### University of Hong Kong 香港大學





Department of Paediatrics & Adolescent Medicine



### A New Era of Paediatric Service

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## Centre of Excellence in Paediatrics (CEP)

- Excellence in clinical service can only be achieved within an academic culture of innovation and learning
- Academic Health Science Centres (AHSC)
   established in US and UK that integrate
   academic (innovation and learning) and care delivery systems to address horizontal
   disconnection
- AHSC not sufficient to address vertical disconnection of community care and hospital care, hence Academic Health Science System (AHSS) proposed

# Planning for CEP is an opportunity to re-examine our current state and reconfigurate the future for a better integrated model

## Reality in Hong Kong

- Horizontal disconnection:-
  - Private/NGO
  - Department of Health
  - Hospital Authority
  - Universities

- Vertical disconnection:-
  - Primary care
  - Secondary care
  - Tertiary care

## Policy support for reconnecting the disconnected sectors horizontally and vertically

| DH           | Clinical Genetics Service  |
|--------------|--|
|              | Child Assessment Service   |
|              | Family Health Service  |
|              | School Health Service  |
| НА           | The disconnected Paediatric Departments  |
| Private      | > 300 private paediatricians and several thousand private doctors caring for children in community |
| Universities | 2 paediatric departments   |
|              | 3 nursing schools  |
|              | Many allied health programs  |

- Horizontal integration of these stakeholders within the CEP needs to be enshrined by strong policy support and sound governance structure, that are still to come
- Vertical integration more complex
- After policy and governance, solid financial arrangements also need to be assured, before realistic planning can start for CEP (remembering the budget for GOSH 2008-09 was £291M for 34,257 patients from Sir Cyril Chantler Jan 2010)

- After strong policy, sound governance and solid finances are all assured, we can then focus on at least 6 key success factors
- To ensure these success factors be realised, we need to have structures and processes to turn these key concepts into actionable plans

### Six success factors

- 1. Clinical programs need to be evidencebased and research agenda driven
- 2. Concentration of all rare cases/events in CEP to achieve quality care and research
- 3. Integrated service configuration within CEP that is patient-centred and at the same time education and research facilitating

### Six success factors

- 4. Recruitment and development of staff committed to clinical service, education and research
- 5. Effective interfaces among CEP, regional hospitals and community-based child health service to ensure continuity of care
- Positioning of CEP as a centre for Hong Kong and beyond is critical to ensure regional excellence

# Clinical programs – Evidence-based and Research agenda driven

- A. Translational Research Unit (GMP facility)
  - stem cell therapy for regeneration
  - gene therapy for Mendelian defects
  - cellular therapy for cancer and autoimmune diseases
- B. Clinical Research Unit (CTC framework)
  - clinical trial phase 1, 2 and 3
  - clinical device and drugs development for children driven by clinicians
- C. Evidence-based Practice Unit
  - Identify gaps that can be filled by HK network
- D. Core-Research Facility Unit
  - Creation of core research support services YL Lau 2010

### Concentration of all rare cases/events

- Network of referral and shared care among CEP and regional hospitals, with clear clinical path and a joint patient database to ensure audit and quality assurance
- Creation and/or participation of national and regional network to promote care and research in these rare diseases (need Bioinformatics and IT Unit)
- Rare Diseases Laboratories
  - to support diagnosis, management and research in these rare diseases such as IEM and PID, or less rare diseases such as cancer and CHD

### Integrated service configuration that is patientcentred and research and education facilitating

### **Back-to-Basics Committee** (B to B Committee)

- Horizontal disintegration of services is a major concern in highly-subspecialised hospitals. A continuing process to examine this issue and provide solutions need to be structuralised
- Possible solutions include named physicians, diseasebased wards instead of discipline-based wards according to the degree of the inter-dependency of the disciplines and setting up of general paediatric service responsible for the "multi-handicapped child"
- Architectural design of these wards and outpatient services must be patient-centred and facilitate research and education for both staff and patients

  YL Lau 2010

# Recruitment and development of human resources

If we need 150 experienced and high quality doctors of different specialties to operate this 450 beds CEP in 6 years time, there must be a HR Development Committee with all the policy and financial support to come up with a plan soon

Nurses and allied health workers.....

# Effective interfaces among CEP, regional hospitals, community and government

### A. CEP - Regional Hospitals Alliance

 To plan the clinical pathways for referral and shared care, joint training programs for specialists and subspecialists, and research network for contributing to regional and global research

#### **B. Clinical Genetic Service**

- To reconfigurate current service offered by DH, HA and Universities into an integrated service model with emphasis on research and education
- -To re-visit the newborn screening program

# Effective interfaces among CEP, regional hospitals, community and government

### C. Child Public Health and Epidemiology Unit

To conduct educational and research activities that are able to bridge the knowledge gap between the bed-side and the community, which shall reinforce the interface between CHP of DH and CEP

### **D.**Community Child Health Unit

To conduct educational and research activities that promote vertical integration of community-based service and hospital service, which shall reinforce the interface between private paediatricians, FHS/CAS of DH and regional hospitals

## **CEP for Hong Kong and beyond**

### **Public Engagement Committee**

Deep engagement with HK community and potential partners must be started as early as possible to instill a sense of ownership in our citizens, to ensure their continuing support to have a centre positioned for HK and mainland China

### However.....

### We still lack

- Clear and strong policy
- Workable and sound governance
- Enabling and solid finance

for the CEP and the reconfiguration of existing services, without which the subsequent steps are not possible