Egypt

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

Prof. Bassel Tawfik started a CE and HTM course for the first time in all Arab countries in 1991 in Cairo university. Since then, three other public and two private universities opened the course. We estimate about 200 - 400 graduates per year all over. The major problem with clinical engineers though is (1) lack of continuous education, and (2) lack of professional certification. These problems lead the young graduates to rely only on their experience which is accumulated at a slow rate. And this is not sufficient to keep pace with international developments.

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

Value of CE-HTM program manifests itself in:
1. Our graduates are hired immediately by all stakeholders both at home and in the Gulf countries.
2. There is a growing demand for consultancies especially in the field of medical equipment planning.

We suggest the creation of an accredited body to increase the awareness of the value of having better CE-HTM programs. This accredited body can collaborate with the universities by offering them educational materials, training programs, and workshops.

3. Example of success stories where CE supported patient outcomes

Some hospitals showed success stories by doing the following:
1. Complying with the regulatory requirements of accrediting organizations.
2. Collaborating with experienced consultants and companies to manage the activities related to CE and HTM.
3. Implementing the methods proposed in Master and PhD theses to solve specific problems or to adjust the international policies/standards according to the mission criticality and different resources of each hospital.

Nevertheless, we do lack statistics and hard evidence for our successes. This needs a concerted effort and funding.

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

4 public and 2 private universities offer BSc. in Biomedical engineering. All of them offer one CE course at least. Most of them offer postgraduate courses as well. Although we must say they are not of the same caliber.

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

No credentials
6. **CE major challenges (think of 3 subjects)**
   1. Lack of access to professional courses offered by such agencies as the FDA, ECRI, AAMI, etc. There are no funds for this.
   2. Lack of consistency of course quality among different universities.
   3. Lack of certification.

7. **What is the most important action you will support to increase CE recognition?**
   The most important action we will support is the creation of an accredited body that offers continuous learning and certification for CEs.

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