ABSTRACT
Singapore has come a long way in enabling persons (people) with intellectual disability (ID) to be truly integrated into our community. In this presentation, we take a historical overview in the journey of care and integration from the time of the setting up of Singapore Children's Society in 1952 to the first Enabling Masterplan (EMP1) for the period 2007-2011. We are now in the Third Enabling Masterplan (EMP3) for the period 2017-2021. To support persons with disabilities in acquiring relevant vocational and independent living skills and emerge stronger from the COVID-19 pandemic, the Temasek Trust-CDC Lifelong Learning Enabling Fund was launched and made available for one year only (3 Dec 2021 to 31 Dec 2022). Family physicians being the medical practitioners in the frontline of medical care are touchpoints in accessibility to healthcare services and benefit schemes for this group of people. They are key stakeholders.

Keywords: People with disabilities, enabling masterplan, early intervention, education, employment, Adult care, cross-cutting issues.

INTRODUCTION
Singapore has come a long way in enabling persons (people) with intellectual disability (ID) to be truly integrated into our community. In this presentation, we take a historical overview in the journey of care and integration from the time of the setting up of the Singapore Children's Society in 1952 to the present day in 2022.

A/PROF GOH LEE GAN
Senior Consultant, Department of Family Medicine
National University Health System

Singapore Children's Society
The Singapore Children's Society was set up in 1952.1 The society's missions are to protect and nurture children and youth of all races and religions. Its services have evolved to meet the changing needs of children in need of protection and help. In 2021, it reached out to 19,973 children.

Movement of the Intellectually Disabled of Singapore (MINDS)
The Movement for the Intellectually Disabled of Singapore (MINDS)2 was founded in 1962, is a voluntary welfare organisation based in Singapore that provides services for persons with ID.

SPD (Serving People with Disability) (formerly Society for the Physically Disabled)
The SPD is a local charity set up in 1964 to help people (persons) with disabilities (PwDs) maximise their potential and be a part of mainstream society. The local charity helps children and youths with special needs to achieve their best potential through early intervention and educational support.3

HOW PEOPLE WITH DISABILITY ARE DEFINED IN SINGAPORE4
There are various similar definitions of disability across the world. In Singapore, PwDs are defined as “those whose prospects of securing, retaining places, and advancing in education and training institutions, employment, and recreation as equal members of the community are substantially reduced as a result of physical, sensory, intellectual, and developmental impairments.”

SINGAPORE PREVALENCE RATES ON DISABILITY5
It is difficult to have precise prevalence figures on PwDs in Singapore because disability is a spectrum in grades of severity; the severe ones are hard to reach for them to be counted. Nevertheless, “various sources put the prevalence rate at about 3 percent of the population, which means about 100,000 in total, out of which about 10,000 are students.”
The prevalence rates of PwDs and numbers for Singapore population in 2010 are shown in Figure 1.

<table>
<thead>
<tr>
<th>Population group</th>
<th>Prevalence rate (Estimated number)</th>
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<tbody>
<tr>
<td>Pre-school (0-6 years)(^a)</td>
<td>3.2 percent (7,000)</td>
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<tr>
<td>School (7-18 years)(^b)</td>
<td>2.5 percent (13,000, of which 7,600 are mainstream and 5,400 are SPED)</td>
</tr>
<tr>
<td>Adulthood &amp; Aged (&gt;18 years)(^c)</td>
<td>2.5 percent (77,200)</td>
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Footnotes:
\(^a\) MOH’s Child Development Unit statistics 2006-2011;
\(^b\) MOE data on school-going cohort 2005-2010; and
\(^c\) MOH’s National Heath Surveillance Survey

Figure 1. Prevalence Rates and Estimated Number of People with Disabilities (2010 Population)\(^6\)

CAUSES OF DISABILITIES

Causes of disabilities in children, youth, and adults are fairly wide-ranged. Such persons require the help of family members, caregivers, and voluntary helpers in the daily activities of daily living to a greater or lesser extent depending on the severity of disability.

The causes of disabilities are different in children and youth, as compared to adults:

- Children and youth – Developmental disability, intellectual disability and autism spectrum disorders, hearing loss, visual loss, physical disability
- Adult – Disability from childhood, stroke, spinal cord injury, traumatic brain injury, musculoskeletal injury, psychiatric illness, dementia

ENABLING MASTERPLANS

What are the Enabling Masterplans?\(^7\)

The masterplans are five-year roadmaps for the government and the community to work together, to support persons with disabilities (PwDs). The Enabling Masterplans cover many areas across each life stage, including early detection, education, employment, health, assistive technology, and infrastructure, among others. These masterplans help us build a caring and inclusive Singapore, where persons with disabilities are recognised as, and empowered to be, integral and contributing members of society.

Areas of Emphasis

Figure 2 shows the areas of emphasis in the vision of a life course and integrated approach in caring for persons with ID in our community. This was presented in the second Enabling Masterplan (EMP2) in 2012 and is the blueprint for the present and future.
Four Areas of the Second Enabling Masterplan (EMP2)

1. Early intervention. The early formative years are critical in a child’s development. For children with developmental delay, there is strong evidence to support early intervention and its benefits in improving the long-term outcome of the child and the family.

2. Education and healthy lifestyle. The inculcation of a healthy lifestyle of healthy diet, exercising regularly, weight control, smoking cessation, and alcohol consumption within limits, forms the foundation of good physical health.

3. Employment. A value-chain framework to enable persons with disabilities to achieve self-reliance through employment is important. Vocational assessment, training, job placement, and support is important. Sustained employment is dependent on availability of employment opportunities, job readiness, and quality of job support services.

