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WORKSHOP FINAL REPORT ON MANAGING CHILD HEALTH FOR THE HEALTHCARE WORKFORCE

APEC Health Working Group
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Final Report

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Acknowledgement
The views expressed and the conclusions reached are those of the author and not necessarily the consensus view of APEC member economies or of the individual economies addressed.

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ACRONYMS

Acronym	Full Term
AI	Artificial Intelligence
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
ASD	Autism Spectrum Disorder
BD	Brunei Darussalam
BPJS	Badan Penyelenggara Jaminan Sosial
BruHIMS	Brunei Health Information and Management System
CENSIA	Centro Nacional para la Salud de la Infancia y la Adolescencia
COERMI	Committee on Strategies for the Reduction of Child Mortality
CT	Chinese Taipei
e-CDSS	electronic Clinical Decision Support System
EDI	Evaluación del Desarrollo Infantil
FGD	Focus Group Discussion
GRADE	Grading of Recommendations, Assessment, Development, and Evaluations
HECCD	Holistic Early Childhood Care and Development
HLMA	Health Labor Market Analysis
HPA	Health Promotion Administration
HWG	Health Working Group
IMCI	Integrated Management of Childhood Illness
IMNCI	Integrated Management of Neonatal and Childhood Illness
INA	Indonesia
IPC	Interprofessional Collaboration
JPN	Japan
MAS	Malaysia
MCH	Maternal and Child Health
MCS	Maternal and Child Health Services
MPDSR	Maternal and Perinatal Death Surveillance and Response
MUAC	Mid-Upper Arm Circumference
NGOs	Non-Governmental Organization
PACK	Practical Approach to Care Kit
PHL	The Republic of the Philippines
PKK	Pemberdayaan Kesejahteraan Keluarga (Family Welfare Movement)
Posyandu	Pos Pelayanan Terpadu (Integrated Health Post)
Puskesmas	Pusat Kesehatan Masyarakat (Primary Health Center)
RPJMN	Rencana Pembangunan Jangka Menengah Nasional
SDG	Sustainable Development Goals
SMS	Short Message Service

Acronym	Full Term
SRHR	Sexual and Reproductive Health and Rights
THA	Thailand
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USA	United States
VN	Viet Nam
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization

EXECUTIVE SUMMARY

Good child health serves as the foundation for a productive future workforce and reduces the burden of expensive medical care within the APEC region. While infant and under five mortality rates have declined since 2000, recent years demonstrate a slowdown in improvement, signaling a critical need for renewed policy attention and targeted system level interventions. Economies currently face persistent challenges such as stunting, malnutrition, and rising childhood obesity, alongside systemic issues like the geographic maldistribution of health workers, fragmented service delivery, and a significant digital divide.

The project held a three-day workshop from 20 to 22 January 2026 in Makassar, Indonesia, hosted by the Makassar Health Polytechnic and the Indonesian Ministry of Health. The event aimed to enhance the capacity of the health workforce specifically doctors, nurses, and midwives by sharing best practices in early life health promotion and exploring innovative technological solutions to improve access to care. The workshop brought together delegates and expert speakers from across the Asia-Pacific region. Participants represented the following economies: Brunei Darussalam; Indonesia; Malaysia; Mexico; The Republic of the Philippines; Chinese Taipei; Thailand; Viet Nam.

This report summarizes the contents and key findings from seven thematic sessions and four phases of focus group discussions. The sessions explored the interlinked determinants of maternal and child health, strategies to mitigate workforce shortages through task shifting and health labor market analysis, and the potential of digital innovations like telemedicine, AI-enabled diagnostics, and drone based vaccine delivery. Throughout the series, participants emphasized that sustainable progress requires multifaceted strategies that address social determinants, such as parental education and sanitation, alongside clinical care.

The findings from participant surveys, discussed in Section 3, indicate high satisfaction, with 81.3% of participants rating the overall experience as excellent. The report concludes with six core policy recommendations to guide APEC member economies in strengthening child health systems, advancing digital transformation, and enhancing regional cooperation. Detailed workshop agendas, speaker biographies, and full presentation materials are provided in the Appendices.

