

MEDIA FACTSHEET

Programme name	DayOne
Launch date	May 2022
Partners	Lien Foundation and KK Women's and Children's Hospital (KKH)
Overview	<p>DayOne <u>is a new programme to support the mental health of caregivers of children with developmental needs.</u></p> <p>Research shows that caregivers of children diagnosed with developmental needs are more likely to suffer mental health challenges, which can greatly affect the mental health of the developing child.</p> <p>While Singapore has made advances in supporting children with developmental needs in recent years through programmes such as the Development Support Learning Support (DS-LS) Programme, Development Support - Plus (DS-Plus), Inclusive Support Programme and Early Intervention Programme for Infants and Children (EIPIC) Under-2, more support can be given to the caregiver of the child.</p> <p>To address this, DayOne will provide the universal screening of caregivers for the presence or risk of mental health challenges at the emotionally difficult milestone when their preschool child is diagnosed with developmental needs at KKH's Department of Child Development (DCD). It will also offer intervention services for the caregiver as needed.</p> <p>The service model is built around the unit of a caregiver-child pair (or dyad), where the caregiver is the individual identified to be most involved in the care of the child. This caregiver will often be the mother, but can be the father or grandparent depending on circumstances.</p> <p>Gender-specific services and training will be explored, to keep pace with the shift towards shared caregiving and female workforce participation in Singapore.</p> <p>To achieve the goals of DayOne, KKH will:</p> <ul style="list-style-type: none"> ● Recruit a new multi-disciplinary team and deepen their skills ● Redesign clinical processes and services to be more caregiver-focused ● Establish more frequent touchpoints in the patient journey for fast-tracking, reduction of drop-out from intervention and follow up, as well as identification of later/new caregiver needs



	<ul style="list-style-type: none"> • Develop partnerships with service providers in the community for improved transition of care.
<p>DayOne - background and identified challenges</p>	<p><u>1. There is no universal early screening of caregivers' mental health and socio-emotional competency</u></p> <p>The point when a child is referred to a hospital to assess the possibility of developmental needs is a key tension moment for the caregivers. Stressors can be high and vary widely among families. Caregivers may face individual challenges (such as anxiety, depression, social challenges, limited support, early adversity in their own childhood, etc) as well as caregiving-related challenges (such as stigma, child's challenging behaviours, frequent medical appointments). There is currently no stratification of appointments based on parental stress levels. Left unattended, the stress may rise during the waiting time for the medical appointment and affect the eventual intervention for the child.</p> <p>At the hospital, the child is the focus of the assessment. Significant caregiver concerns may be identified only if they emerge during history-taking or are obvious to the care team. If high-risk caregivers can be identified early, they can then be provided with the support they require, as they begin their journey with their child with developmental needs.</p> <p>Children who lack secure relationships with their caregivers may experience greater difficulty in developing social and emotional competency, which is crucial for future academic and social success.</p> <p>With limited provision of relational work, caregivers may be less equipped to use child-rearing strategies that are developmentally-appropriate (e.g. increased predictability of daily routines).</p> <p><u>2. Downstream screening of caregiver mental health is not universally performed</u></p> <p>Caregiver stress levels may increase after the child's diagnosis, leading to mental health challenges. The practical demands of caregiving for a child with developmental needs can be overwhelming and vary over time, leading to possible burnout. Caregiving of other family members may be adversely affected.</p> <p><u>3. Community resources are not maximised or made easily accessible</u></p> <p>The many needs of families cannot be met solely by hospital-based resources. They require the activation of community resources with their diverse capabilities, accessibility, and organic social networks. However, navigating the landscape of services is challenging. In the absence of sufficient informational and emotional support, some</p>

