Enhancing the Role of the CE in Japan
(BRIEF EXPLANATION OF JAPANESE CE)

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Agenda

1. History & Current Status of CE in Japan
2. Definition & Duties of CE in Japan
3. Situation of CE in Japan
4. Issues & Challenges of CE’s Activities in Japan (in 2005)
5. Current Situation of CE (in 2008)
6. Future of CE in Japan
1. **History & Current Status of CE in Japan**

- Improvement of Medical & Engineering Technologies (Technology) (ex. Rapid growing of medical support by artificial organs)
- Substantial increase of ESRD patients in hemodialysis (HD) field
  - Safe and appropriate operation/application of HD machine
  - Need of more HD specialists and CEs operating artificial heart & lung
- Strict requirements for safe & appropriate operation of all medical equipments
  - Need of more specialists

- Requests for specialists from medical field

[Diagram]

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 Establishment of CE

 Growing need & number of CE
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Administrative Milestone of CE

1987  “Clinical Engineers Law” was promulgated by MHLW (Ministry of Health, Labour and Welfare)

1990  Professional organization JACET was founded (Japan Association of Clinical Engineering Technologists)

2002  JACET was certified by MHLW as a public utilities corporation

2008  20th. Anniversary of “Clinical Engineers Law”
2. Definition & Duties of CE in Japan

1) Qualification of Clinical Engineer:
   - Licensed by the Government (MHLW)
   - Under “the Clinical Engineering Law”

2) Main Duties:
   - Operation of life-support medical equipments
     - Check & maintenance work
     - Direct medical actions to patients
       - Blood & drug injection to patients
       - Blood sampling of patients
       - Electronic care to patients
       - Others
     - Care to patients
   - Training of Other medical stuff
   - Cooperation with doctors, nurses and other medical stuff to take team approach
3) Applicable Medical Equipment

**Life-Support Equipments:**

Biogenic functional support of respiratory, circulation and metabolism with life-support equipments and others
3. Situation of CE in Japan

No. of Licensed CE: 24,611 (as of March 2008)
(1,510 were newly licensed in March 2008)

Actually working CE: approximately 15,000

Member of JACET: approximately 9,800 (as of March 2008)
CE at Work

Age

CE Breakdown by Job

1) Issues of CE in 2005

- Jobs not clearly defined by Law
- No public remuneration guaranteed
- Duties including sanction of phlegm and blood drawing are not legally admitted
- Insufficient education period
- Lack of understanding of CE’ jobs in medical institutions
2) Challenges of CE in Japan in 2005

—For Safer Medical Equipments Operation—

• **Longer & continuous education/training**

• **Clear legal definitions**

• **Enhance CE’s position in LSS at medical institutions**

• **Improve skill by Certification System**

• **More central ME control centers at medical institutions**

• **Cooperation with industries in the development of safer & advanced LSS**

• Others

Some examples are as follows:

1. The revision of Medical Law was enforced in April 2007, and staffing of a person in charge of medical equipment management became mandatory for the safety purpose.

2. MHLW issued a notification in December 2007 which urged positive utilization of CE.

3. A law enforced in April 2008 restricts the attendance of medical equipment manufacturer representatives to clinical site, and original role of CE is highly recognized again.

4. Public remuneration for one of CE’s jobs became payable in April 2008.
6. Future of CE in Japan

- Continuous efforts towards safe operation of LSS
- Legal enhancement of CE’s duties
- Authoritative specialists to LSS at medical institutions
- Improvement of Education system & Certification system
- “JACET Academy” & “JACET Seminar center”
- Others
Objectives of Conceptual Scheme of “JACET Academy” & “JACET Seminar center”

“JACET Academy”

- Sharing of know-how and technologies
- Contribution to future development
- Award system

“JSC”

Planning and running of educational programs