1. INTRODUCTION

This document summarizes the strategic discussions and outcomes of the APEC workshop titled Managing Child Health for Healthcare Workforce, which aimed to enhance the clinical and promotional capacity of doctors, nurses, and midwives. The report conveys that investing in child health is the essential foundation for developing a productive future workforce and reducing the long-term burden of medical costs in the Asia-Pacific region. By sharing best practices and innovative technological solutions, the document seeks to align APEC member economies toward building more resilient communities for children.

The workshop identified that while infant and under-five mortality rates have declined since 2000, recent years demonstrate a slowdown in progress that necessitates targeted, system level interventions. Analysis shows that geographic maldistribution of health workers remains a core problem, as specialists are often concentrated in urban areas while rural populations face severe shortages. Survey results within the sources reveal that 57.1% of participants believe their existing economy child health strategies are not yet fully effective. Furthermore, major barriers to equitable care include limited physical access, financial constraints for families, and persistent nutritional challenges such as stunting, which remains prevalent in several provinces.

The workshop concluded with a comprehensive set of strategic recommendations aimed at securing sustainable health outcomes for children across the Asia-Pacific region. To build more resilient communities, participants emphasized that APEC member economies must strengthen child health systems by reinforcing evidence based policies and fostering parental empowerment to combat critical issues like malnutrition and obesity. These systems should prioritize interprofessional collaboration and high quality services to support optimal early childhood growth across diverse settings.

Achieving these goals requires promoting cross sector collaboration, where government agencies, healthcare providers, academic institutions, and community organizations work in concert. Such multisectoral approaches are essential for addressing the region's complex health challenges and ensuring that health service delivery remains efficient and accessible to all populations.

In tandem with structural reforms, member economies should advance technology and digital transformation by adopting innovative tools such as mobile applications, telehealth, and digital MCH handbooks. Integrating these digital systems will facilitate regional knowledge sharing and institutionalize the use of data for more effective health planning. Simultaneously, health authorities must enhance healthcare workforce capacity through continuous professional development and the improvement of digital competencies. These programs ensure that services remain people centered and that community health workers are fully equipped to meet local needs.

To sustain this progress, child health priorities must be integrated into higher education, with universities leading research to generate evidence based solutions that can be translated into practical policies and scalable community programs. Finally, participants urged APEC member economies to support regional cooperation by prioritizing sustainable and culturally appropriate interventions. By utilizing collaborative learning platforms and regional mechanisms for knowledge exchange, member economies can effectively share best practices and ensure the success of scalable child health programs throughout APEC member economies.

2. WORKSHOP SUMMARY

2.1. Opening Remarks

2.1.1. Report by the Workshop Committee

The report from the Director of Makassar Health Polytechnic Dr Rusli, Apt., Sp. FRS:
Director Dr Rusli welcomed delegates to the APEC Workshop in Makassar. He represented the Makassar Health Polytechnic and Indonesia's Ministry of Health. He honored the Mayor and delegates from various APEC member economies. This significant event focused on managing child health for the workforce.

Good child health builds a productive future workforce for our region. Healthy children reduce the burden of expensive medical care. Disparities in infant mortality rates remained a significant global challenge. Economies had to work together to address these critical health gaps.

The workshop enhanced the capacity of doctors, nurses, and midwives. Experts shared best practices in early life health promotion and management. Participants explored innovative technological solutions for better access to care. Deep discussions identified successful case studies across the Asia-Pacific.

The team aimed to produce concrete recommendations for health systems. These steps would create more resilient communities for children. Dr Rusli thanked the APEC Secretariat and the Ministry of Health. He wished everyone a productive and memorable stay in Makassar.

2.1.2. Welcome Speech by the Host Economy

The welcome speech from Vice Minister of Health Dr Benjamin Paulus Octavianus, Sp. PKR:
Vice Minister Dr Benjamin Paulus Octavianus welcomed all APEC delegates and speakers. He appreciated the workshop's focus on managing child healthcare. This event addressed global challenges in quality child healthcare. A strong workforce ensured better healthcare for children.

