

Special Section

Proceedings of the Meeting on Consensus on Integrated Child Health – from Hospital to Community

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Abstract

A "Consensus on Integrated Child Health – from Hospital to Community" was jointly organised by The Hong Kong Paediatric Society, the Hong Kong Paediatric Foundation and the American Academy of Pediatrics (AAP) on 7-8 November 2015 with contribution by world experts from AAP, Asia Pacific Pediatric Association and Chinese Pediatric Society to discuss the concepts of "Medical Home" and "Integrated Care" with the objectives of bridging the gap in child healthcare between hospital and community and providing a child-centered, family-focused, seamless, comprehensive healthcare system with a favourable ecology to children with medical complexities. Over 300 international and local experts including paediatricians, nurses, allied health professionals, administrators, policy-makers, politicians, educators, community partners and parent groups assembled together to discuss, share and exchange experiences and knowledge arriving at a good consensus on integrated and coordinated quality care for child health from hospital to community. It was concluded unanimously that a comprehensive Child Health Policy for Hong Kong and a Children's Commissioner are urgently needed to maintain the good healthcare standard, to address the evolving challenges and to provide a safe environment for all children to develop onto their highest potentials in life.

Key words

Child health policy; Children's commission; Children's hospital; Hospital to community; Integrated child health

Background

With the advancement of medical technologies, the current attention on diseases is no longer on mortality or morbidity alone, but to a wider concept of global burden of diseases and attainment of one's full potential in life. There was continuous debate on which healthcare model for children, hospital-based or community-based, should be the best. In fact, no single model can perfectly address all the healthcare needs of children with multiple medical

complexities. It is always a matter of balance and integration.

Nowadays, it is the common goal of all healthcare modalities to provide best quality care which should be far beyond treatment of diseases only but more focusing on quality of life, satisfaction with service, cost effectiveness and impact on care givers. The existing programmes taking care of children with chronic illnesses are often disconnected and ineffective creating lots of dissatisfaction to patient and care-taker.

The Hong Kong Paediatric Society (HKPS) and the Hong Kong Paediatric Foundation (HKPF) take pleasure and privilege to jointly organise the meeting themed "*Consensus on Integrated Child Health – from Hospital to Community*" with the our close collaborative partner, American Academy of Pediatrics (AAP), in the presence of invited guests including the President of Asia Pacific Pediatric Association (APPA) and President of the Chinese Pediatric Society (CPS) at the Mira Hong Kong, on 7-8 November 2015. This meeting was targeted at multidisciplinary healthcare professionals who have

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committed to serve children with different healthcare needs. Through the guidance of these world leaders with active participation of our policy-makers, service providers, professional bodies, stakeholders, non-government organisations, parents and all those interested in child health, we have assembled, discussed, shared experiences and exchanged knowledge with the goals to arrive at consensus on Integrated Child Health – from Hospital to Community. We hope it can act as a platform for paediatricians and other child health professionals to communicate, to coordinate and to formulate the practical strategic plans for integrated child health in Hong Kong.

The Hong Kong Children's Hospital is designated to take care of children with medical complexities and to lead the paediatric field in Hong Kong in terms of service, training, research and integration with community. As the children's hospital will soon commence into service in 2018, we are very honoured to have renowned experts from AAP to enlighten us on the concept of "Medical Home", which has been well established in the United State, to bridge between hospital care and community care aiming at child-centered and family-focused comprehensive healthcare to children and families with chronic conditions. "Hospital" here refers to not only to Children's Hospital but also all hospitals with paediatric units in both public and private sectors. Interfacing between hospital and community care is the key to this seamless and integrated health care for children.

