Global CE Summit Report 2019

CED Global Action Plan
2020-2021 CED: Improve Safety, Affordability, & Access
(HT that is Appropriate, Available, Acceptable, Increases Quality & Efficiency, …)

Recommend-ations	Definition	Linkage to Earlier Priorities / Projects	National/Regional Comments
1. Identification	- Identify minimum & unique (M&U) competencies that qualify individuals to practice in the field. - Describe minimum acknowledge required to qualify for practice in the field at different levels: engineer, supervisor, or director - Assess CE status (against the M&U competencies); recognize and enhance CE in challenging locations, eg, Russia and former CIS countries - Standardize terms and definitions	- Recognition, both Internal & External Recognition Projects - (7-10 competencies essential, see CE Value listing below)	- Competency Profile (South Africa) - Unique = Co-Competencies (China) - Applied BOK/BOP - CE difference in diverse settings - Measure Impact: ROI & clinical outcomes - Promote CE program in every hospital (EURO) - Create standard, evidence based (EB) Data collection for CE competencies (EURO) - Utilize CE-HTM benchmarking (WPRO)
2. Engagement	- Engage volunteer CEs to connect with all relevant stake holders in the Regions, eg, for Media representation, Politics, or other functions where we lack presentation of ce in various areas of CED work - Who are key stakeholders (by country); optimize partnerships and communications with other allied health professionals related to use of HT, eg, medical physicists and IT - Best learned through project involvement	- Go beyond External Recognition and Relationships to create new relationships in many areas - Driven by needs of the country(ies)	- Politics contact (in a country) - Media contact (in a country) - Build on HIMSS/IHE relationships, etc. - Professional Article writers supporting other content providers - Engage with HTAD, and others to help - Develop CE-HTM Mentoring (WPRO) - Developing Regional Federation of CE Societies (EURO); create Regional & national Society(ies) for EMRO
3. Education - Leadership	- Primarily includes the development of leadership skills, perhaps a 2-part training accomplishing the following: (1) teach leadership aspects of Identification results above, (2) field example-based set of applied leadership exercises; pilot in Spring/Fall 2020, and (3) Follow-up with ongoing mentoring (eg, Collaborators and other senior CEs matched with younger) - Particularly focused on younger CEs, students - Link to other allied health professionals (eg, IT through this pathway) - Elliot Sloane, Yadin David, & Mario Castaneda can provide initial Leadership training components	- Education / Training current priority - Helping the younger CE generation answer 'what's next' question after certification (eg, CCEs in China) - CE Pre-development Workshop (Australia) before ABEC meeting	- Some Regions need CE-HTM core fundamentals training (AFRO & EMRO) - Digital Medicine training, see Elliot Sloane & Ricardo Silva's CAHIMS proposal for 2020 - Enhance CE academic programs offerings with clear content from the Identification project and the CED BOP/BOK; establish an ongoing link with CE academic programs globally to provide content input to CE undergraduate & graduate programs - Transmit HT Regional best practices through monthly regionally based Virtual Hub meetings - Create certificates programs in emerging areas of CE work, eg, AI, IoT, Telehealth - Teach different skill sets, eg, negotiation - Teach Quality & Safety aspects of all phases of CE-HTM Asset Lifecycle Management (WPRO)
4. Professional Standing	- Promote credentialing as feature of unique professional standing (accreditation, certification, etc.), and - Define desired content of certification systems; tailor that to specific Regions recognizing some differences - Identify common global minimum guide for entering into health critical field/hospital - Need ongoing training throughout career	- Next steps in our Credentialing project, via the ICB (International Credentialing Board)	- Pilots needed for ICB to consider for national certification and registration (US, China), - eg, Ireland submitting their Certification program for global recognition by ICB - eg, National Registration & Certification programs in Japan submitted to ICB
5. Policy	-Identify technology-based medical programs (i.e. Telehealth) that CEs can draft Policy in support of Ministries of Health-	- Policy Co-Chair and Advisory Board suggested	- Special Journal issues: use approaches like USA ECRI former 'Devices (HT) & Dollars' publications and global case studies of applied HT Policy

