

Organizational Practices

OP1

STROKE TREATMENT UNITS: REQUIREMENTS AND RECOMMENDATIONS

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Objectives: This study aimed to outline the requirements and recommendations for establishing specialized stroke treatment units. **Methods:** The criteria for specialized stroke treatment units were categorized into seven areas and analyzed based on existing recommendations and guidelines. These areas included infrastructure, early diagnosis, diagnostic and therapeutic infrastructure, therapeutic interventions, multidisciplinary mobilization and rehabilitation, expertise of medical staff, and emergency departments. **Results:** The infrastructure of a specialized stroke treatment unit should consist of two functional segments: Segment A for acute phase treatment and monitoring, and Segment B for post-acute phase treatment. Rapid neurological assessment and access to a neurologist or internist trained in stroke treatment are crucial within 30 minutes of admission. Diagnostic procedures such as CT scans, echocardiography, and Doppler or duplex sonography should be available within specific timeframes. Therapeutic interventions, including thrombolysis and thrombectomy, should be initiated promptly. Multidisciplinary mobilization and rehabilitation should be provided, addressing nursing care, physiotherapy, speech therapy, cognitive rehabilitation, and patient education. The expertise of physicians and nursing staff should be continuously developed through training programs. **Conclusions:** The establishment of specialized stroke treatment units requires adherence to specific requirements and recommendations. These units should have appropriate infrastructure, rapid and accurate diagnostic procedures, efficient therapeutic interventions, and multidisciplinary mobilization and rehabilitation. Ongoing training of medical staff is essential to maintain expertise. Access to emergency departments with trained professionals is crucial for continuous stroke care. Implementing these recommendations can improve stroke treatment outcomes and enhance patient recovery.



OP3

SINGLE-USE VS REUSABLE ENDOSCOPY REPROCESSING: AN EFFICIENCY SURVEY OF NURSES AND TECHNICIANS

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Objectives: Numerous studies have highlighted the potential time savings single-use endoscopes (SUEs) may afford facilities when compared to reusable endoscopes (REs) due to their ability to eliminate post-procedure cleaning. This time savings may not only allow for more procedures to be performed, but free up the resources and time of individuals responsible for cleaning both the procedure rooms and REs. The purpose of this survey was to evaluate the impact SUEs could have on the individuals responsible for procedure room turnover and RE reprocessing. **Methods:** Clinical training specialists across the United States distributed surveys to nurses, reprocessing technicians, and others involved in endoscope reprocessing. Data collection took place from September 2022 to February 2023. Proportions were calculated using each question's applicable respondents. **Results:** 52 participants participated in the survey. 100% believed using SUEs instead of REs could save time and allow them to spend more time on imperative tasks, with 66% saving 4+ hrs/week and 17% saving 15+ hrs/week. When considering time savings, 70% believed they would be able to reallocate 4+ hrs/week and 13% believed they could reallocate 15+ hrs/week. Additionally, 11% of individuals felt that SUEs could reduce 6+ hrs/week of after-hours and/or weekend time. Finally, 89% of reprocessing technicians felt that eliminating the reprocessing of just one type of scope would reduce the pressure to keep up with the demands of cleaning/reprocessing other types of scopes and equipment. **Conclusions:** SUEs may not only save employees time by eliminating endoscope reprocessing but allow them to spend time doing more imperative tasks and reduce job pressures. All respondents felt that utilizing only SUEs could save time and over 17% felt they could save 15+ hrs/week. If widely adopted, facilities may not only see a reduction in costs, but an increase in time savings, employee morale, and elimination of reprocessing related risks.



OP4

SCIENTIFIC COMMUNICATION PLANS IN HEALTH ECONOMICS AND REAL-WORLD EVIDENCE

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Objectives: To review and report reasons to include a scientific communication plans (SCP) in projects of health economics and real-world evidence globally. **Methods:** We conducted a narrative literature review to map reasons presented in literature for support implementations of SCP for research projects. We discussed the main reasons founded to support future adoptions of SCP in health economics and outcomes research. **Results:** The use of SCP is an outline to guide effective communication for various audiences. Some projects are including a roadmap with milestones for sharing their methodologies, results and future steps for different audiences like other scientists, patients, policymakers, funding agencies. The main reasons to encourage an organization of scientific communication plans covered in



this review were: collaboration, resource allocation, transparency, reproducibility and dissemination. A SCP allows researchers around the world to identify potential synergies and collaborate effectively in real-world studies, for example. It also permits institutions, stakeholders, policymakers and funding agencies to save and allocate resources more strategically. A SCP allows the scientific community to evaluate details from each study increasing the transparency and reproducibility. A structured SCP can contribute to dissemination of science, contributing to collective understanding of science. It also facilitates future research and inspires new ideas. **Conclusions:** The use of SCP has a main objective to expand the reach of science across different areas around the globe, as in health economics and real-world evidence. Including a strategy for SCP inside projects can promote collaboration and improve resource allocation. Also allows transparency, reproducibility and dissemination of science in different areas.