Child health served as the foundation for future human resource development. We must invest in education and continuous training for health workers. Innovation and technology promoted equity in children's healthcare. This forum enabled economies to share best practices and strategic approaches.

Indonesia promoted regional cooperation to strengthen the health workforce. This initiative aligned with the health system transformation agenda. The workshop generated concrete recommendations and sustainable collaborative networks. These activities brought meaningful benefits to child health across the region.

2.1.3. Welcome Speech by the Mayor of Makassar City

The welcome speech from the Mayor of Makassar City, Munafri Arifuddin, SH:
Mayor Munafri Arifuddin welcomed all APEC delegates to Makassar City, one of Indonesia's major urban centers with a population of 1.4 million. He highlighted Makassar's diverse health challenges, particularly in child health, and expressed hope that the meeting would generate shared solutions to improve health outcomes while supporting economic growth.

He provided an overview of Makassar, noting that its population is distributed across 15 districts and 153 urban villages, supported by 47 public hospitals and 147 primary health centers. These characteristics underscored the importance of strengthening urban health systems to meet the needs of a growing population.

The Mayor emphasized the importance of collaboration among APEC member economies to formulate practical solutions that improve community health, especially in South Sulawesi Province. He concluded by welcoming participants to Makassar and encouraging collective action to advance child health and regional development.

2.2. Session 1: Challenges in Child Health in Developing Economies

2.2.1. Presentation by Mr Ryza Maulana Putra, Senior Health Economist, Health Systems Insight

Situation and Contributing Factors of Child Health Indicators: Lessons from Indonesia
Mr Ryza Maulana Putra presented child health indicators across developing economies. His presentation focused on Indonesia and comparative trends in APEC member economies. The data showed that infant, neonatal, and under five mortality rates have declined since 2000. However, recent years demonstrated slower improvement.

According to Mr Putra, this slowdown signaled a need for renewed policy attention. More targeted system-level interventions were required. Progress could not rely on previous momentum alone. Strategic reforms had to address emerging challenges.

The presenter highlighted that economic growth correlated with reduced child mortality. Healthcare coverage improvements also drove better outcomes. His analysis showed that economic gains alone did not ensure equitable outcomes. Indicators of access to essential healthcare clearly reflected this pattern.

Mr Putra's research explained that stronger health systems link closely to lower infant mortality. This relationship is particularly evident in lower income settings. His argument emphasized that system performance matters as much as economic development. Quality infrastructure and services make measurable differences.

The presentation emphasized persistent inequities affecting access to child healthcare. Poor and vulnerable populations faced the greatest barriers. Limited physical access restricts service utilization. Financial constraints prevent families from seeking care.

Service quality gaps undermine health outcomes, as noted in the presentation. Weak continuity of care disrupts treatment effectiveness. These barriers compound across multiple disadvantaged groups. Addressing them required comprehensive approaches, according to the speaker.

Mr Putra underscored that non-health determinants significantly influence child mortality. Parental education levels affect health-seeking behaviors. Water access and sanitation infrastructure prevent disease. These factors operate independently of healthcare.

Focusing on Indonesia, the presentation highlighted disparities requiring attention. Health insurance coverage varies among under-five children. Service utilization differs across socioeconomic groups. Provincial immunization coverage showed uneven patterns.

The speaker concluded that sustained improvements demand multifaceted strategies. High-quality healthcare must reach all populations. Household capacity grew through parental education. Stronger regulatory frameworks enable better implementation.

Mr Putra's final remarks emphasized that sustainable financing ensured long-term program viability. Locally driven innovation addressed context-specific challenges. These elements must align to achieve equitable gains. Lasting progress required integrated policy approaches.

2.2.2. Presentation by Shanon McNab, Regional Advisor, SRHR UNFPA Asia-Pacific Regional Office

The Dyad: The Linkages and Determinants of Child Health as Linked to Maternal Health

Ms Shanon McNab presented interlinked determinants of child health through a maternal health lens. The Regional Advisor for SRHR UNFPA Asia-Pacific Regional Office emphasized critical connections. Maternal health is fundamental to child survival, growth and development. This relationship was particularly crucial during the first 1,000 days of life.