	<p>parents give up on attempts to access the services that they or their child needs.</p> <p>Addressing these key areas increases the potential to radically alter the journey of caregivers and their children at a critical juncture of their lives.</p>
Goals	<p>Through DayOne, we aim to ascertain:</p> <ul style="list-style-type: none"> • the proportion of children, caregivers and dyads at risk of poor socio-emotional and mental health outcomes • their level of needs • the staff and service capability and training needs • the robustness of the service model • the needs and readiness of community partners to provide the required service
Beneficiaries	<p>500 caregivers will be screened and thereafter supported via a 4-tier support system. Of the 500, 100 caregivers are expected to require more intensive interventions in Tiers 3 and 4 of the support system, comprising counselling, psychological and psychiatry services.</p>
Location	<p>The geographical focus will be the northeast – Punggol, Sengkang and Hougang – due to its large population of young families.</p>
Timeline	<p>Project duration: 2 years</p> <p>May 2022: Project commences</p> <p>May 2022 to Apr 2024: Operation and validation of the service model</p> <p>From May 2024: If evaluation results are positive, the programme may be scaled up by re-locating the service from KKH to willing community partners, whose interest and collaboration will be sought during the project.</p>
Spokesperson Quotes	<p>Associate Professor Lourdes Mary Daniel, Head and Senior Consultant, Department of Child Development, KKH:</p> <p>“Every child develops in the context of relationships. The most crucial relationship in the child’s life is with the caregiver. By supporting the caregiver, the child and the dyad, we are in fact optimising Singapore’s human capital, by helping these children reach their full potential.</p> <p>DayOne is aligned with the life course approach to address healthcare at critical life phases of both mother and child. This is envisioned as part of the SingHealth Duke-NUS Maternal and Child Health Research Institute, to support the growth and development of every woman and child to their fullest, and lay the foundation for the future health of Singapore’s population.”</p>



	<p>Lee Poh Wah, CEO, Lien Foundation:</p> <p>“Day One is the day of diagnosis, the 1st day of a new reality for these families. We hope that through supporting caregivers and not just the children alone, this programme improves the user experience and outcomes.</p> <p>DayOne tackles 2 big stigmas at once - developmental needs and mental health. It is rooted in the reality that in young families, these 2 conditions are often intricately linked and need to be addressed holistically. After all, there is no health without mental health.”</p>
<p>Statistics from research studies</p>	<p>13.9% - Lifetime prevalence of mental illness, based on the 2nd Singapore Mental Health study in 2016 that surveyed over 6,000 participants. It also showed that many of these mental health disorders were present in childhood.</p> <p>75% - Percentage of adult mental health disorders that are already present before the age of 25, based on international studies.</p> <p>Specific to maternal mental health, much of the available local data comes from the Growing Up in Singapore Towards healthy Outcomes (GUSTO) study, a longitudinal study of 1,200 mothers which started in 2009 in Singapore. It showed:</p> <ul style="list-style-type: none"> • Maternal sensitivity (ability to perceive, infer meaning to and respond appropriately to her infant's behavioural signals) has a long-term impact on the hippocampus, a brain structure important for learning and memory. • Higher maternal parenting stress at 48 months increased the risk for internalising problems (e.g. depression, anxiety, etc.) in children. This shows that maternal factors are important for the eventual outcomes of children. <p>Based on KKH data in 2016, 29% of mothers of children with autism spectrum disorder continued to score above clinical cut off for depression on screening within 6-12 months of the diagnosis. Parents who perceived that caring for a child with autism has negatively impacted the family also experienced more depressive symptoms.</p> <p>In another study on caregivers of children with developmental needs in Singapore during the COVID-19 pandemic, depression, anxiety and stress scores were high. These were associated with difficulties involving infection control measures, autism diagnosis, and need for early intervention services. For caregivers of children with autism, the scores were significantly higher than non-pandemic scores locally and in other Asian countries.</p>
<p>Contextual info</p>	<p><u>1. International level</u></p> <p>Globally, the focus started shifting a decade ago from the individual</p>



child to a broader appreciation of the role of the parent-child pair, its dynamic relationship with the rest of human ecology, and support for vulnerable families. It was a reflection among international practitioners of the acceptance that for successful intervention of children with developmental needs, the key lies with the caregiver.

