mariam Claesson from Karolinska, Kumanan Rasanathan from WHO, and Prof Margaret Kruk from Harvard.



Carl Otto Schell publicly defended his PhD in November, the day after the conference with the title *Essential care of critical illness*.



 EECC has been presented at conferences in Singapore, South Africa, Sweden, USA, Germany, Botswana







 Life Support Foundation and The EECC Network held presentations at the Swedish Society for Anaesthesia and Intensive Care annual meeting in September 2024



• An Indonesian-Swedish research partnership in EECC has recently been announced. https://news.ki.se/carl-bennet-partnership-enables-indonesian-research-collaboration-in-critical-care The partnership, "will generate evidence on how to address public health and

clinical priorities of mutual interest between Sweden and Indonesia, and globally: the management of severely ill children, with focus in the newborn period, and how to accelerate progress on essential emergency and critical care (EECC)", says Mariam Claeson, Senior Advisor in the research team.



EECC Champions have been trained in workshops in Dar es Salaam and Zanzibar



Published in 2024 (available in the 'public domain')

• EECC has a chapter in a new World Bank book published in 2024, "Hospitals in Health Systems: Opportunities for Efficient, High-quality, and Integrated Care".

https://documents.worldbank.org/en/publication/documentsreports/documentdetail/099052424144516229/p1787771c10d8b0e41b9f916191e741fd65

The editors write, "Building upon their experience responding to COVID-19, Baker, Schell, and Khalid highlight the opportunity to reconceptualize critical care of patients in hospitals.

Essential Emergency and Critical Care (EECC) is a health system innovation with a horizontal

approach that focuses on illness severity rather than specialty and diagnosis. It unites a focus on the severity of the illness with the concept of essentialness—providing the fundamental, most costeffective, first tier of care. Adopting EECC can lead to far more costeffective investments for building sufficient capacity to prevent the millions of deaths caused by insufficient access to critical care."



- Karima Khalid and colleagues in BMC Health Services Research: Hospital readiness for the provision of care to critically ill patients in Tanzania— an in depth cross-sectional study. Key findings: availability of EECC resources in hospitals was 84% but readiness in the wards was 56%. District hospitals had lower readiness scores than regional and tertiary hospitals. Equipment readiness was highest (65%) while that of guidelines lowest. Availability of advanced critical care resources was 31%. In conclusion, resources for EECC were available in hospitals, but were not ready for the immediate needs of critically ill patients in the wards. https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-024-10616-w
- Emergency Medicine International, Strategies for Oxygen Ecosystems in Middle-Income Countries: A Review and Case Study from Lebanon https://www.hindawi.com/journals/emi/2024/9964636/
- Petronella Bjurling-Sjöberg and colleagues in BMC Med Education Capability to identify and manage critical conditions: effects of an interprofessional training intervention
 https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-024-05567-z
 The article's conclusion: The study confirms the need for improvements in the care of critically ill patients in general hospital wards in Sweden and supports the notion that training can increase the capability to identify and manage patients with critical conditions.
- EECC preprint by Carl Otto Schell et al: The hospital burden of critical illness across global settings: a point-prevalence and cohort study in Malawi, Sri Lanka and Sweden https://doi.org/10.1101/2024.03.14.24304275

The main findings: A point-prevalence of critical illness of 12.0% among 3652 hospitalized patients in countries of different socio-economic levels. They had a hospital mortality of 19% and an odds ratio of death of critically ill compared to non-critically ill patients of 7.5. Of the critically ill patients 3.9 % (95% CI, 2.4-6.1) were cared for in ICUs.

The article's conclusion: The study has revealed a substantial burden of critical illness in hospitals from different global settings. One in eight hospital in-patients were critically ill, 19% of them died in hospital, and 96% of the critically ill patients were cared for outside ICUs. Implementing feasible, low-cost, critical care in general wards and units throughout hospitals would impact all critically ill patients and has potential to improve outcomes across all acute care specialties.

EECC preprint by Aneth Kaliza et al: Improving The Care of Critically III Patients: Lessons
Learned from The Promotion of Essential Emergency and Critical Care In Tanzania: A
Qualitative Study

https://doi.org/10.1101/2024.05.24.24307887

The main findings: Five thematic lessons emerged from the promotion of EECC in Tanzania: (i) ensure early and close collaboration with the government and stakeholders; (ii) conduct research and utilize evidence; (iii) prioritize advocacy and address misconceptions about EECC; (iv) leverage events and embed activities in other health system interventions and (v) employ a multifaceted implementation strategy.

The article's conclusion: The results from this study show the efficacy of a holistic, comprehensive approach in promoting EECC as each strategy reinforces the others. This approach led the to the successful promotion of EECC and the development of a National Strategic Plan for EECC by the government of Tanzania.

Elibariki Mkumbo and colleagues in BMC Health Services Research Health care workers'
experiences of calling-for-help when taking care of critically ill patients in hospitals in
Tanzania and Kenya

https://link.springer.com/article/10.1186/s12913-024-11254-y?utm_source=rct_congratsemailt&utm_medium=email&utm_campaign=oa_20240717&utm_content=10.1186%2Fs12913-024-11254-y#citeas

The article's conclusion: Calling-for-help when taking care of a critically ill patient is a necessary life-saving part of care, but health workers in Tanzanian and Kenyan hospitals experience a range of significant challenges. Hospitals lack functioning structures, processes for calling-for-help are improvised and help that is provided is not as requested. These challenges likely cause delays and decrease the quality of care, potentially resulting in unnecessary mortality and morbidity.

- Rodwell Gundo and colleagues in Malawi in the International Journal of Critical Care Burnout
 Among Nurses Working in Critical Care Units in Africa: An Integrative Review
 https://wfccn-ijcc.com/index.php/ijcc/article/view/128
- Peter Saria and colleagues in Anaesthesia News Essential Emergency and Critical Care:
 Training Global Champions in Tanzania
 https://issuu.com/associationofanaesthetists/docs/anews_september_2024_web?fr=sOGM_wODc3NjlyMTA
- Mervyn Mer in Critical Care Medicine Critical Care in Resource-Limited Settings: Shedding
 Light and Providing Light...and Hope states, "Similar to using excellent clinical acumen,
 Essential Emergency and Critical Care has been advocated as a pragmatic and low-cost way of
 potentially improving care and substantially reducing preventable mortality in critically ill
 patients."

 https://journals.lww.com/ccmjournal/citation/2024/11000/critical care in resource limited
 d settings .16.aspx
- Trustworthy Majuta and colleagues including the use of Vital Signs Directed Therapy in BMJ
 Open Quality Combining quality improvement and critical care training: Evaluating an ICU
 CPR training programme quality improvement initiative at the National Hospital in Tanzania
 https://bmjopenquality.bmj.com/content/13/4/e002891

Thank you for your contribution in 2024!

Tim Baker, Henrik Jörnvall, Claes Frostell, Per Conradi, och Jonna Idh

www.lifesupportfoundation.org/support-us

SWISH: 1234610804 Bankgiro: 502-1456

info@lifesupportfoundation.org

www.facebook.com/lifesupportfoundation