Opening Ceremony

The Opening Ceremony was officiated by the invited renowned overseas guests including official representatives of AAP Dr. Jane FOY and Dr. Thomas KLITZNER, President of Asia Pacific Pediatric Association (APPA), Dr. Zulkifli ISMAIL and President of Chinese Pediatric Society (CPS), Prof. SHEN Kun Ling who were invited to put "Wish Charms" onto a "Wish Tree" signifying our blessing to the child health in Hong Kong. All together six wishes were put onto the wish tree:

1. Developing Integrated Child Health for Children in Hong Kong
2. Providing Coordinated Care Services for Children with Medical Complexities and Special Care Needs
3. Advocating Healthy Environment for Healthy Children
4. Establishing a Children's Hospital in Hong Kong
5. Formulate a Visionary Child Health Policy for Hong Kong
6. Setting up Children's Commission for Hong Kong

The consensus meeting was officially started after the opening ceremony with blessings from our international guests.

Session I – Child Health Services around the World

Moderators: Dr. David LUK and Dr. Lilian WONG

Speakers: Dr. Zulkifli ISMAIL, Dr. Jane FOY, Prof. SHEN Kun Ling and Dr. CHAN Chok Wan

This session provided an overview of the child health situations and health services around the world. Dr. Zulkifli ISMAIL, Dr. Jane FOY, Prof. SHEN Kun Ling and Dr. CHAN Chok Wan shared with the audience the most updated child health services in Asia Pacific region, United States, Mainland China and Hong Kong respectively. Dr. ISMAIL stated that there are about 900 million children aged less than 15 years old living in the Asia Pacific Region. Many of the child health services in the region are remnants of the systems adopted by nations that colonised these countries. For example, the child health services in Malaysia, Singapore, Hong Kong, India and Pakistan originated from British system while Indonesia adopted those from Dutch involving clear private and public sectors and 3 to 4 tiered referral systems. The health systems in these regions have evolved over the years to mature in directions that meet individual needs so there is no single model or solution addressing all populations. Successful child health systems tend to be the ones that put priority on public health and preventive medicine.

Dr. Jane FOY shared that child health care services in United States is also not a single system but rather a complex array of programmes and services funded by a variety of public and private sources. Children and adolescents' access to other medical services is largely dependent on the type of health insurance they have. Primary medical care is usually delivered by paediatricians, family physicians, nurse practitioners or physician assistants in both private and public settings. Children with complex medical needs are mainly cared by subspecialists in specialised children's hospitals with access depending on the distribution of subspecialists and the family's location and resources. Mental health services are particularly in shortage with situation similar to other countries. Recent trends in U.S. are moving paediatrics toward greater integration of primary care with mental health and specialty care, greater accountability for quality and cost and greater use of technologies such as electronic health records and telemedicine to increase access to specialty care. Yet, there are still lots of disruptive issues following these trends whereby AAP is actively advocating reforms to improve the health and wellbeing of children in U.S.

Prof. SHEN Kun Ling quoted that the children and young

population aged 0-18 years is 300 million which accounts for 22.5% of the national population. There was two-third reduction in the under-5 mortality rate between 1990 and 2015 based on the Millennium Development Goals (MDGs). There are three child health related associations in China namely Chinese Pediatric Society (CPS), Child Health Care Association (CHCA) and Chinese Pediatrician Association (CPA) jointly promoting child health and providing quality child health services. Nevertheless, scarcity of paediatric medical resources, high caesarean rate leading to perinatal complications, decreasing breastfeeding rate, increasing obesity, overweight and other non-communicable diseases are the emerging health challenges in China.

Dr. CHAN Chok Wan presented the history of child health services in Hong Kong which started to germinate since 1940s with services at Maternal and Child Health Centres and consolidated in 1962 when the Hong Kong Paediatric Society (HKPS) inaugurated and first hospital paediatric service started at Queen Mary Hospital. Throughout the past 80 years, child health services gradually developed in Hong Kong with contributions from both local and overseas paediatricians. We started to have local accreditation and examination in 1992 with the establishment of the Hong Kong College of Paediatricians. Transectoral and interdisciplinary collaborations were advocated by the Hong Kong Paediatric Foundation which was set up in 1994. The Centre of Excellence in Paediatrics was strived since 2005 and will soon be commenced into service in 2018. The HKPS Medal for Child Health was set up in 2007 to award those healthcare professionals from medical, social or education, who have dedicated to child health development in Hong Kong. The first proposal of Child Health Policy for Hong Kong was launched in September 2015. Hong Kong is now one of the United Nations (UN) members with lowest Infant Mortality and Below-five Mortality rates and one of the top ranking scorers for the Human Development Index (GDP/Longevity/Literacy) in the world statistics. We hope to maintain these best vital statistics for our children in Hong Kong.

