Supporting Quality Graduate Medical Education in China

CMB Beijing Office
November 2022
Recent history of CMB’s engagement with GME

• Government initiatives

• CMB approached for assistance on GME

• Formation of China Consortium of Elite Teaching Hospitals (CCETH)

• Model GME program piloted by Peking Union Medical College Hospital (PUMCH)

• Current status of GME in China

• Next steps
Initiatives to enhance GME in China

• China health reforms in 2009 called for quality medical services
  o Priority area: health workforce development

• Standardized Residency Training (SRT) as a national strategy in 2013
  o Jointly launched by seven government ministries

• Lack of technical capability in Competency-Based Medical Education
CMB approached for assistance on GME

- GME designated as an area of strategic importance
- After CMB’s 100th anniversary celebration (2014) CMB approached for assistance
- Key area for collaboration prioritized by PUMCH
- GME as a major program initiative approved by the CMB Board in December 2015
  - First CMB-PUMCH 5-year MoU finalized in early 2016
  - Assistance in upgrading PUMCH residency education
  - Support China Consortium of Elite Teaching Hospitals (CCETH)
The Establishment of China Consortium of Elite Teaching Hospitals

• A collaborative ecosystem
• Linkages with National Health Commission, Ministry of Education, Chinese Medical Doctor Association
• Enhanced collaboration and resource sharing among consortium member hospitals
• Learning community for committed clinical educators at leading hospital in China
• Key international exchange platform on GME
Lincoln Chen’s GME Framework

Planning (Red = Completed)

Input
- HUMAN RESOURCES
  - Faculty
  - Program directors
  - Chief residents
- EDUCATION RESOURCES
  - Pedagogy centers
  - Simulation labs
  - Teaching aides

System Process
- Selection/recruitment
- Progressive learning
- Barriers (time, money)
- Hukou (e.g. Shanghai)
- M&E

Output
- COMPETENCY
- Core Framework
- 36 Specialties (e.g. Internal Medicine, General Surgery)

Accreditation
- Self-study

Certification
- Examination

Consortium Activities
- Calls, Groups, Workshops/Conferences,
  Courses/Training, Advisory Services, White Papers
Consortium Goals

• **Achieve highest quality residency education**
  - Members aim for world class quality
  - Achieve optimal residency education model in China
  - Innovate and pioneer GME
  - Nurture pioneers and leaders in medicine

• **Strengthen residency education throughout China**
  - Provide advice, guidance, standards to government
  - Build GME sharing platform for China
  - Demonstrate and disseminate quality to other hospitals
The Consortium: Operation

- **Board meeting every September, review the results of the stage and make the annual plan**
- **Monthly teleconference, quarterly work meeting**
- **Communicate, coordinate, summarize and report at any time**
The Consortium Activities: Board Meeting, Executive Meeting, Work Meeting

Meeting with National Health Commission and China Medical Doctor Association Leaders

2017, Hong Kong, Executive Committee Meeting

Board Meeting

Work Meeting

Fellow Meeting & Workshop
The Consortium Activities: Domestic and International Education Conferences
The Consortium Activities: Overseas Visits

2015, PUMCH education leaders visited ACGME

2015, PUMCH education leaders visited Canadian Royal Academy of Medical Sciences

2019, the Consortium hospital fellows participated in the ACGME conference

2019, the Consortium hospital fellows visited Mayo Clinic

2021, four fellows participated in the first ACGME virtual conference
Consortium Hospitals Self-Studies

Oct 21, 2016
Initiation of self-study in China West Hospital

Nov 2, 2016
Self-study in PUMCH

Mar 15, 2017
Self-study discussion in CMB Beijing Office

Mar 17, 2017
Sun Yat-Sen Hospital, self-study briefing

Improving Graduate Medical Education in China: Leading Teaching Hospitals Engage in Self-Analysis

Shuyang Zhang, MD, PhD*
Zuojin Yan, MD*
Xuehong Wan, MD*
Ye Sheng, MD*
Guanghua Lei, MD*
Ming Kuang, MD*
Hui Pan, MD*
Qing Yu, MD*
Xingyue Wang, MPH*
Guoping Jang, MD, PhD*
Jie Peng, MD*
Lina Tang*
Chao Guo, MD†
Jiming Zhu, PhD†
Thomas S. Inui, ScM, MD, MACP†

In December 2016, an ambitious new national policy, Healthy China 2030, was endorsed by China’s political leadership. A key aim of this policy is to improve health care quality, including the quality of physician services. Effective implementation of this policy requires enhanced graduate medical education.

Background
There is currently considerable heterogeneity in the educational background of China’s physician workforce, with half of the individuals officially recognized as physicians lacking a bachelor’s degree. One
Competency Framework

- Release of Consortium Consensus on Core Competency Framework for Residency Education in 2018
- Supported by the Ministry of Education, National Health Commission of China and the Chinese Medical Doctor Association
Milestone Framework

- Harmonized Milestones for Residency Education
- Milestone frameworks for 5 specialties (Internal Medicine, Surgery, OB/GYN, Family Medicine, Pediatric)
- Assessment tool based on online questionnaire
- The formal version released in 2021
World-Class Medical Education: PUMC/PUMCH Early Days

- Followed the Johns Hopkins model
- Developed top medical experts and health leaders in China
- The first eight-year medical education program in China
- Small-scale elite medical education led by internationally renowned Chinese and foreign experts
- Rigorous admission and graduation requirements to ensure the quality of graduates
- **Piloted residency education system in China**