Recommend-ations	Definition	Linkage to Earlier Priorities / Projects	National/Regional Comments
	MoHs <u>Implementation</u> (Elliot Sloane proposal on Telehealth policy), with close links to HTA and HTM -Spun up via WHO Collaborating Centers-CCs and national CE-HTM Institutes	- CED now out in front of HIMSS & AAMI engaging global community	- Ask Dr. Yunkap Kwankam (BME) to help (formerly WHO e-Health leader now with own company linked to WHO's Global Health Observatory-GHO)

6. WHO Priorities	From Adriana Velazquez, eg, furthering data collection for WHO Human Resources Dept and ILO in 2020. Others include:
	- Numbers regarding patients, equipment, etc. at the hospital are important also to know the description of competencies regarding Clinical Engineers
	- Acronyms as HTM & HTA, CE knows what they mean, but others need to to know to facilitate the understanding of topics for those external to CE profession.
	- To increase the number of CE's internship in the hospital.
	- To promote the exchange of information related to funds available.
	- 2020 WHO steps include to improve accessibility mainly on topics like key medical devices, HTM, etc.
	From HT Regions about WHO:
	- Schedule monthly designated CED-WHO Task Force collaboration
		- eg, Mladen Poluta reflect re what learned at all 4 previous GFMD	-WHO now to run GFMD on opposite years from CED ICEHTMCs
			
			WHO 2020
			- Adriana plans 5th Global Forum on Medical Devices (5GFMD) in 2020
			- Medical Device Safe Use legislation
			- MeDevIS: WHO clearinghouse of medical device information
			- 3rd EDL and PMD Respiratory
			
			CED 2020
			- Participate in WHO World Health Assembly (WHA) 18-24 May in Geneva; begin preparations now with appropriate Stakeholders around:
			  - Nomenclature
			  - Policy
			  - Other

The actual ranking votes of the 2019 Common Challenges and Consensus scores were:

1. Lack of Education and Mentoring Program. 20
2. Lack of Professional recognition. 18
3. Lack of Credentialing standard. 0
4. Lack of National Association and Federal umbrella. 3
5. Lack of Policies to use of Medical Devices. 12
6. Increase Clinical Engineering role in Decision Making processes, eg, promote CE involvement in pre purchase-evaluation in hospital level. 21
7. Standardize terms and definitions. 5
8. Add medical devices to Regulatory Agency names. 0
9. Encourage Clinical Engineering system design incorporation into System Lifecycle.   3

Clinical Engineers enhance the Value of healthcare (HC) delivery in their countries/HC organization/system by:

1. Assessing and managing health technologies (HT): *eg, to support SDG3 (good health and well-being of populations) sharing evidence-based (EB) R&D across countries; & optimizing high-technology, high-cost spare parts management*

2. Containing HT-related costs and increasing ROI; *eg, involved in HT Pricing decisions; & CE-HTM lifecycle systems design and cost analysis*

3. Improving HT-related patient and staff safety and quality; *eg, teach quality & safety aspects of all phases of equipment asset lifecycle*

4. Supporting clinical caregivers using HT; *eg, define appropriate devices for outbreaks; & joining them in Device pre-purchase evaluation and deployment*

5. Innovating new care processes using HT; *especially using Digital Medicine approaches and creating CE culture of Innovation*

6. Using digital medicine to improve patient access while optimizing CE-IT relationships; *eg, Device EHR integration, as for Blood Pressure monitoring for hypertension management; & for Patient Social Media engagement*

7. Addressing HT regulation challenges; *eg, those regarding post-market surveillance, HT-related adverse events, and cybersecurity*

8. Develop reporting/communication relationships with highest level decision makers, *eg, with MoH and or WHO country representatives*

9. Developing appropriate HT-related policy and or legislation, *eg, Telehealth policy, HT Donations policy, and/or Device Safe Use legislation*

10. Optimizing partnerships and communications with other allied health professionals, *eg, to jointly improve quality & safety in care delivery processes*

Next Steps:

1) Develop communication strategy for the Action Plan above
   a. Each Country and HT Region to develop their own Action Plans around Priority Issues & Global Plan by January 1, 2020
2) Provide curated Directory (of CE documents) and access to existing content online
3) Identify opportunity to engage CE in policies and standards development and make them Universal.