Section II – Role of Stakeholders for Child Health Services

(1) Role of Multidisciplinary Healthcare Professionals

Moderators: Ms. Susanna LEE and Ms. Gloria LUK

Panelists:

Ms. Mary LEE (Social Worker),

Mrs. Betty IP (Educator),

Ms. Connie WAN (Paediatric Nurse),

Ms. CHAN Kit Ping (Mental Health Nurse),

Ms. Sanne FONG (Occupational Therapist),

Mr. Charles LO (Pharmacist),

Ms. Sumeet CHAN (Clinical Psychologist),

Mr. Joshua MAK (Speech Therapist)

Over 10 child health disciplines including allied health and nursing healthcare professionals such as paediatric nurse, school nurse, mental health nurse, occupational therapist, physiotherapist, dietitian, speech therapist, pharmacist and clinical psychologist together with social worker and educator shared in this Panel Discussion on the roles of different stakeholders for child health services in Hong Kong. Each discipline has its specific role but all panelists agreed that transdisciplinary collaboration is most important for coordinated services especially for caring children with medical complexities and special care needs.

Ms. Mary LEE related the role of social worker in helping children and families to access for community resources during their treatment and rehabilitation processes. Mrs. Betty IP highlighted the evolving needs of children with special care needs and the challenges of staff at special schools in taking care of children with medical complexities in the community. She urged the healthcare professionals especially those in hospitals to train the school teachers and staff for the care of these group of children. Ms. Connie WAN and Ms. CHAN Kit Ping confirmed the coordinating role of nurses no matter in paediatrics or mental health arena. Hence many a time, the nurses might act as the case manager in the multidisciplinary integrated care to provide effective communication among different disciplines and the care takers. Ms. CHAN Kit Ping raised the concern on the transition care from paediatric to adult care for adolescents with mental health problems. Ms. Sanne FONG added that the current rehabilitation services for children and youth with special care needs in Hong Kong were very scattered and inadequate. She advocated for "barrier-free" concept to facilitate families and patients in seeking services. A central registry for children and adolescents with special care needs should be set up to enhance long term rehabilitation planning and follow up. Ms. FONG strongly supported to have a Child Health Policy for Hong Kong.

Mr. Charles LO shared the daily functions of pharmacists in the clinical management in hospital setting. He added that the role of pharmacists could be further extended into the community by providing more education to the public in terms of knowledge on medication and drug compliance. Ms. Sumeet CHAN stated that there were increasing needs

of psychological support to both the care takes and children or adolescents with chronic illnesses. Mr. Joshua MAK described the diverse roles of speech therapists including speech training, feeding of young children and swallowing training especially for those with complex medical conditions.

All the panelists agreed that the coordination between hospital and community in terms of different disciplines were still ineffective. More could be done to improve the bi-directional communication and coordination in both settings. Electronic health records could be one of the strategies to enhance the communication.

(2) Gold Standard for Integrated Child Health: from Hospital to the Community in Hong Kong

Moderators: Dr. Daniel CHIU and Dr. Aaron YU

Speaker: Dr. CHAN Chok Wan

Dr. CHAN recalled the promises that Dr. York CHOW, Secretary for Food and Health in 2011 had given to the child health professionals regarding the establishment of Centres of Excellence in Paediatrics and Neuroscience to upgrade our health care services as stated in the 2007 Policy Address of the Chief Executive of Hong Kong. The Centre of Excellence in Paediatrics (CEP) was designated to enhance the quality of tertiary clinical services, research and training in the discipline of paediatrics through an efficient concentration of expertise, advanced technology, and caring for complex illnesses. CEP would be a ground-breaking model of multi-partite collaboration of experts within and outside Hong Kong, including universities, healthcare institutions and private sector organisations to promote public and private interfacing. It should be conveniently located at Kai Tak, covering an area of 22,337 sqm with over 460 beds for different Paediatric subspecialties and family-friendly in its design and service provision. Salient feature of CEP was "Design & Build" allowing close communication and interaction between designer, builder and users. There should be support from medical, academic experts, patient groups and community organisations. A steering committee was set up under Food and Health Bureau with participation from different sectors.

