



Introduction of Clinical Engineer System in Japan

June 1 | 13:00-17:00

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Japan Association for Clinical Engineers (JACE) ²⁾

Clinical Engineers : Japan

- Clinical Engineer License System
 - Established in 1987
 - National License
- Education
 - 4 years education in university
 - or
 - 3 years education at a polytechnic college



The Facts

Operating Equipment in the Clinical Environment 40%

- Respiratory therapy
- Perfusion (HEART-LUNG machine)
- Dialysis (Dialysis equipment)
- Operative treatment (Surgical equipment)
- Intensive care units
- Cardiac catheterization
- Catheter abrasion for arrhythmias
- Hyperbaric oxygen therapy
- Other treatment (defibrillators)
- Pacemaker, ICD, CRT

Service Delivery Management 20%

Patient Safety 20%

Healthcare Technology Management (HTM) 20%



Our Clinical Fields *(a case of Aso Iizuka Hospital)*



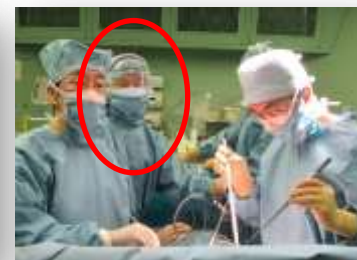
HTM



Haemodialysis



Operation Room



Operation Assistance



Perfusion



Intensive Care



Cardiac Catheter
(intervention)



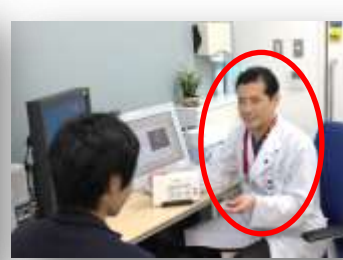
Hyperbaric Oxygen Therapy



Endoscopy



Capsule Endoscopy
(Interpretation)



Pacemaker Clinic



Staff Education



Japan Association for Clinical Engineers (JACE)

JACE was established under the approval of the Ministry of Health, Labor, and Welfare (MHLW) in March 2002.

The objective of JACE is to contribute to the promotion and development of the nation's medical care and welfare through the raise of professional ethics of CEs, enhancement of their professional knowledge and skills, and improvement of reliability of equipment-based medical care and welfare, including life-support systems.

About 40,000 licensed Clinical Engineers in Japan
About 19,000 of them are the members of JACE



Roles of JACE

- Safety Management Activities in Clinical Engineering Fields
- Awareness Activities
- Development of Knowledges and Skills, and Quality Improvement
- Welfare for the Members
- Publishing Books and Journals