Her presentation explained that pregnancy established the baseline for newborn and child health outcomes. Maternal physical and mental health directly influence birth outcomes and early development. Socio-economic conditions and environmental exposures also shape these critical results. These factors create lasting impacts on child health trajectories.

Ms McNab highlighted that specific maternal conditions increased risks for newborns. Anemia, malnutrition, and hypertension elevate risks of preterm birth and low birth

weight. Common perinatal mental health conditions affect bonding and breastfeeding. These conditions also contribute to childhood stunting and developmental delays.

The presenter identified maternal survival as a critical determinant of child outcomes. Evidence demonstrated that infants whose mothers die during childbirth faced substantially higher mortality risks. These children also experienced severe malnutrition due to lost nurturing care. Maternal death creates cascading negative effects on infant survival and development.

Emerging environmental risks received particular attention in the presentation. Heat stress was associated with multiple adverse outcomes. These included preterm birth, stillbirth, and hypertensive disorders. Gestational complications also increased under heat exposure conditions.

Ms McNab noted that maternal, neonatal, and stillbirth mortality rates have stagnated globally. A significant proportion of maternal deaths concentrate in few economies. Several Asia-Pacific economies account for substantial portions of these deaths. This regional concentration demands targeted intervention strategies.

The presentation emphasized maternal mental health as an often under addressed determinant. Women experiencing common perinatal mental disorders access antenatal and postnatal care less frequently. They also faced higher likelihood of obstetric complications. Their mental health status directly affects maternal and child outcomes.

According to the speaker, children of mothers with mental health challenges faced elevated risks. Higher rates of undernutrition occur in these populations. Poor cognitive development and reduced breastfeeding also result from maternal mental disorders. These children experienced increased illness rates throughout early childhood.

Ms McNab's conclusion underscored priorities for protecting maternal survival and wellbeing. Skilled birth attendance provided essential support during delivery. Respectful maternal and newborn care ensured dignified treatment throughout the continuum. Effective referral systems connected women to appropriate care levels.

Her final recommendations emphasized strengthened data use for evidence-based interventions. Integration of maternal mental health into routine services addressed previously neglected needs. Support for health provider wellbeing ensured sustainable, quality care delivery. These elements work together to protect maternal health comprehensively.

The presenter's closing statement reinforced the core message of the presentation. Protecting maternal health is essential to safeguarding children's right to survival. Child development and long-term wellbeing depend on maternal health investments. Maternal and child health outcomes remained inseparable across the life course.

2.2.3. Presentation by Dr Wira Hartiti, M. Epid - Directorate General of Primary Care and Community Health Family Healthcare, Ministry of Health, Indonesia

Factors Contributing to Health Disparities in Child Health in Indonesia

Dr Wira Hartiti, representing the Directorate General of Primary Care and Community Health at Indonesia's Ministry of Health, presented the factors contributing to disparities in child health outcomes. She represented the Family Healthcare division at Indonesia's Ministry of Health. Her presentation examined factors affecting inclusive access to child healthcare.

Indonesia's context presented unique challenges for healthcare delivery, according to the presenter. The economy's large, multicultural population created diverse health needs across communities. Its archipelagic geography complicated physical access to healthcare facilities. The decentralized health system required coordination across provinces and districts.

Dr Wira reported that Indonesia has achieved progress in reducing child mortality rates. Neonatal, infant, and under-five mortality have declined in recent years. The economy remained on track to meet its 2024 economy-level targets. These achievements demonstrated the effectiveness of existing interventions.

However, the presentation emphasized that neonatal deaths account for most under-five mortality. Indonesia still lags behind several APEC member economies in child health indicators. Performance also falls short of longer-term RPJMN 2029 targets. The economy had not yet achieved SDG 2030 benchmarks.

Marked disparities persisted between provinces, as highlighted in the data. Eastern and remote regions experienced substantially higher mortality rates. Urban and more developed areas showed significantly better outcomes. These geographic differences required targeted policy responses.