With the change of top management of the HKSAR government in the new term, the Centre of Excellence in Paediatrics was renamed into Hong Kong Children's Hospital (HKCH). The governance and management was transferred from Food and Health Bureau to Hospital Authority. The existing model has created a number of concerns:

- It is no longer a Bureau Hospital which is the central governing body for Department of Health and Hospital Authority
- It is operated by Hospital Authority (42nd hospital) and Department of Health is left out
- Centre of Excellence in Neuroscience Project next door has been flopped
- Subspecialty services in Paediatrics would be included in HKCH in sequence
- Public-private interface has not been confirmed
- Not much details has been shown in the interfacing among service, training and research

The Gold Standard for Integrated Child Health should include the following key elements:

- i. Child-centered to uphold the benefit of children and their family
- ii. Integrate and comprehensive strategic planning to spans across all sectors, disciplines and organisations
- iii. Perform impact assessment in all policies related to welfare and well-being of children and their family periodically as evaluation and improvement mechanism
- iv. Focus on prevention and early intervention but not only on treatment
- v. Advocate health literacy in the population
- vi. Plan for workforce training
- vii. Establish centralised data collection system for continuous surveillance of the child health parameters and situations in Hong Kong
- viii. Develop indicators to measure well-being and health needs of children to facilitate research and assessment
- ix. Formulate comprehensive child health policy to guide the development directions according to the most emerging health needs. The policy should be implemented across different government departments with appropriate resource allocation and holistic approach.
- x. Set up a Children's Commission which should be above-bureau and financially independent of the government bureaus to supervise, implement, assess and measure outcome deliverables of the Child Health Policy and advocate and secure children's rights

(3) Cost-effectiveness and Financial Implication of Coordinated Care Services for Children with Medical Complexity

Moderators: Dr. Daniel CHIU and Dr. Aaron YU

Speaker: Dr. Thomas KLITZNER

Dr. Thomas KLITZNER shared the Pediatric Medical Home Programme founded by him at UCLA. Children with medical complexity represent the most expensive segment of health service for pediatric population. Purely preventive care may not be able to reduce the cost of health care for this group of patients because hospital admissions and life-saving procedures are not avoidable in many situations. The Medical Home is basically a General Pediatric Resident Continuity Clinic that is accessible, family-centered, continuous, comprehensive, coordinated, culturally sensitive and compassionate serving children with multiple chronic medical conditions. The basic elements include (1) Longer consultation time; (2) Family Liaison person to coordinate all the follow ups; (3) Family notebook called "All About Me Binder" which include updated medical records of patient, physician's information and a list of patient's medications; (4) Ongoing quality improvement through evaluation research; (5) Parent Advisory Group to provide guidance. This medical home project was proven to reduce emergency service utilisation by 55% and increase patient and family's satisfaction.

The "Policy" Night – The Child Health Policy for Hong Kong

(1) The Policy

(2) The Launching

Speakers: Dr. CHAN Chok Wan and Dr. Lilian WONG

The "Policy" night was dedicated to all the healthcare professionals in Hong Kong who were committed to and contributed to the production of the "Proposal on Child Health Policy for Hong Kong" in the past three years. A video on "Voices of Children" acted as prelude of the policy night. The video was a powerful piece of advocacy work submitted by our children and youth in Hong Kong. The children and youth expressed their wishes of having a comprehensive Child Health Policy for Hong Kong to safeguard their rights and wellbeing of all aspects. They also requested to have a Children's Commission to take care of all the health related issues. They hoped the adults could listen to their voices and respect their individual needs because they would be the future for Hong Kong. The

betterment on health of our children and youth at the present moment will ensure the health enrichment of the population as whole in future.

