

# Evolution of Clinical Education in S. Korea



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**Clinical Teaching to Transform Healthcare Professionals**

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## Consultative Visit Report



**Association for Medical Education in the  
Western Pacific Region**

- Vietnamese Society of Medical Education
- Licensing Exam
- OSCE
- Accrediting agency

# Country Profile: Republic of Korea

- Total population > 50 million
- GDP 1404.4 Billion USD, 11<sup>th</sup> IMF 2016
- Health expenditure = 7.4% GDP (2014)
- Specialist-oriented care and weak 'generalism'
- Government drive for medical industrialization

- Average life expectancy > 90 years by 2030
- Access to medical services & Healthcare coverage
- Healthcare efficiency
- Excellence in treatment outcome: highest survival rates in the world for colorectal cancer and cervical cancer

## *Content expert / Technical expert!*

- World-class robot surgery
- Laparoscopic surgery
- Organ transplantation
- Cancer surgery
- First tooth auto-transplantation
- Computer assisted dental technology

# Dawn of Western Medical Education

1885

American missionary Dr. Horace Newton Allen  
First hospital for allopathic medicine

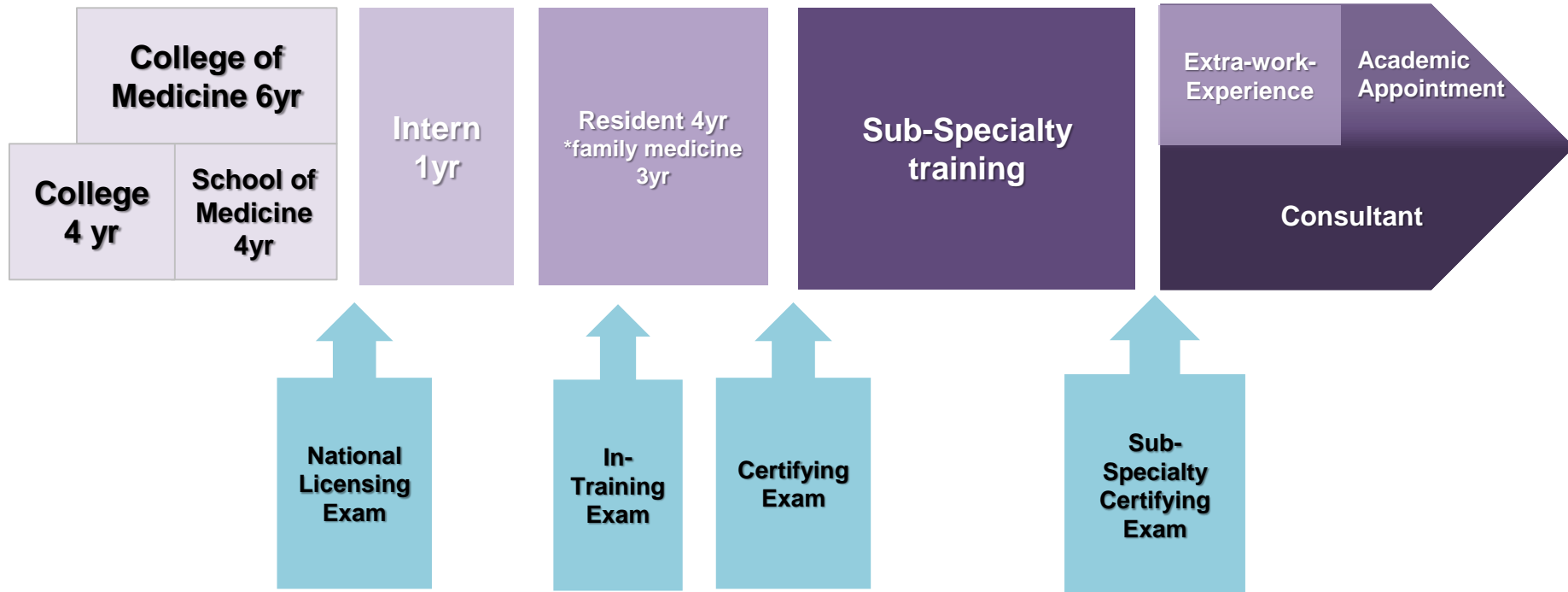
1886

16 Students from prestige class  
First higher education for allopathic medicine

1899

Dr. Evison, Canada  
Foundation of “Severance Medical School”