4. Adult care. This is an important growing area in the context of a rapidly ageing population in Singapore. Care arrangement is also a serious concern for many ageing parents of disabled children. A spectrum of care options needs to be in place to support the varying needs of PwDs and their family caregivers.

Five Cross-Cutting Issues Requiring an Integrated Approach

Five cross-cutting issues affect persons with disabilities across their life course and must be attended to. These are:

1. Caregiver Support & Transition Management. Two key areas are important in supporting caregivers. One, caregivers need the necessary skills and knowledge to be competent. Two, respite care options can provide caregivers with short-term and temporary relief from their caregiving duties. Proactive approach to support PwDs through their different transition points of their care is needed and this is undertaken by SG Enable.

2. Manpower & Technology. Skilled manpower is crucial in ensuring that services are accessible and effective. Scaling up training of care staff to meet the projected demand will be needed. Increasing the attractiveness of jobs in the social service sector will be very helpful. The use of assistive technology (AT) and information and communications technology (ICT) enhance the quality of life of PwDs and their potential to lead productive lives.

3. Transport. Several transport assistance schemes have been created, namely the taxi subsidy scheme for vehicles carrying persons with physical disabilities to park at designated parking lots to allow them to get in and out of the vehicle with ease.

4. Public Education. Public education is important in changing mindsets and promoting an inclusive society. Effective public education must be sustained and coordinated.

5. Accessibility. Accessibility to services, information, and communication is needed for PwDs to be included in society. Accessibility to healthcare services, information and schemes can be facilitated by family physicians functioning as touchpoints.

DIRECTIONS OF THE THREE MASTERPLANS

Three masterplans have been released, beginning with the first Enabling Masterplan introduced in 2007.

• The First Enabling Masterplan (EMP 1) from 2007-2011 charted the direction for disability services and programmes, and advanced Singapore’s vision of becoming a more inclusive society.

• The Second Enabling Masterplan (EMP 2) from 2012-2016 built on the foundation laid by earlier initiatives for Singapore to strive towards an inclusive society.

• The Third Enabling Masterplan (EMP 3) from 2017-2021 envisions Singapore to be a caring and inclusive society where persons with disabilities are empowered to achieve their fullest potential and participate fully as integral and contributing members of society.

DISABILITY SPORTS MASTERPLAN

There is also a Disability Sports Masterplan that executes the vision of awareness and participation in disability sports, as well as the greater inclusiveness of PwDs through disability sports. The first Centre of Expertise (COE) for Disability Sports – Sengkang Sports Centre – was officially launched in conjunction with the launch of Yes! I can, a beginner level disability sports programme.

TEMASEK TRUST-CDC LIFELONG LEARNING ENABLING FUND

To support persons with disabilities in acquiring relevant vocational and independent living skills and emerge stronger from the COVID-19 pandemic, the Temasek Trust-CDC Lifelong Learning Enabling Fund was launched and made available for one year only (3 Dec 2021 to 31 Dec 2022).

ROLE OF FAMILY PHYSICIANS

Our family physicians on the frontline of medical care are touchpoints in accessibility to healthcare services and benefit
schemes for this group of people. They are key stakeholders in the care of PwDs and persons with ID.

1. Care of PwDs. Based on what has been discussed, it is clear that family physicians can play a major role in the care of PwDs through the execution of the following:
   - Being the first touchpoint to various services in caring for PWDs
   - Communication and explanation to PwDs and caregivers
   - Early intervention
   - Ongoing care
   - Preventive care
   - Public education
   - Being the patient-centred medical home

2. Patient-centred medical home. This is a team-based healthcare delivery model led by a family physician or another care provider that provides comprehensive and continuous medical care to patients with the goal of obtaining maximal health outcomes. The provision of patient-centred medical homes may allow better access to healthcare, increase satisfaction with care, and improve health. There are four elements of importance in the patient-centred medical home:
   - Patient-centred care
   - Quality care
   - Health information technology
   - Practice organisation

Within such a model of care, accessibility, care co-ordination, continuing care, and health promotion and disease prevention can be fostered. Looking at the healthcare needs of PwDs, there is much more satisfying care that such a care model can provide.

3. Preventive focus
   - People with disabilities suffer from acute and chronic medical problems just like those without disabilities, but the consequences may be magnified because of the disabilities.
   - Some disabilities can be prevented from recurring, e.g., the recurrence of complications of the cardiovascular complications of the metabolic syndrome.
   - Some disabilities can be prevented through appropriate screening measures, e.g., antenatal screening of high risk mothers, and primary preventive measures targeted at the risk factors, e.g., attention to prevention of falls resulting in traumatic brain injuries or severe musculoskeletal injuries, or the prevention of metabolic syndrome through attention to diet, exercise, and weight control.

**CONCLUSION**

In this historical overview of the care and integration of PwDs and persons with ID in our community, we have progressed a long way since the first Enabling Masterplan for PwDs was rolled out (2006-2011). The enduring vision that PwDs form an integral part of our community remains robust. Family physicians on the frontline of medical care are touchpoints in accessibility to healthcare services and benefit schemes for this group of people, and as such are key stakeholders in this enduring vision.

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LEARNING POINTS

• In Singapore, 3 percent of the resident population is estimated to have some form of disability.

• The four pillars in the life course approach to enable PwDs to participate fully in society are: early intervention, education and healthy lifestyle, employment, and adult care.

• The five cutting issues that need to be addressed in implementing the enabling masterplan for PwDs are: caregiver support and transition management, manpower and technology, transport, public education, and accessibility.

• Family physicians are often the first touchpoint of services or schemes that PwDs need to improve their health, and are key stakeholders in the care of PwDs and persons with ID.