Dr. CHAN briefly introduced to audience how the Child Health Policy was firstly initiated at the 50th Anniversary of the Hong Kong Paediatric Society with a Steering Committee setting up in late 2012. Thereafter, four Drafting Groups namely (1) Medical; (2) Social; (3) Education; and (4) Nursing and Allied Health were set up to prepare the first draft of the child health policy through SWOT analysis. The main objectives of the Child Health Policy were:

- i. To optimise provision of care
- ii. To eliminate equity disparities
- iii. To enhance the holistic health development of children
- iv. To advocate and enhance health literacy in the population
- v. To enhance public understandings and respect of Children's Rights

Throughout the past three years, HKPS and HKPF have gathered over hundreds of healthcare professionals, economist, educators and social welfare professionals using over 5000 hours consulting and collecting the views from both public and professionals to review the child health situations in our community and to compose and modify more than six drafts of the proposals. The final proposal represented the first "Child Health Policy for Hong Kong" composed by the collective inputs from all relevant stakeholders and supported with local data. The "Proposal" was finally completed in September 2015 and submitted to the Chief Executive of HKSAR government. A Press Conference was held on 20 September 2015 as formal launching. We truly hoped that this proposal will be served as the framework to guide the HKSAR government to develop a comprehensive and practical Child Health Policy for Hong Kong.

Dr. Lilian WONG shared with the audience on the details of the Press Conference with objectives of:

- i. To raise public awareness on the Child Health situations in Hong Kong
- ii. To reinforce the urgency of developing a comprehensive child health policy for Hong Kong
- iii. To convince the HKSAR government to take up the task on the Child Health Policy
- iv. To consolidate the alliance with other child health professionals

There were around 100 attendants at the Press Conference including the Steering Committee and Drafting Group members of the Child Health Policy, the Council of HKPS and Board and Executive members of the HKPF as well as total 16 media units covering electronic media, paper media

and portal media. The Child Health Policy was well covered in various media channels at the day of Press Conference and subsequent feature articles in a number of electronic and paper media. The message was strong and clear stating that:

- i. A comprehensive Child Health Policy is urgently needed in Hong Kong to take care of the evolving child health issues which would require intersectoral, and cross-bureau and cross-departmental coordination management.
- ii. A Children's Commission should also be set up to supervise the implementation and evaluation of the policy actions suggested in the Child Health Policy.
- iii. It is the ultimate duty of the HKSAR government to take up the tasks to ensure holistic approach and the most appropriate management of child health related issues in Hong Kong.
- iv. Early identification and early intervention on the health issues in early childhood has been proven to be the most cost-effective government investment to reduce future costs on medical services and improve health outcomes of adults, elderly and population as a whole.

The HKSAR government and various bureaus acknowledged the safe receipt of the Child Health Policy Proposal and yet no active measures have been taken so far. We need to unite all the efforts from different stakeholders and further promote the Child Health Policy in Hong Kong.

Session III – The Children Hospital of Hong Kong

Moderators: Prof. CHAN Chi Fung, Godfrey and Dr. CHAN Hin Biu

(1) Update on the Progress of the Children's Hospital of Hong Kong

Speaker: Dr. Libby LEE

The Hong Kong Children's Hospital (HKCH) is now under construction and will soon be ready for service commencement by phase in 2018. It aims at enhancing the quality of paediatric services in Hong Kong by concentrating expertise, research and teaching with multi-partite involvement. HKCH will serve as tertiary referral centre for management of complex paediatric cases requiring multidisciplinary collaboration through re-organising the existing paediatric services into a coordinated network under a "HUB & SPOKE" model. The design of the hospital will be child-friendly, home-like with comfortable environment to support children in treatment and their families.

