Bolivia

1. State of Clinical Engineering (CE) - Health Technology Management (HTM) – Body of Practice (BOP)

Unfortunately, the development of clinical engineering and the direction of health technology management in my country Bolivia, has remained in a nebula since its year of implementation in 2015.

The national market is divided into a private sector and a public sector, with the public sector in greatest demand in terms of human resources, medical equipment, frequency of patients and implementation of new technologies.

The current government made a pact with the country of China, to improve telecommunications in Bolivian territory, by launching for the first time a satellite called "tupac Katari", which has no major role or is not relevant in the public sector.

The state of clinical engineering is not promptly carried out by biomedical engineers, but more than anything with people who are dedicated to the architecture profession and biomedical engineers only participate for the reception of the equipment in the hospital. Mostly the participation of a biomedical engineer, is for a control as to the delivery and operation of the equipment and not to highlight the needs of the service environment and the understanding between medical staff and patients.

2. How would you suggest to show the Value of and from having CE-HTM program

Every empirical and applied information is vital in the formation of new technologies and systems developments, if we point out the health, it is acquiring a tremendous need to release patients as quickly and efficiently as possible. Hospitals must add to the innovation of service and continuous learning for greater attention to the public, not only in urban areas but, in rural areas such as the RAFT project in my country. Unfortunately, I was not provided with data and results of its attention.

3. Example of success stories where CE supported patient outcomes

“Dr. Alejandro Vargas in collaboration with the Rainbow Hospital in La Paz (Dr. Miguel Ugalde and Dr. Ramiro Narváez) and Medspazio SRL in Cochabamba (Dr. Reynaldo Vargas), together with Prof. Antoine Geissbuhler of the University Hospitals from Geneva in Switzerland, they have just published the first international scientific-technical article on Telemedicine in Bolivia: RAFT-Altiplano Project, experiences, perspectives and recommendations in the Pan American Journal of Public Health (http://www.paho.org/journal /). After three years of work, the authors demonstrate the feasibility of developing and implementing telemedicine tools in government and municipal health institutions in certain isolated regions of Bolivia for the benefit of the population. The experiences, difficulties and risks identified are very useful for the design and implementation of the TeleSalud telemedicine project for
Bolivia nationwide. The article in question will be available online for free in the coming weeks.”


4. CE Education program available (levels and content) – Body of Knowledge (BOK)

Within my country, there are very few courses aimed at a clinical engineering education, they are not more than 1 or 2 a year and mostly, the courses that other colleagues have, are programs conducted online (internet) or leaving the country.

5. CE Association/Society and Credentialing/Certification program if available

6. CE major challenges (think of 3 subjects)

1. Training: medical personnel, biomedical and auxiliary engineers must take into account and delineate their functions with respect to the specific service area in a hospital.
2. Application of standards: Bolivian standards are based on both Colombian, Chilean, Argentine, Cuban, etc. I think it is necessary to become independent in a certain way with a research model to have Bolivian norms clearly.
3. Viability: Since the largest movement is in the public sector, the government must derive economic resources, human resources and other resources, without politicizing one of them.

7. What is the most important action you will support to increase CE recognition

I would very much like to help with infrastructure issues, that the comments of my colleagues and mine are heard by the ministry of health in my country. Since we as biomedical engineers have also been guilty of misinformation and submission to jobs that are not applicable to normalize hospital structures and administration.

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