# Continuum of Medical Education





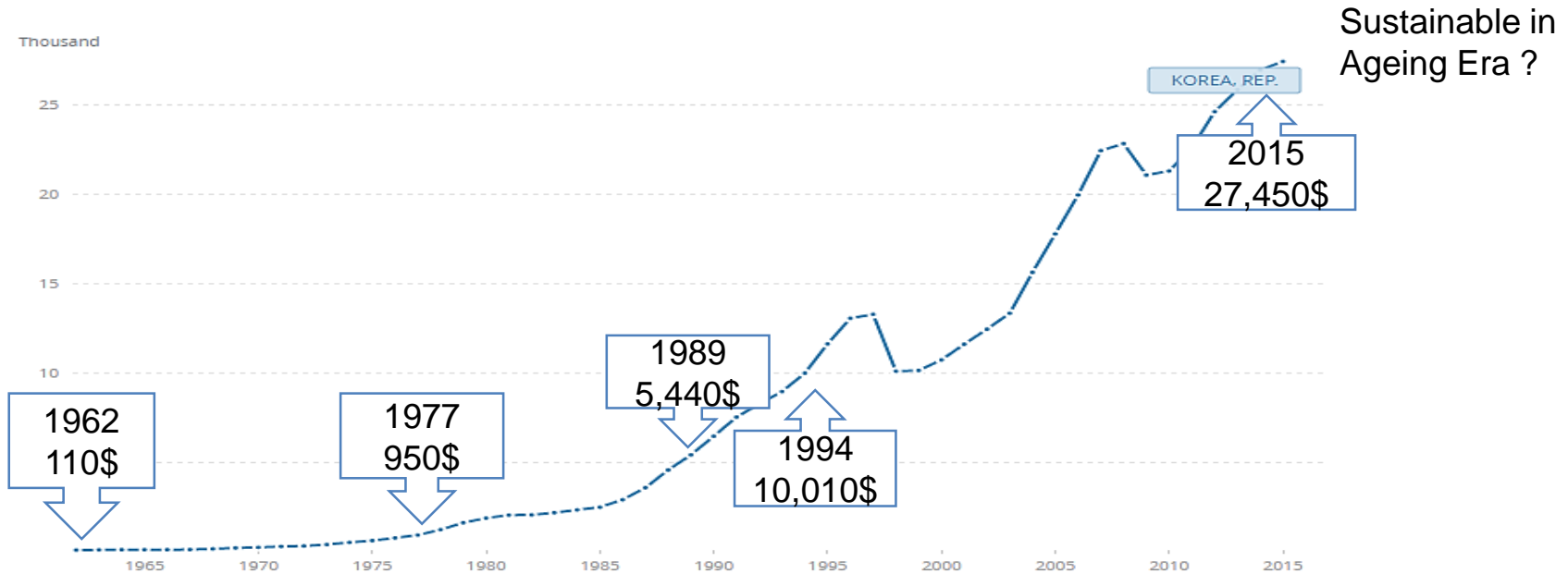
## *General overview*

- Heavy emphasis on lectures and book knowledge
- Less innovative curriculum
- Relatively passive clerkship--much less involvement in patient care than in West
- Strong emphasis on specialty rather than general training
- Ill defined general consensus on resident education



# Government Initiatives: NHI

1977 National Health Insurance > 500 employees  
 1989 Universal Health Coverage: Copayment system



	1962	1977	1989	1994	2015
Med. School	10(5/5)	23(8/15)	31(8/16)	41(10/31)	41(10/31)
NHI \$	N/A	13 Mil	1,621 Mil	4,282 Mil	47,334 Mil

## ***Faculty Evaluation: China Medical Board***

Singapore, Hong Kong, Malaysia

- Very able faculty

South Korea, Taiwan

- Less competent faculty members in relation to teaching, service and research

Japan

- Not included in evaluation

*Patrick A. Ongley, Yonsei Medical Journal 1985*

# Korean Medical Schools

Year	# of schools	# of students
1950	6	805
1980	19	2090
1997	41	3072

## *A case of quantity over quality*

Governmental push for the fast expansion of medical schools

Too rapid an expansion was the reason for low quality medical education in some schools

Profession led medical school accreditation started in 1997

# BME Accreditation in Korea

- 1997 The Accreditation Board for Medical Education in Korea (ABMEK)
- 1999 Piloting in 10 new medical schools
- 2000 The official accreditation of medical schools
- 2004 ABMEK became KIMEE (Korean Institute of Medical Education and Evaluation)
- 2011 Mandatory accreditation by law
- 2016 WFME recognition