(2) Subspecialty Care Under the Children's Hospital – Sequential Implementation

Panelists:

Dr. Libby LEE (Administrator of Hospital Authority),

Dr. CHAU Kai Tung (Cardiology),

Dr. LI Chi Kong (Haematology and Oncology),

Dr. TSE Kei Chiu (Renal),

Dr. TSOI Nai Shun (Paediatric Intensive Care),

Dr. CHAN Chok Wan (Neurology)

The Hong Kong Children's Hospital (HKCH) will be started in phase in 2018. The initial four subspecialties being implemented in the first phase would be (1) Cardiology; (2) Haematology and Oncology; (3) Renal; and (4) Paediatric Intensive Care. All the cases and resources related to these subspecialties will be concentrated and centralised at HKCH. The convenors of these four subspecialties including Dr. CHAU Kai Tung, Dr. TSE Kei Chiu, Dr. LI Chi Kong and Dr. TSOI Nai Shun explained to the audience on the service planning and staff training of these subspecialties and the potential challenges ahead.

Dr. CHAN Chok Wan was concerned about the missing of child neurology subspecialty in the service planning of HKCH because it was initially planned at the Centre of Excellence in Neuroscience which has been dissolved in the current service model. A second concern was the interfacing between public and private which has not been initiated at the strategic planning. Dr. Libby LEE reassured Dr. CHAN that the child neurology would be included in future HKCH and the first meeting has been started with the Child Neurology Subspecialty Board recently. Regarding the Public-Private Interfacing, it would be considered in the subsequent phases when the coordination network among paediatric services in public system has been set up.

Session IV – Principles of Coordinated Child Health Services in the Community

Moderators: Dr. Hon Fernando CHEUNG and Prof. Daniel SHEK

(1) The Role of the Medical Home in Coordinating Child Health Services

Speaker: Dr. Jane FOY

The concept of Family-centered Medical Home was initiated in pediatrics for caring of children and youth with special health care needs has now become the standard care

for all ages including adults among the health care professionals and payers in the USA. It provides a framework for integrating care across multiple systems namely "the medical neighbourhood" aiming at improving experience of care from patient and family and reducing fragmentation and costs. According to AAP Policy, the care provided at Medical Home should be easily accessible, family-centered, continuous, comprehensive, coordinated, compassionate and culturally competent.

Successful care coordination especially for those children with medical complexities should be team-based connecting specialists and primary care physicians, with family and patient as central players, providing coordination among health, education, early child care, nutrition, mental health, community partnership and social services. Currently in US, around half of children with special care needs receive care from a medical home and about two-thirds of these receive effective and coordinated care services. The primary care physicians are encouraged to implement and enhance the medical home model in their daily practices.

(2) Local Profile for Coordinated Child Health Services in the Community

Speakers:

Dr. CHOW Chun Bong (Medical Sector)

Dr. Hon Fernando CHEUNG (Social Sector and Legislative Council)

Mr. Hon IP Kin Yuen (Education Sector and Legislative Council)

Dr. CHOW Chun Bong revealed the gaps in current health care services in Hong Kong including fragmented and poorly coordinated services; inadequate needs assessment not reflecting the genuine needs; failure of information sharing among disciplines, between hospital and community and between public and private settings; delayed and insufficient support to those in needs and their families; remedial services rather than preventive or protective services; stigmatised services for most vulnerable children; inadequate training to healthcare front-line staff; unclear definition of good practice and evaluation. Dr. CHOW urged to develop holistic and cross-sectoral approach with child-focused health services and set out core responsibilities of each key stakeholder. He also emphasized the need of setting up a network of local champions with best use of community contribution. Dr. CHOW also suggested a number of roles for the government including:

(1) To establish a Children's Commission as central structure within the government; (2) To develop a comprehensive Child Health Policy; (3) To have annual report on the state of children using relevant child health indicators.