2. National level

- In 2021, approximately 7,000 preschool children were assessed for developmental needs, and the majority (72%) were seen at KKH's DCD. Among this group of children, language delay, autism and behavioural problems were the most common diagnoses, comprising 36%, 22% and 18% of the children respectively.
- DayOne is envisioned to align with the Ministry of Health's focus on **population health** and its "**3 Beyonds**" strategy, which calls for a shift from hospitals to the community, quality to value, and healthcare to health. DayOne also fits into 2 areas of rising national importance, namely maternal and child health (led by the government's **Inter-agency Taskforce for Child and Maternal Health and Well-being**), and mental health (led by the government's **Inter-agency Taskforce on Mental Health and Well-being**).
- DayOne synergises with the aim of the SingHealth Duke-NUS Maternal and Child Health Research Institute, which is to support the growth and development of every woman and child to their fullest, and lay the foundation for the future health of Singapore's population.
- A 2019 review of the current and future challenges related to mental health in Singapore showed that the **psychiatrist to population ratio** was low in Singapore (2.6/100,000 compared to the USA and UK [11-13.7/100,000]). Provision of mental health care in the community was one of the recommendations made.

3. Partners level

DayOne synergises with a series of pilot projects launched by the Lien Foundation in recent years, and is designed to **integrate health and social services**, such as:

- **Mission I'mPossible 2 (MIP2)** programme, launched by PAP Community Foundation, KKH and Lien Foundation in Jan 2022 to screen children for developmental needs in the preschool from as young as 2 months old. While MIP2 aims for early detection and intervention for children, DayOne supports caregivers of such children. More on MIP2 [here](#).
- **HELMS** programme, launched by KKH and Lien Foundation in Apr 2022, pilots a new care model to improve the mental



	<p>and metabolic health of expectant and new mothers into 18 months after delivery. DayOne's beneficiaries also include mothers and their children, but those whose lives have taken an unexpected turn a few years into the caregiving journey due to their child's diagnosis. More on HELMS here.</p> <ul style="list-style-type: none"> ● Post-Diagnostic Support (Dementia) programme launched by Dementia Singapore and the Lien Foundation in June 2019 also supports caregivers facing mental health stressors – albeit with the difference that in PDS-Dementia, it is the parent or spouse who is diagnosed (with dementia), not the child (with developmental needs). Situated at opposite ends of the life course, DayOne and PDS-Dementia will enable the cross-pollination of knowledge related to the common task of caregiving irrespective of diagnoses. More on PDS-Dementia here.
<p>Project support</p>	<p>The total project budget is \$3.6 million for 2 years. About 75% is supported by the Lien Foundation, while the balance will be funded by KKH.</p>
<p>About KKH</p>	<p>KK Women's and Children's Hospital (KKH) is Singapore's largest tertiary referral centre for obstetrics, gynaecology, paediatrics and neonatology. The academic medical centre specialises in the management of high-risk conditions in women and children.</p> <p>Driven by a commitment to deliver compassionate, multidisciplinary care to patients, KKH leverages innovation to advance care. In 2021, the hospital launched the SingHealth Duke-NUS Maternal and Child Health Research Institute (MCHRI). This centre of excellence aims to support the growth of every woman and child to their fullest potential through research and innovation, to transform national health in Singapore and the region.</p> <p>Some of the hospital's recent breakthroughs include uSINE®, a landmark identification system for the administration of spinal epidural anaesthesia, the discovery of new genetic diseases, e.g. Jamuar Syndrome, and a series of guidelines for women and children to improve metabolic health.</p> <p>The Academic Medical Centre is also a major teaching hospital for Duke-NUS Medical School, Yong Loo Lin School of Medicine and Lee Kong Chian School of Medicine. In addition, KKH runs the largest specialist training programme for Obstetrics and Gynaecology, and Paediatrics in Singapore. The programmes are recognised by the Accreditation Council for Graduate Medical Education International (ACGME-I), and are highly rated for the quality of clinical teaching and translational research.</p> <p>KKH was founded in 1858. For more information, visit www.kkh.com.sg</p> <p>Follow us on</p>