OP5

MULTISTAKEHOLDER HEALTHCARE COOPERATIVE: A NEW PARADIGM FOR HEALTHCARE DELIVERY

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Objectives: To analyse healthcare system with financial engineering perspective to optimise the solution. The healthcare delivery system in India is facing challenges to meet sustainable development goals by 2030. Government has a shortage of funds and 60% of the population pays from pocket for health care. This pushes many on the borders below the poverty line due to catastrophic out-of-pocket health expenditures. Healthcare demand and costs are rising due to the aging population and newer health technologies. Increased Expectations from medical treatment lead to frustration when the treatment fails to deliver desired outcomes, which leads to cases of violence against the medical community. **Methods:** The healthcare delivery system was analyzed using a **Financial engineering perspective** with the objective of optimising the outcomes. Three major areas of financial engineering that are most relevant to the risk analysis/management needs of health care organizations are stochastic analysis and value at risk, portfolio optimisation and asset liability management, and distributed decision making and agency theory. Governments desire to maximize the health of the citizens at minimum costs, and people desire good health. Healthcare providers such as doctors and hospitals are assumed to be working towards maximizing consumption. Diagnostic centers and the pharma industry are purely profit-oriented. **Results:** The multistakeholder system is a complex system and requires the meaningful cooperation of all the players to optimize the outcomes. Stakeholder management (STM) lies at the heart of FIR (fourth industrial revolution). Thus cooperative society may be a better model for delivery of health care in a complex multistakeholder environment with uncertain outcomes. **Conclusions:** Co-operatives in healthcare may offer solutions to the shortage of funds. Lack of access, and also help deliver inclusive and patient-centered care. India has had a rich experience in the cooperative sector and there is a scope for introducing healthcare cooperatives as a novel model of healthcare delivery, to achieve universal health coverage by 2030.



OP6

OVERCROWDING AND BOARDING TIME: EMERGENCY DEPARTMENT PERFORMANCE AND IMPACTING FACTORS

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Objectives: Higher boarding times (BTs) usually affect the Emergency Departments' (EDs) activities, resulting in a lower care quality level for patients, waiting for an inpatient bed. This study aims to evaluate the different EDs performance indicators affecting BT. **Methods:** Real-life data were collected in an ED in Northern Italy, considering the years 2019-2022, and referring to 189,976 accesses (134,199 adults and 55,777 pediatrics). The following KPIs were assessed: time between ED access and the first visit, BT, ED overall stay, ED repeated access within 72 hours. Both the National Emergency Department Overcrowding Scale (NEDOCS) and the Emergency Department Working Index (EDWIN) were adopted. All measures were compared to the national standards. A bivariate correlation was performed to explain endogenous and exogenous factors, that could impact on the patients' BT. **Results:** Time between ED access and the first visit results over the national standards, for all the patients, except for white and green patients (referring to pediatric department). Repeated accesses within 72 hours increased for white and green patients; a decreasing trend was registered for red and yellow patients, especially in the children's pediatric department. Stratifying the accesses and evaluating the NEDOCS index, in the pediatric department overcrowding situations were demonstrated only for the light-blue and green patients. The bivariate analyses revealed that time band ($\beta=-0.057$; p -value=0.000), patient's code ($\beta=-0.028$; p -value=0.005), and ED organizational assets ($\beta=0.039$; p -value=0.000) could affect the BT, with an increase during the night and for the less complex codes. **Conclusions:** BT resulted higher at night, as a consequence of the reduced number of recovered patients, increasing the overcrowding. The overall process time is enlarged over the years 2020-2021, also due to the COVID-19 spread; better results emerged in 2022. EDWIN and NEDOCS indexes could be considered as relevant indicators, providing more comprehensive information for understanding EDs dynamics and improving EDs management.

