

## Paediatric Services: The Future Direction

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Medical care in Singapore has progressed significantly over the past few decades; we have achieved a world class healthcare system with a standard of care comparable with the best in the world in many disciplines. Singapore's healthcare system is designed to ensure that everyone has access to different levels of healthcare in a timely, cost-effective and seamless manner. Singapore has achieved several notable firsts in the world in the arena of medical care but medical excellence is not just about doing cutting edge research and procedures, but also about doing the common things well.

Changing trends of diseases in childhood has seen infectious diseases make way for chronic diseases such as childhood malignancies and other chronic illnesses to be the major causes of death in children today. The top causes of disease burden in childhood in Singapore today include autism spectrum disorder, asthma and attention-deficit hyperactivity disorder (ADHD).<sup>1</sup>

With a rapidly ageing population, there is a justifiable increase in the focus on healthcare for the elderly today. It is however important to remember that how we care for the child today will impact on his well-being tomorrow as an adult. The positive impact of paediatric care on the future health of the adult population reinforces the importance of investing in excellent paediatric care today for long-term benefits and future cost savings.

The paediatric services of the future will have to address the changing needs, expectations, as well as the increasing affluence and demands of the population.

### Integrated Care in Paediatrics

Integrated care is centred on the patient's needs and its service delivery principle focuses on making the patient's journey through the system of care as simple and smooth as possible. It presents to the patient a health care provision that is personalised and seamless, and is particularly beneficial for those patients whose current care provision is disjointed and fragmented, especially those with multiple comorbidities.<sup>2</sup>

With increasing chronic disease burden and complex conditions in childhood, there is a growing recognition of fragmentation of healthcare services that is aggravated by the rapidly emerging trend of increasing subspecialisation—a phenomenon seen by our adult counterpart years earlier. Without integration, healthcare performance suffers—patients get lost, needed services fail to be delivered or are delayed, quality and patient satisfaction decline, and the potential for cost-effectiveness diminishes. Integration allows for greater efficiency and effectiveness, less duplication and waste, and better coordination and continuity of care.

Medical and technological advancements have improved the survival of even the very premature and critically ill; this has however resulted in an increase in disabled children with complex healthcare needs. With this are the social, financial and emotional stresses that commonly accompany childhood disability. Parents, siblings and the children themselves struggle to experience a normal family life as time-consuming and sometimes distressing medical and therapeutic routines are regularly required. Social support, advice, information and respite from the routines of care are much needed. Medical care itself, which often involves multiple specialty disciplines and allied health fields, add on to the complexity of care and the burden on the caregivers.<sup>3</sup> Unfortunately, the latter is often fragmented between different services and professionals. The major tasks of accessing and coordinating these different sources of help are additional sources of stress. Integrated care programmes will thus help facilitate coordination of services and resources, and enable more convenient and efficient care.

Another important and increasingly important group of patients is the growing numbers of adolescents with chronic conditions. Transition from paediatric to adult care must consider the patients' and caregivers' needs and expectations. Integrated care programmes can better package services to facilitate convenience and achieve greater acceptance hence improving adherence, translating to better and more successful clinical outcomes.<sup>4</sup>

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### **Child-friendly and Family-centred Services and Facilities**

The clinic or hospital visit need not (and should not) be scary or unpleasant; it is important that paediatric facilities be child-friendly and not just generic-looking spaces. This extends beyond just cartoon murals or provision of a play corner, but encompasses the overall design and layout, fittings, atmosphere, environment and ambience. Work processes, communications and procedures should be made conducive to the child and family. The physical, psychological and emotional needs of the child and their families should also be taken into consideration. This would enhance the child's (and families') acceptance of medical therapy which translates to better compliance and ultimately enhancing the outcomes of care.<sup>5</sup>

More than just the child, paediatric care actively involves the family unit and caregivers. Through close partnership, respect, and negotiation between the healthcare team and caregiver, the desired outcome is a successful collaboration that enhances communication and thus helps the family and caregivers navigate the healthcare system effectively.<sup>6</sup> This also reduces the level of anxiety and stress (and fear of the unknown), and improves the overall level of satisfaction.<sup>7</sup> Giving more attention to the voices of parents and children goes a long way to ensure that their priorities and needs are addressed and enables optimal care in the context of family and community.<sup>8,9</sup>

Supporting the family and caregivers during the course of the child's illness is essential; it enables the parents to be well rested and to be available by the child's side to provide reassurance and support. This will aid the recovery process and also help strengthen the parent-child bonding. These provisions can range from residential facilities for caregivers (e.g. Ronald McDonald House), to programmes providing psychological support as well as physical sustenance (e.g. refreshments and meals), within a family-centred and family-oriented framework. The love and care of the family during such difficult times can certainly make a significant difference to the child in aspects no amount of medicine can; truly it is love that heal wounds and knits the family together.

### **Towards Ambulatory Care**

When a child is hospitalised, the parents or caregivers and family are significantly impacted. Keeping the child out of the hospital reduces the hospital resource utilisation, increases convenience for the child and the family (reduces or avoids disruption to the family unit), improves quality of life, reduces the incidence of healthcare-related infections and also reduces direct and indirect costs. Hence a redesign of the care delivery with a focus on ambulatory versus

inpatient care is especially beneficial in paediatrics. There is growing evidence such ambulatory care is cheaper, and yet equally safe and effective compared to traditional inpatient care.<sup>10</sup>

The care of technologically-dependent children with complex medical needs (including children on ventilatory assistance, continuous tube feeding, parenteral nutrition) can be managed within the home environment. Medical care can be performed by the home-care team, reducing the strain on already overburdened parents and caregivers, and reducing the risk of deterioration during transfers. Prompt and proper medical assessment and intervention by the visiting home-care team can often reduce the need for re-hospitalisation, and hence reduce total cost and burden on limited inpatient healthcare resources.

With the fast growing demand for hospital beds in Singapore from both an ageing and growing population, the current hospital bed crunch highlights the importance of keeping patients healthy and out of hospital, and for sick patients to remain stable and be cared for at home; this is something that is especially relevant in paediatrics.

### **The Human Touch**

At the heart of paediatric care provision is the healthcare team: the doctors, nurses, allied health workers, educators, researchers and administrators. The team-based model of paediatric care seeks to provide high quality, cost-effective care by minimising duplication of clinical effort and promoting the appropriate and timely use of all healthcare providers and resources on the team.<sup>11</sup> Each member of the team should embrace their responsibility to educate patients, their families, and their caregivers; even policy makers, the media, and the public on common childhood conditions, health promotion, disease prevention, and child safety. The training of healthcare providers must also keep pace with the changing needs, inculcating a strong desire to serve patients, demonstrate empathy and compassion as well as good verbal and nonverbal communication skills.

### **Children Are Not Just Small Adults**

Just as medical assessments and treatments differ significantly between a child and the adult, applying the four E's—engagement, empathy, enlistment, and education—to paediatric patients and their families requires a much different approach than with adults. Paediatric medical interaction has unique aspects that differ in structure, format, and content from adult patient medical communication. The paediatric facility, environment and approach to care are also necessarily different and the healthcare delivery models must adapt to the changing needs and expectations of the child, his/her family and the community.

Traditional organisation of medical care has been very much provider-centred. We need a different paradigm of patient- and family-centredness to give our patients our best. This needs much hard work, hard thinking and rethinking; but isn't this what good medical care is all about?

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