Dr Wira identified malnutrition, particularly stunting, as a major ongoing challenge. Overall nutritional indicators have shown improvement in recent years. However, stunting remained prevalent across many Indonesian provinces. This condition posed significant threats to future human capital development.

The presenter noted that Indonesia's Human Capital Index remained relatively low. Children are not yet reaching their full developmental potential. Current conditions limit future productivity across the population. These findings reinforce the urgency of accelerating stunting reduction efforts.

Her presentation outlined implementation of a life-course and continuum-of-care framework. This approach integrates nurturing care with strengthened primary healthcare (Puskesmas) systems. Integrated Management of Childhood Illness (IMCI) forms a core component. Growth and developmental monitoring tracked progress across child populations.

The framework included multiple intervention points, according to Dr Wira. Nutrition interventions addressed immediate dietary needs and long-term development. Immunization services prevent communicable diseases affecting child health. Community-based platforms such as Integrated Health Post (Posyandu) extend service reach beyond facilities.

The Maternal and Child Health Handbook served as a key instrument. It supported growth and development monitoring throughout early childhood. The tool enabled early detection of developmental delays and health concerns. Parental engagement increased through structured tracking and educational content.

Mothers' classes complement the handbook system, as explained in the presentation. Routine community activities reinforce health messages and promote behavior change. These platforms create social support networks for caregivers. They also facilitate peer learning and shared problem-solving.

Despite these initiatives, Dr Wira identified persistent implementation challenges. Limited human resources constrain service delivery capacity across regions. Facility capacity remained insufficient in many districts and provinces. These resource gaps affect both coverage and quality.

Suboptimal implementation of IMCI and early developmental screening undermines program effectiveness. Referral systems for growth and developmental disorders showed critical weaknesses. Children requiring specialized care often cannot access appropriate services. These gaps create treatment delays and missed intervention opportunities.

The presenter highlighted uneven community participation as another significant barrier. Service coverage varies substantially across provinces and districts. Some areas achieve high engagement while others struggle with low uptake. These disparities reflected both supply-side and demand-side factors.

Dr Wira's conclusion emphasized essential requirements for reducing disparities. Sustained capacity building must strengthen workforce skills and institutional capabilities. Stronger cross-sectoral integration can address social determinants beyond healthcare. Improved data use enabled evidence-based decision-making at all levels.

Her final recommendations stressed continued investment in primary healthcare systems. These investments support broad access to essential child healthcare. They also build a foundation for long-term health system strengthening. Such approaches align with economy level priorities and global development frameworks.

The presentation concluded that comprehensive strategies are needed to achieve improved outcomes. Integrated approaches had to address multiple determinants of child health simultaneously. Policy coordination across sectors enhanced intervention effectiveness. These efforts support progress toward economy-level targets and the Sustainable Development Goals.

2.2.4. Q&A Session

Dr Agussalim moderated the discussion session following the presentations. The Associate Professor from Makassar Health Polytechnic invited panelists to address audience questions. All speakers returned to engage with participants on key topics. The session facilitated deeper exploration of child health determinants.

Mr Manjilala asked why complementary feeding was not explicitly included in the conceptual framework. Mr Ryza explained that complementary feeding falls under the nutrient deficiency category. Each determinant encompasses multiple underlying factors not all listed in slides. This approach maintained clarity while prioritizing main determinants affecting child mortality.

Mr Manjilala observed declining breastfeeding prevalence in South Sulawesi and asked about maternal mental health. Ms Shanon confirmed that maternal mental health significantly influences breastfeeding interest, confidence, and willingness. Bidirectional relationships existed where breastfeeding pressure can also contribute to mental health problems. Healthcare providers needed empathetic approaches, understanding individual circumstances including social and work-related constraints.

She emphasized strengthening provider capacity among midwives, nurses, and postpartum care providers. Integrating mental health support into breastfeeding counseling improves outcomes for mothers and infants. Evidence-based assessment tools and continued postpartum follow-up enable timely interventions. This approach ensured mothers feel supported rather than judged throughout breastfeeding.

Mr Manjilala asked about solutions for Posyandu cadre shortages at urban village level. Dr Wira explained that urban villages represented the lowest government administration level. The Ministry collaborates with local governments and the Family Welfare Movement (PKK). Integrated Posyandu models enable cadres from different service areas to share responsibilities.