Annual Conference of JACE

Participant: Over 5,000

120 Oral Presentations

500 Poster Presentations

5 Lectures

18 Luncheon Seminars

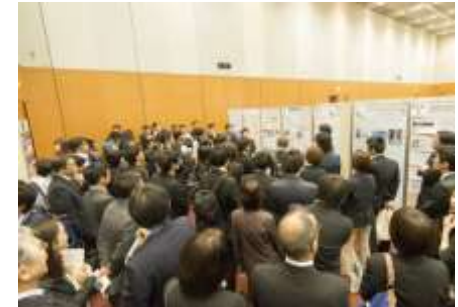
2 Lectures Open to the Public

4 Symposiums

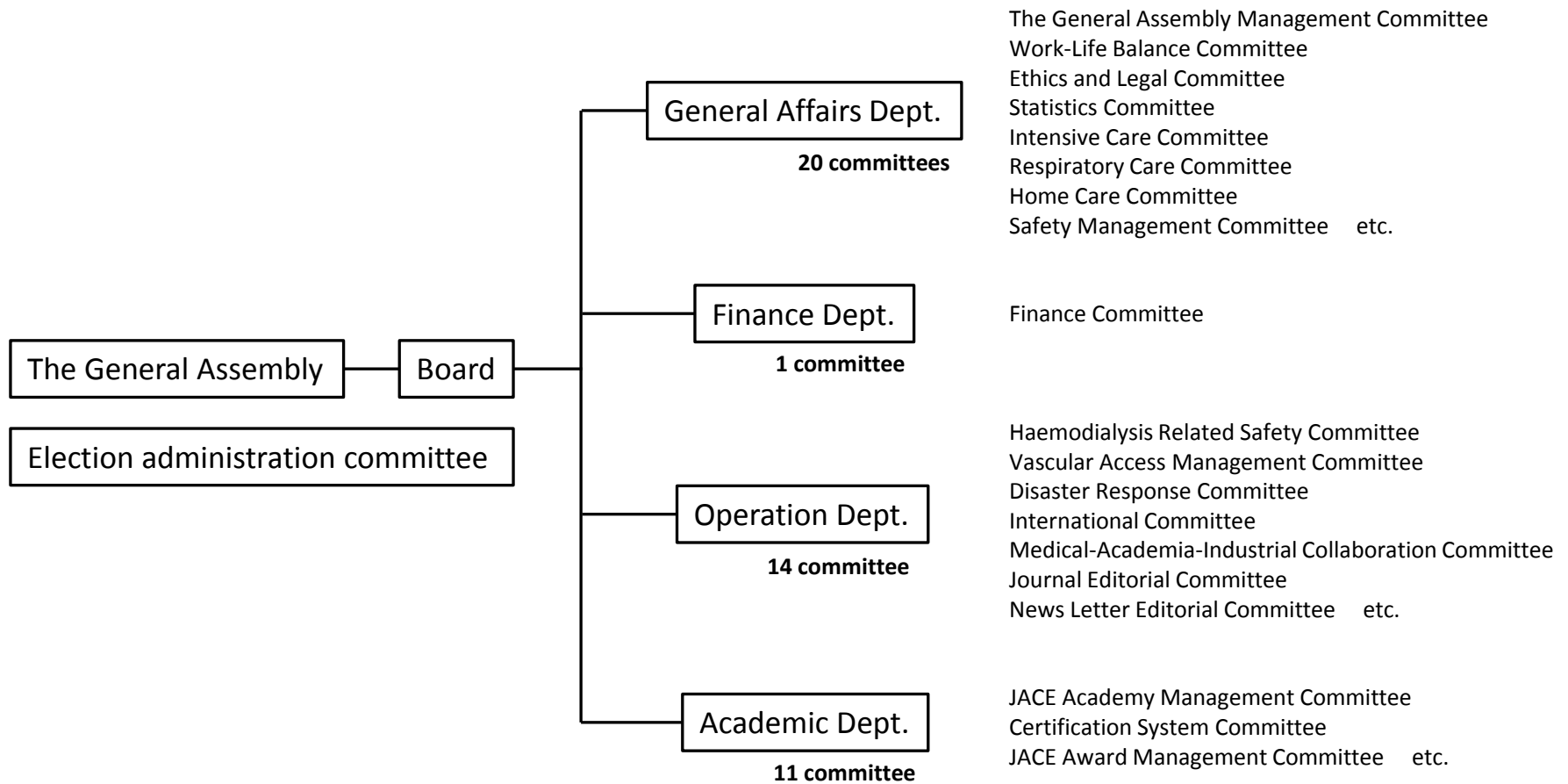
17 Workshops

40 Exhibitions

(The 25th Congress of JACE in 2015)



Organisations of JACE



Medical-Academia-Industrial Collaboration Committee

The Roles

- 1) To promote medical device development based on clinical needs
- 2) To support our members in device development
- 3) To expand CEs' fields and opportunities



Activities of the Committee

- Idea posting system on the web site of JACE



- Needs/idea evaluation service by committee
- Introducing CEs' needs and ideas at a matching events.
- Introducing needs and ideas by CEs at exhibitions, expos, etc.



Certification System Committee

New certification in HTM

Tow layers of certification system (pilot outline)

Standard : Basic knowledge in HTM → Starting from 2019

Upper level : Advanced level of knowledge in HTM

Ideally, linking the certificate with the reimbursement system...

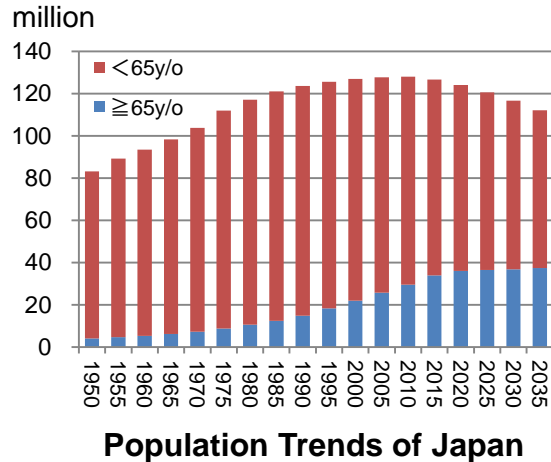
Aiming to stipulate the CE's roles on the reimbursement system



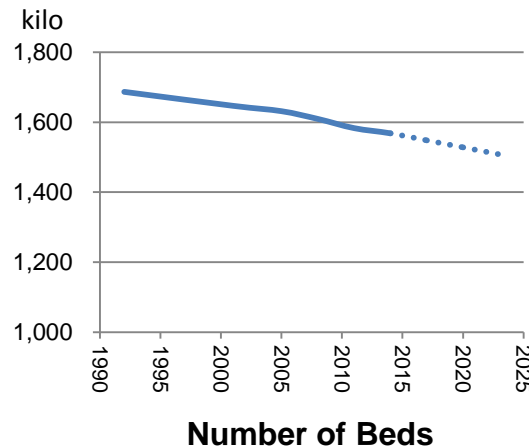
Presence of CEs allows to charge more fee



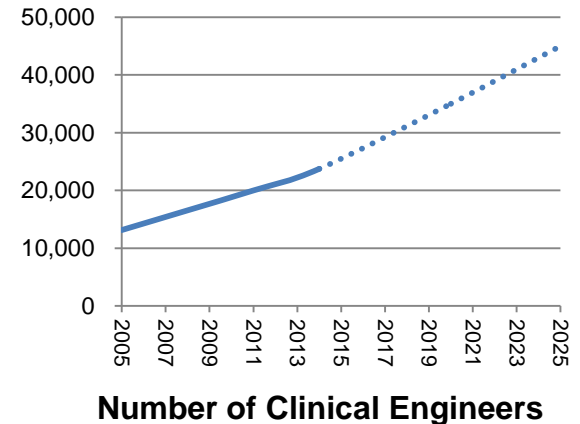
Concern for the Future



Data from "Bureau of Statistics of the Ministry of Internal Affairs and Communications"



Data from the Ministry of Health, Labour and Welfare



Need to expand CEs' fields and opportunities

- Medical device development could be a new field to use CEs' engineering skills and their medical knowledge.
- Stipulating the CE's roles on the reimbursement system would lead to strengthened CE's importance and presence in the clinical fields.



Thank you for your attention



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