1933 Graduate Ceremony, Roger Greene, Acting President of PUMC

1940, Internal Medicine Grand Round, by Lin Junqing
GME brought about great changes at PUMCH

- Postdoctoral residents piloted the validation of Competency framework and the Milestone
- Competency-based education, leveled training, evaluation and feedback introduced into postdoc curriculum
- Recognized as a national model for developing medical leaders
  - Education management system upgraded
  - Graduate Medical Education Program Office established and ran by professors instead of administrators
  - Newly established education committee as one of key advisory body at PUMCH
  - Selected education team members participated in overseas training
PUMCH Clinical Postdoctoral Program

• Piloted the clinical postdoctoral program in China with 331 postdocs recruitment during 2016-2021, covering 21 clinical specialties

• Supported by the Ministry of Human Resources and Social Security of China

• Goal is to train residents excellent in both clinical practice and scientific research

2019, the first postdoctoral graduation ceremony

2020, President Zhang with postdoctoral residents in Wuhan, the frontline of COVID-19 pandemic

2020, postdoctoral residents in isolation ward
PUMCH Faculty Development

- Lectures, workshops, teaching weeks and international forums
- Sponsored educators to participate in The University of Chicago International Medical Education Program (IMEP)
  - 2019, three educators from Dept. of Internal medicine, Surgery, OB-GYN, respectively
- Sponsored clinical teachers to participate in overseas training program
  - 2017-2019, 25 clinical teachers, 1-3 months
  - USA 21, Australia 1, Italy 1, Japan 1, Hong Kong 1
  - 14 specialties
Current Status of GME Programs in China

• Model GME program to develop future leaders piloted by PUMCH

• A collaborative network facilitated by CCETH
  o Share best practices and lessons learned
  o Develop, pilot and promote new pedagogical practices
  o Minimize GME gaps between Consortium hospitals and leading teaching hospitals in US
CMB’s Roles and Contributions

• Extensive network of outstanding leaders in medical education in the US

• Promotion of new ideas in education

• International exchanges focused on education workforce development

• Financial support and advice on resource allocation
CMB Clinical Education Fellows (2015~2022)

Chao GUO
PUMCH Chief Resident,
Thoracic Surgery

Shu ZHANG
PUMCH Attending,
Dermatology

Quan JING
PUMCH Associate Professor,
Dentistry

Ying YAO
Peking University Third Hospital
Associate Professor, OB-GYN

Bo ZHU
PUMCH Associate Professor,
Anesthesiology

Wei NI
Peking University Third Hospital
Attending, Ophthalmology

Chenyu ZHU
PUMCH Attending,
Dermatology

Nanfang XU
Peking University Third Hospital
Attending, Orthopedics

(2015-2016)

(2017-2018)

(2018-2019)

(2018-2019)

(2020-2021)

(2020-2021)

(2021-2022)

(2021-2022)
CMB Clinical Innovation Grants Program

**CMB Clinical Scholar Innovation Grants Program**

**Project Progress Meeting**

**Time**: 8:00 – 10:00 AM Eastern Daylight Time, September 23, 2022
8:00 – 10:00 PM Beijing Time, September 23, 2022

**Zoom**: https://us02web.zoom.us/j/822147298?pwd=TjnuSlNlM0JhYVYxVmx6TFdRUT09

**Moderator**: Dr. Wenkai Li, China Medical Board

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
<th>Institution</th>
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<tbody>
<tr>
<td>8:00</td>
<td>Welcome and Opening Remarks</td>
<td>Dr. Barbara Stoll, Wenkai Li, Li, China Medical Board</td>
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<tr>
<td>8:05</td>
<td>Development of surgical skills training system based on hierarchical</td>
<td>Dr. Chao Gao, Peking Union Medical College Hospital</td>
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<td>progressive training</td>
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<td>8:20</td>
<td>Development of an internationally shared dermatology E-learning</td>
<td>Dr. Shu Zhang, Peking Union Medical College Hospital</td>
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<td>8:35</td>
<td>Promoting oral health and dental care during pregnancy in China:</td>
<td>Dr. Quan Jing, Peking Union Medical College Hospital</td>
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<td>mixed methods study for knowledge translation</td>
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<td>8:50</td>
<td>Towards competency-based assessment for medical students: an</td>
<td>Dr. Yingyun Yang, Peking Union Medical College Hospital</td>
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<td>exploration to identify and implement competencies, milestones and</td>
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<td>EPAs for undergraduate medical students</td>
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<td>9:05</td>
<td>Development and validation of Entrustable Professional Activities</td>
<td>Dr. Bo Zhu, Peking Union Medical College Hospital</td>
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<td>for pediatric anesthesiology fellowship training</td>
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<td>9:20</td>
<td>Exploration on the application of new telemedicine technology</td>
<td>Dr. Haijun Chen, The First Affiliated Hospital of Sun Yat-sen University</td>
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<td>for pregnancy care in underdeveloped areas of China and its role in</td>
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<td>improving the competencies of primary care providers: A pilot study in</td>
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<td>Guangdong</td>
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<td>9:35</td>
<td>Group/Discussion</td>
<td>All Participants</td>
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Next Steps

- To integrate undergraduate medical education with GME
- To establish a systematic education framework
- To build a talented team of outstanding education leaders
- To facilitate collaboration with professional associations in charge of medical education in China

Detailed Work Plan

- Implementation of milestone framework in Consortium hospitals; apply them to SRT demonstration sites
- Integration of Milestones with Entrustable Professional Activities (EPAs) to enhance quality of feedback
- Faculty development within CCETH
- Educational exchange and repeated self analysis within Consortium hospitals
- Development of electronic assessment tool