This integrated approach maximizes limited human resources through improved coordination and shared workloads. Cross-training and task-sharing strengthen overall service delivery capacity despite personnel limitations. The model demonstrated practical adaptation sustaining essential maternal and child healthcare. PKK mobilization and volunteer engagement enhanced reach and sustainability of programs.

Ms Runjati asked about global best practices applicable to Indonesia for child health. Ms Shanon responded that coordinated, system-wide solutions are essential as no single intervention succeeds. Improving access to high-quality emergency obstetric and newborn care required trained providers always. MPDSR systems reviewing maternal and perinatal deaths identified preventable factors for targeted improvements.

Strong midwifery systems are critical with midwives supporting women across reproductive health continuum. Health systems must empower midwives through comprehensive training, regular supervision, and clear scopes. Regulatory

frameworks should enable autonomous decision-making within their competencies for effectiveness. UNFPA supports these approaches in Indonesia and across the Asia-Pacific.

2.3. Session 2: Shortages in Child Healthcare Resources and Workforce

2.3.1. Presentation by Dr Samir Garg - World Health Organization Regional Office for the Western Pacific, based in Manila

Shortage of Qualified Child Healthcare Workers in Developing Economies

Dr Samir Garg delivered a structured policy-oriented overview on health workforce distribution challenges and strategic responses, with particular emphasis on implications for equitable child healthcare coverage. The presentation began by outlining the current situation, highlighting significant disparities in health worker density across regions. It underscored that the core problem lies not merely in absolute workforce shortages, but in persistent geographic maldistribution, with health professionals, especially medical specialists, concentrated in urban areas despite a substantial proportion of the population residing in rural settings. Contributing factors such as inadequate infrastructure, limited career prospects, and weak incentive structures in remote areas were identified as key drivers of this imbalance.

He then introduced a paradigm shift through Health Labor Market Analysis (HLMA) as an alternative to traditional supply focused workforce planning. HLMA was presented as an integrated framework that examines the interaction between population health needs, effective demand shaped by government financing and employment capacity, and workforce supply influenced by education systems and individual preferences. Through this lens, policymakers can better diagnose mismatches and apply targeted policy levers to ensure that health workers are available, motivated, and appropriately distributed.

Furthermore, the presentation emphasized the importance of bundled strategies to address rural and remote shortages, combining interventions across education, regulation, incentives, and personal and professional support. Rather than relying on single-policy solutions, the approach advocates coordinated packages that are fiscally sustainable and context-specific, including rural focused recruitment, expanded scopes of practice, transparent compulsory service schemes, and strengthened career pathways.

To illustrate feasibility, Dr Garg highlighted good practices and innovation, including economy-level workforce support mechanisms in the Philippines such as economy-level health workforce support system and the doctors to the barrios initiative, which have demonstrably increased physician deployment in underserved areas. Digital health solutions, including telemedicine and decision-support tools, were also discussed as enabling mechanisms to extend specialist input to remote facilities.

The presentation concluded by reaffirming that while health workforce maldistribution is largely driven by market forces, global evidence showed that coherent, well-

designed policy interventions can effectively mitigate these challenges and contribute to more equitable access to child healthcare across regions.

2.3.2. Q&A Session

Ms Ida Adhayanti moderated the discussion session and invited panelists to address audience questions on child health workforce sustainability. The session focused on strategic approaches to address shortages of qualified child healthcare workers in developing economies.

Dr Garg responded to a question on workforce priorities by emphasizing that economies must implement multiple, coordinated actions. He highlighted education, training, and workforce planning as equally important components. He urged economies to optimize skill mix across primary healthcare teams rather than focus on single professional categories. He stressed that investment at the primary healthcare level enabled broader health system improvements.

Mr Riza raised concerns about balancing workforce distribution with service quality, using antenatal ultrasound screening as an example. He explained that reliance on specialist limits service availability in rural areas and questioned whether midwives could safely perform ultrasound services. Dr Garg responded by emphasizing task shifting as an effective strategy. He stated that service quality depends on competency and training, not professional titles, and cited successful implementation in several economies, including THA.