	<p>Facebook Instagram YouTube </p>
<p>About Lien Foundation</p>	<p>The Lien Foundation is a Singapore philanthropic house noted for its model of radical philanthropy. It breaks new ground by investing in innovative solutions, convening strategic partnerships and catalysing action at the intersection of health and social care.</p> <p>In the area of early childhood development, a key tenet of the Foundation's work is grounded in the belief of providing all children with a more equitable start. Circle of Care (CoC), in partnership with Care Corner and NUH's Child Development Unit, aims to support children from low-income backgrounds in their transition to primary school through an integrated care model helmed by social workers partnering an interdisciplinary team of educators, therapists, health specialists and community partners. CoC now works across more than 20 preschools including MOE Kindergartens, and is a consultant to the national KidSTART programme. The Canossian CoC model uses an in-house Child Development Unit to integrate services across the preschool, primary, special education and after-school sector within the compound of Canossaville Children and Community Services. Kindle Garden, Singapore's first purpose-built inclusive preschool, was established in partnership with AWWA. Mission I'mPossible 2 is a joint programme with PCF and KKH that will screen children for developmental issues from as young as 2 months old. It builds on an earlier pilot, which was adapted by the government as the Development Support and Learning Support programme. The Foundation also established the Centre for Holistic Initiatives for Learning and Development (CHILD) together with NUS Medicine to provide a multi-disciplinary approach to translating critical research to intervention, with the aim of improving the health and developmental outcomes of children in Singapore and beyond.</p> <p>For more information, visit https://www.lienfoundation.org</p> <p>Follow us on Facebook Instagram YouTube</p>
<p>Glossary of terms in Mandarin</p>	<p>Please refer to Annex A.</p>

Annex A - Glossary of terms in Mandarin

Lien Foundation	连氏基金会	
KK Women's and Children's Hospital	竹脚妇幼医院	
DayOne	曙光亲子辅助计划	
Lien Foundation	Mr Lee Poh Wah Chief Executive Officer Lien Foundation	李宝华 总裁 连氏基金
KK Women's and Children's Hospital	Associate Professor Lourdes Mary Daniel Head and Senior Consultant Department of Child Development KK Women's and Children's Hospital Programme Director DayOne	Lourdes Mary Daniel 副教授 主任兼资深顾问医生 儿童发展部门 竹脚妇幼医院 计划负责人 曙光亲子辅助计划
	Dr Shilpee Raturi Department of Child Development KK Women's and Children's Hospital Programme Co-Lead DayOne	Shilpee Raturi 医生 儿童发展部门 竹脚妇幼医院 计划联合主任 曙光亲子辅助计划
	Ms Majella Irudayam Master Medical Social Worker Department of Child Development KK Women's and Children's Hospital Programme Co-Lead DayOne	Majella Irudayam 医务社工师 儿童发展部门 竹脚妇幼医院 计划联合主任 曙光亲子辅助计划
1.	Accessible and sustainable model of care	便利及可持久的护理模式
2.	At-risk caregivers	高风险看护者
3.	Capability building	能力建设
4.	Caregiver-child dyad	看护者-孩童对偶

5.	Children with developmental needs	有发展需求的儿童
6.	Community service providers	社区服务机构
7.	Counselling	辅导
8.	Development Support (DS)-Learning Support (LS)	启发辅助计划-学习支持计划
9.	Development Support (DS)-Learning Support (LS)- Plus	升级版启发辅助计划
10.	Early Intervention	早期介入
11.	Early Intervention Programme for Infants and Children (EIPIC)	婴儿与幼儿早起介入计划
12.	Fast-track	快速
13.	Healthy Early Life Moments (HELMS)	新康母健幼之旅
14.	Integration of health and social services	整合保健与社会服务
15.	Inter-agency Taskforce for Child and Maternal Health and Well-being	母子健康跨机构工作小组
16.	Mental health disorders	心理健康障碍
17.	Mission I'm Possible 2	任务我行2
18.	Multidisciplinary mental health clinical team	跨学科心理健康临床护理团队
19.	Polyclinics	综合诊疗所
20.	Preschools	学前班 / 幼儿园 / 学前教育中心
21.	Psychological and Psychiatry Services	心理及精神科服务
22.	Psychosocial well-being	心理健康
23.	Redesign clinical processes	重新规划临床护理流程
24.	Right-siting of care	就近医疗护理
25.	Screening tools	筛查工具

26.	Service model	护理模式
27.	SingHealth Duke-NUS Maternal and Child Health Research Institute	新保集团杜克--国大妇幼保健研究所
28.	Social emotional well-being	社交和心理健康
29.	Social Service Agencies	社会服务机构
30.	Transition of care	护理交接
31.	Universal screening	普遍筛查