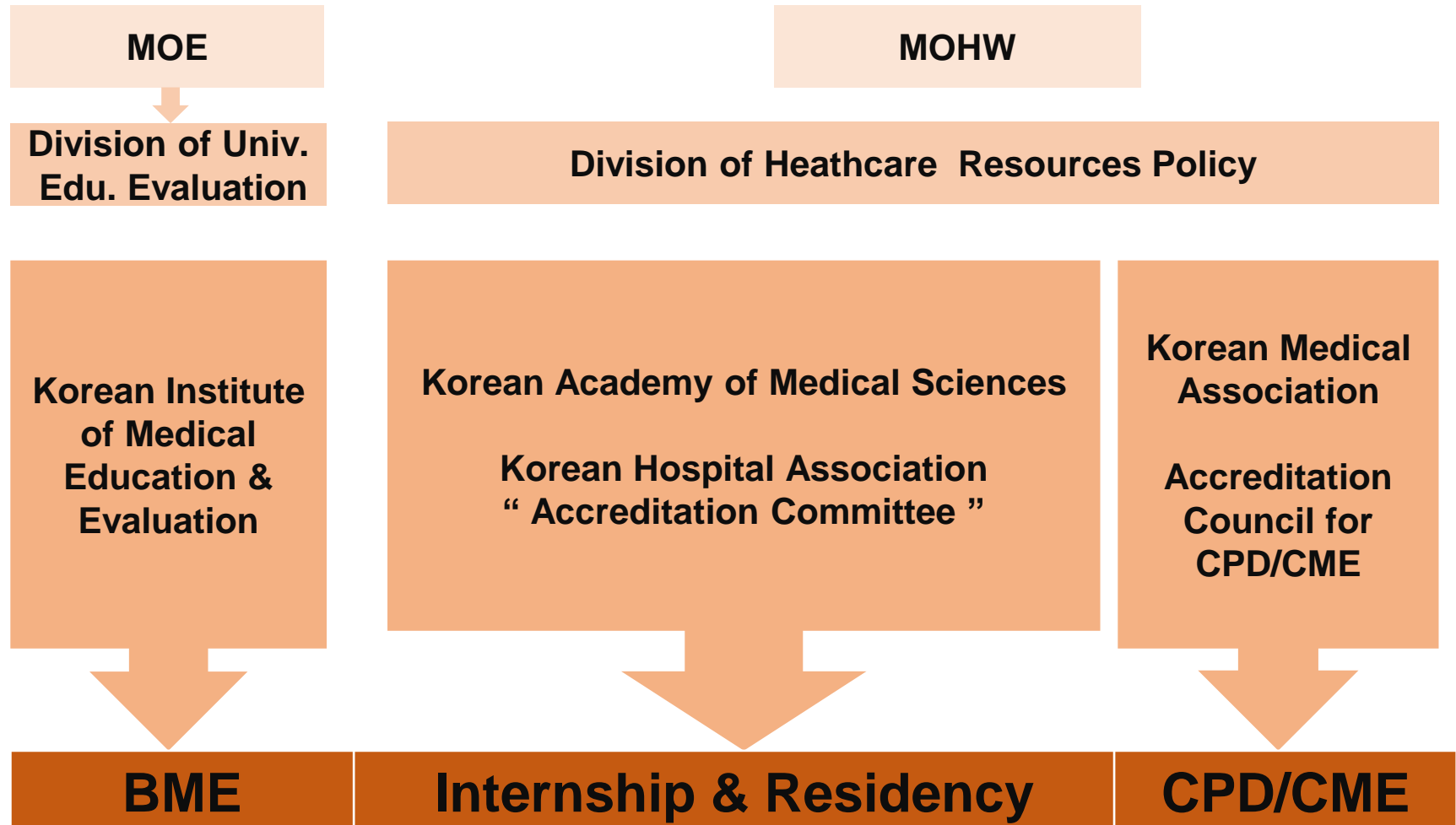
# Recognition of Accrediting Agencies

1. Government entities
2. Entities that are authorised or recognised by the government (either or both of the MOH & MOE)
3. Entities that are authorised or recognised by an appropriate professional or scientific association

ECFMG Policy >2023

Only graduates of medical school accredited by recognized agency by WFME can have residency training in USA

# Regulators for Medical Education



## Written

- Total 400 MCQ items
- A type 340
- R Type 60:15%
- Item Bank System
- 2014 Written Exam Objectives

## Clinical Skill Assessment

- First in 2010
- High-stakes large-scale 12 station OSCE for 157min
- Clinical Skill Assessment Objectives 2015
- 54 clinical presentations
- 32 procedural skills



# Internship Training

- Intern training hospital must be approved by MOH
- 1 year; MED, SURG, OBGY, PED, ER, Elective etc
- Routine work/chores: I.V., ECG etc
- No educational overview, not enough supervision
- No sense of belonging, and marginalization
- Equivalent to 3 months of clerkship in N. America
- Current debate for abolishing internship training!