Dr. Hon Fernando CHEUNG advocated on a legal basis for the Integration of Health, Social and Educational Services for children with special education needs (SEN). Dr. Hon CHEUNG revealed that the existing waiting time for assessment and service provision for SEN children was extraordinary long jeopardising the golden opportunity for early identification and intervention. He also highlighted the importance of whole school approach, home-school cooperation and cross-sector collaboration in supporting SEN children. Dr. Hon CHEUNG urged Hong Kong government to protect SEN students through legislation over the important domains:

- i. Review the definition of Special Education Needs
- ii. Set up the standard time frame of early identification and intervention
- iii. Define clearly the rights and responsibilities of different stakeholders
- iv. Set mandatory requirement of individual educational plan (IEP) which is a common strategy in UK, US, and Taiwan for SEN children
- v. Support teachers with adequate training, improve teacher/student ratio, increase intensity of supporting professions and establish position of SEN coordinator
- vi. Encourage participation and formal roles of parents
- vii. Set up an independent mechanism to resolve conflicts

Mr. Hon IP Kin Yuen highlighted the drawbacks on the current education system in Hong Kong. Both students and parents have experienced enormous stress under the existing education system. The recent hot debate on the Territory-wide System Assessment (TSA) has demonstrated how an education policy has created huge stress to all stakeholders including students, parents, teachers and schools. Mr. Hon IP advised the Education Bureau to re-evaluate the system and avoid unnecessary assessment or extra stress impinged onto the students. He also pushed the government to expedite the review of education system in Hong Kong and integrate the education policies with other government policies related to the wellbeing of children such as social and healthcare measures. He stressed on a holistic approach to deal with children's issues.

Session V – Implementation for Integrated Child Health in a Community

Moderators: Dr. CHAN Chok Wan and Dr. Lilian WONG

(1) Improving Health Care Outcomes for Children with Medical Complexities

Speaker: Dr. Thomas KLITZNER

There are limited strategic approaches to improve outcome and reduce costs in the care of paediatric cases with medical complexities. Dr. KLITZNER described four strategic principals:

i. Tier of Care

"Tiers of Care" to categorise paediatric patients based on the severity of their medical condition has been proven to be effective in reducing costs and improving outcomes. Tier 1 is defined as patients with simple medical condition, least severity and cost of care is expected to be low. No specialty care is needed. Tier 2 is classified as those with complicated medical condition that last for more than one year but affecting only one organ system. The cost of care would be moderate with linear treatment process requiring high expertise in a variety of fields. Tier 3 is referred to those with complex medical conditions which last longer than one year and affecting more than one organ systems. The cost would be high and treatment is usually non-linear and simultaneous requiring effective communication and coordination.

ii. Care from health providers

Health care providers should provide services at their highest level of medical expertise supported by training and credential.

iii. Co-management

Well-designed co-management in which specialists and general pediatricians share responsibilities for caring of chronic patients should be encouraged.

iv. Quality improvement

There must be systems to review and improve quality

(2) Interfacing between Hospital and Community

Speaker: Dr. Lilian WONG

Integrated healthcare is designed to be more patient focused with holistic approach, to provide seamless service in the moment of need, to facilitate coordination, early intervention and comprehensive care to cover a wide range of physical, psychological, behavioural and social health problems. Acute care at hospital usually aims at short-term

stabilisation of emerging problems whereas community-based care is the long-term management facilitating patients to restore their usual life at school or at home. Interfacing between hospital and community is the fundamental element of integrated care allowing children with medical complexities to go through the transition smoothly and effectively.

This seamless integration demands complete system redesign, including the blending of separate practice cultures, shared medical records, introduction of new work flows, integrated and team-based approach to treatment plans, follow ups, and reallocation of available resources. While integrated child healthcare often involves a team of multidisciplinary professionals to work together, patient and family should always be the central member embedding with key roles in treatment strategies, development of shared care plans, practice of patient self-care, and address of social determinants of health.

Interfacing between hospital and community care is a dynamic process requiring continuous monitoring, evaluating and remodelling the service provided to meet the evolving patient needs. Firstly, there must be a bridging system to link between the two different care models. Secondly, it is important to identify optimal practices for the care team and develop interdisciplinary training strategies to equip the team members to take up the tasks. Thirdly, we must strengthen linkages with available community partners and resources. Fourthly, we must eliminate barriers from both patient and providers. Fifthly, new measures must be developed to better evaluate the impact of integrated healthcare on population health and society as a whole.