Dr Ranjini shared Malaysia's experience implementing credentialing and privileging systems to expand workforce capacity. She explained that MAS defined minimum competency requirements for specific skills and trained medical officers and paramedics accordingly. She described continuous training, logbooks, supervision, and periodic re-credentialing as mechanisms to maintain service quality and sustainability. She emphasized that this approach reduced unnecessary referrals to hospitals while maintaining safety standards.

Mr Rashed emphasized aligning workforce strategies with epidemiological needs. He highlighted that child mortality patterns, particularly neonatal causes, must guide workforce planning and capacity building. He explained that well trained community health workers enable early diagnosis, functional referral systems, and reduced physician workload. He stressed that workforce development, policy alignment, and needs based planning must advance together. Dr Garg agreed with Mr Rashed and reinforced the importance of integrated strategies.

In closing, Ms Ida Adhayanti concluded that the discussion demonstrated child health workforce shortages represented strategic investment priorities rather than isolated staffing issues. She emphasized that sustainable child health systems required coordinated policy, workforce, and service delivery investments.

2.3.3. Focus Group Discussion Phase 1

Variability in Primary Child Healthcare Quality and How to Improve Child Healthcare Standards

Ms Ida Adhayanti, S.Si, M.Sc facilitated the FGD on child healthcare variability. Participants identified primary challenges affecting child healthcare in urban areas. These challenges included limited workforce capacity and high population density. Fragmented service delivery often led to public confusion and system inefficiencies.

Urban health systems faced complex coordination issues and traffic congestion. High patient volumes significantly increased waiting times during epidemic seasons. Socioeconomic disparities affect how parents utilize essential healthcare services. Parents' employment schedules often conflict with traditional clinic operating hours.

INA implements integrated Electronic Health Records from clinics to hospitals. The Mobile JKN application serves as a digital front door for patients. VN adopted digital health registries to track child health progress. These systems improve data accuracy and consolidate essential health resources.

MAS integrates the MySejahtera and MyVAS apps for vaccination appointments. BD utilized the BruHIMS system for stable electronic record keeping. The BruHealth app supports health tracking and reduces patient defaulters. These digital tools ensure strong continuity of care for children.

INA uses the MUAC screening approach for early malnutrition identification. MAS incorporates the pneumococcal vaccine into its immunization program at the economy level. THA included standardized developmental screening in its economy MCH handbook. These preventive measures help reduce child morbidity and mortality.

THA utilized skilled community health workers to deliver integrated primary care. USA strengthened maternal and child health programs through community partnerships. Skilled workers improve child survival outcomes in complex urban settings. Community engagement was a critical component for planning urban health programs.

JPN adopted online healthcare to increase care efficiency. High-quality infrastructure in cities attracted more healthcare professionals. Integrated service models reduced the burden on fragmented urban systems. Better access to modern technology ensured faster diagnosis for children.

Digitalization and integration represented key strengths for APEC member economies. Strong cooperation within government organizations is essential for innovation. Resource stability and income levels influence long-term health outcomes. Successful elements like integrated referral systems are scalable across the region.

Member economies required significant policy support and sustainable funding. Capacity building and technical training remained vital for health workers. Cross-

sector coordination helps overcome barriers in urban health delivery. Stakeholders must address digital inequality and user adoption challenges.

APEC knowledge sharing facilitated the exchange of effective health strategies. Participants suggested annual meetings and field visits to share lessons. These collaborations strengthen child health standards throughout the Asia-Pacific. Joint efforts ensured high quality and timely care for every child.

2.4. Session 3: Sharing Best Practices in Child Health

2.4.1. Presentation by Ms Nguyen Thi Thu Hang, Delegate from Viet Nam

Improving Access to Child Healthcare in Developing Economies: Case Studies of Successful Child Health Programs in Viet Nam

Ms Hang, a delegate from Viet Nam, presented a comprehensive overview of economy-level policy implementation for early childhood health and development, emphasizing its strategic relevance for long-term human capital formation. The presentation explained that Viet Nam has positioned early childhood (ages 0–8 years) as a economy development priority through the Holistic Early Childhood Care and Development (HECCD) Scheme implemented economy-wide under strong government leadership and a multisectoral framework.