# Residency Training for Specialist



- 1951 Law for residency program
- 1960 First certifying exam for specialists
- 2016 Exam for 26 specialties and 26 subspecialties
- Certified specialist: nationally recognized entity by MOH

# Residency Education: S. Korea



- 3200-3400 residents in 26 specialties annually
- Over 95% of medical school graduates in PGME
- Significant imbalance: generalist < specialist
- 15,000 residents in Korea
- 15% of total doctor population
- Decreasing hands-on work experience

# Curriculum for Resident Education

- Minimum requirements by resident year
  - assigned number of patients (inpatients/outpatients)
  - clinical skill training
  - attending extra-mural medical conferences
  - formal course work
  - publishing of papers
  - core rotation
- Structure & contents varies according to the specialty
- Minimum requirements: legal mandate

# Sample Guideline: Y-1 Medicine

- Training Goal

As a resident of Internal Medicine, the trainees are expected to have basic knowledge and abilities to deal with medical emergencies.

- Number of assigned patients: Min. 100 inpatients care  
20 patients of Gastrointestinal Medicine  
15 patients of Pulmonology and Cardiology  
50 more patients of other sections of medicine
- Milestone & EPA under development

# Sample Guideline: Y-1 Medicine

- List of clinical skills
  1. General history-taking and physical examination
    - Interpretation of neurological finding
    - Interpretation of laboratory tests
  2. Interpretation of basic EKG (more than 50 cases)
  3. X-ray reading of chest and GI tract
  4. Training of intern on general Tx & Dx of inpatients
  5. Bedside procedures
    - More than 20 cases: thoracic, abdominal, pericardial and spinal puncture, etc., & central venous catheter insertion





# PGME: Work based learning

- Learning-by-doing in everyday clinical experience

- Scheduled events

Ward rounds, in clinics, in primary care settings, on call,  
during procedures

Case analysis with literature reviews, Journal reading

Quality improvement and audit projects

Simulation, Skill lab

- Unscheduled events
- Key activity – Supervised learning events (SLEs)

# SLEs: Supervised Learning Events

- Interaction between the resident and trainer
- Teachers observe residents' performance
- Provide immediate feedback to residents
- Leading meta-recognition of residents
- Cover a range of situations
- Challenges of varying complexity

# Unsafe learning environment

- Major barrier to formative assessment
- Frequent psychological harm by power abuse
- Violence (80%) in residency education
- Lowered self-esteem, decreased motivation, lack of confidence, anxiety, frustration of residents
- No proper SLEs for junior doctors
- Residents: routine caretakers with no soul

# Barriers in Formative Assessment

- Extreme hierarchical culture
- Familial affective contact & proximity
- Unethical for social institutions: “Favoritism”
- No formal formative assessment is needed in family
- 3<sup>rd</sup> party intervention is needed (ethics and justice)
- Moral hazard in closed culture: Asian values

# Certifying Exam for Specialist

- 2-part exam, average passing rate 94.8% (3270/3449)
- Written: MCQ, SAQ exam.
- Performance: Slide, Case, PMP, CPX, OSCE, CBT
- Summative exam alone hardly measures competence!
- No available formative assessment data
- Minimal effect of in-training exam
- Paradoxical exam performance

# PGME: Work based assessment

- Ensuring progress!
- Regular SLEs & assessment
- SLE should start early in each rotation
- Comprehensive assessment from each rotation
- Mini-Cex, DOPS, CBD, etc
- Rarely done in Korean setting

- 1988 Legal mandate
  - Mixed type: evaluation of institution & program
  - Teaching hospital & clinical department
- Quantitative/prescriptive criteria by health law
- Input and some process-oriented evaluation



# Accreditation Site Visit: S. Korea



- Site visit for teaching hospital as a whole  
Accreditation team: 7-8 assessors for 5 days
- Site visit for clinical department as a teaching program by specialty society: 2 assessors for 2-3 hours
- Checking legal requirement and compliance
- Accreditation for efficient hospital management

## ***Critical View of Current Accreditation***

- Structural weakness, no standards
- Minimal effect on residency education
- Cannot check the quality of education
- Compliance is not directly related to competence
- No criteria for the well-being of residents
- Needs for outcome oriented accreditation

## Are we ready ?

- Patient safety
- Physician well-being and balanced life
- Decreasing hands-on work experience
- Quality education: efficiency
- New educational methods for new technology
- Simulation training
- Competence before performance!

## *Private entities for public goods!*

Canada:

- Royal College of Physicians and Surgeons of Canada

USA :

- Accreditation Council of Graduate Medical Education

Australia :

- Australian Medical Council

# Current Status of Medical Education

- Producing good technical expert but not good specialist
- Limitation of exam driven PGME
- Poor government-led PGME accreditation
- Extremely poor Generalist vs Specialist ratio
- No public fund for BME, PGME

A watercolor-style background featuring a large, soft blue cloud in the upper half and a vibrant green field in the lower half. The colors are blended and textured, giving it a painterly appearance.

# Thank you

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