Round Table Discussion

Consensus for Integrated Child Health in a Community – the Horizon and the Strategic Approach

Panelists:

Dr. Hon Fernando CHEUNG, Dr. Jane FOY, Dr. Thomas KLITZNER, Dr. Zulkifli ISMAIL, Prof. Kun-ling SHEN, Dr. TASO Yen Chow, Dr. CHAN Chok Wan, Dr. Lilian WONG

Dr. CHAN Chok Wan, as moderator, directed the panel and audience to focus the discussions on the following two questions:

1. What are the consensuses for Integrated Child Health?
2. What is the strategic approach in achieving the goal of Integrated Child Health?

The Panelists concluded the consensus for Integrated Child Health as:

- i. Integrated Child Health is the current trend in modern child health.
- ii. Integrated Child Health should be family-centered, child-friendly, comprehensive with holistic care approach to meet the medical, social, education and environmental needs of children.
- iii. Integrated Child Health should include the coordination among different stakeholders including government, policy-makers, professionals, patient and family, community partners and politicians.
- iv. There must be interfacing among different healthcare professionals both in hospital and community settings.
- v. There must be interfacing and bi-directional transition between public and private sectors.
- vi. Case manager or coordinator could be the suitable person to break down cultural barrier and facilitate effective communication among professionals and families.
- vii. A comprehensive Child Health Policy is an essential element for realising Integrated Child Health
- viii. A Children's Commission under Children's Commissioner would be the one to supervise, implement, evaluate and modify the Integrated Child Health with guidance from the Child Health Policy.

Both the panelists and the professionals in the audience agreed that the strategic approach in achieving the goal of integrated child health would be:

- i. To change the mindset of healthcare professionals from traditional hospital-based management to integrated healthcare interfacing hospital and community.
- ii. To enhance health literacy of the whole population through more public education.
- iii. To facilitate child advocacy work through speaking for children and providing opportunities for children and youth to voice out their needs and concerns.
- iv. To encourage patient groups and community organisations to actively participate in decision-making for child health issues.
- v. To optimise the environment for children to grow and to develop and reducing the environmental hazards.
- vi. To formulate the Child Health Policy for Hong Kong addressing the local needs.
- vii. To engage the government, policy-makers and politicians to be interested in children's wellbeing and welfare.
- viii. To train healthcare professionals to understand the

importance of public child health, preventive and primary healthcare.

- ix. To develop a simplified and child-friendly version of the Child Health Policy to encourage active reading and participation in the Child Health Policy.
- x. To establish electronic health record to facilitate bi-directional sharing and communication between public and private settings.

Conclusion

Integrated Child Health is the most up-to-date care model in global child health. Hong Kong has its uniqueness of basic statistics and population characteristics. We have the lowest Child Health Statistics including Infant Mortality Rate and Below-5 Mortality Rate, the highest Longevity Rate, the highest Literacy Rate, and one of the highest Gross Domestic Product in the world. It is our ultimate goal to maintain these super good statistics for our children in Hong Kong so that they have the optimum environment to grow and to develop.

The cardinal elements of Integrated Child Health should be child-focused, family-centered, holistic, continuous, coordinated, compassionate and multidisciplinary to cater the diverse needs of children in terms of medical, social, education, environmental through interfacing between hospital, community, school and family. "Hospital" here not specifically limits to the Hong Kong Children's Hospital but in more broad sense to include ALL hospital settings of other paediatric units under the Hospital Authority as well as private hospitals. The integration should be seamless, effective and bi-directional allowing patients and families to transit from one phase to another with no barriers. One of the salient components is to have a case manager to facilitate all the coordination and transition. Patient health passport summarising all the medical conditions, treatments and medications should go with patient wherever he goes. Electronic health record connecting all the health care systems can be an effective strategy to link up all the healthcare providers for smooth transition and effective communication.

Children make up 20% of our population but represent 100% of our future! Integrated Child Health is essential for their attainment of highest potential in life. We need a joint powerful voice for our Children to achieve the goals of "*Child Survival, Child Health and Child Development*"; "*Healthy Children for Healthy World*"; and "*One Child, One Dream*". Let us work together for the betterment of our children.