She outlined the governance and policy architecture, noting that the HECCD Scheme is anchored in Prime Ministerial Decision No. 1437, with implementation led at the central level and translated into formal action plans across all 63 provinces and cities. Ms Hang emphasized the institutionalized coordination mechanism among the health, education, labor social affairs, and culture sectors as a critical enabler for consistent implementation down to local levels.

Regarding implementation strategies, Ms Hang described large-scale capacity building for health workers, educators, and child protection personnel, alongside economy wide parenting education delivered through community-based counseling models, mass media campaigns, and digital platforms. These integrated efforts were presented as key drivers of improved service quality and workforce readiness.

In presenting the results, Ms Hang reported that over 95% of children now access essential health, immunization, and nutrition services, while more than 90% benefit from holistic development services. She also highlighted substantial gains in human resource capacity, with a high proportion of relevant officials demonstrating improved HECCD-related knowledge and competencies.

At the same time, Ms Hang openly acknowledged remaining challenges, including slower planning processes at district level, limited capacity in mountainous and ethnic minority areas, uneven parenting literacy in some communities, and constraints related to sustainable financing at the provincial level.

The presentation concluded with forward-looking priorities, focusing on strengthening interventions during the first 1,000 days of life, expanding digitalization and cross-sectoral data integration, scaling up integrated community-based service models,

professionalizing frontline workers, and promoting child-friendly environments. Ms Hang emphasized that Viet Nam's HECCD experience offers a policy-relevant and scalable reference for APEC member economies seeking to link early childhood development with long-term social and economic resilience.

2.4.2. Presentation by Dr Ching-Fen Shen, M.D, Director General, Health Promotion Administration (HPA), Chinese Taipei

Improving Access to Child Healthcare: Case Studies of Successful Child Health Programs: A Perspective from Chinese Taipei

Dr Ching-Fen Shen from Chinese Taipei delivered a policy-focused overview on strengthening early childhood health and development systems amid demographic and epidemiological transitions. The presentation began by outlining key structural challenges, including an extremely low fertility rate, increasing maternal age, rising preterm and low-birth-weight births, persistent under-detection of developmental delays, and fluctuating maternal and infant mortality indicators. These trends were framed as interrelated risks to population health resilience and future human capital.

In response, the presenter introduced a set of flagship, system-wide solutions centered on a continuum of care from pregnancy through preschool age. Newborn screening was highlighted as the "first gate" of early intervention, including universal newborn hearing screening and economy wide congenital metabolic disorder screening, both designed to prevent avoidable morbidity and mortality through early detection.

The presentation further emphasized the establishment of an early identification and referral network, combining routine child development screening services for all children with multidisciplinary joint assessments for children suspected of having multiple developmental delays. To address the needs of high-risk infants, targeted home-visit and follow-up programs for preterm, low birth weight, and very low birth weight infants were presented as essential components of care for children with special needs. Digital innovations were positioned as key system enablers, supporting service integration, monitoring, and continuity of care.

At the same time, Dr Ching-Fen Shen acknowledged persistent barriers, including fragmented data systems, delayed detection and referral, workforce constraints, variability in follow up compliance, and challenges related to health literacy and social stigma among families.

Looking ahead, she outlined future priorities focused on continuous evidence-based optimization of services, strengthened cross-sectoral data integration and policy evaluation, sustained high quality screening with improved standardization and closed loop referral mechanisms, and enhanced health education and communication strategies to improve parental health literacy. Overall, the presentation underscored that Chinese Taipei's integrated, data-informed and prevention-oriented approach offers policy relevant insights for APEC member economies facing similar demographic pressures and aiming to safeguard early childhood development as a foundation for long-term economic and social sustainability.

2.4.3. Presentation by Rashed Shah, Dr.PH, M.Sc., MBBS - Lead Advisor, Child Health Department of Global Health Save the Children US, Washington DC Office, USA

Promoting Early-Life Health in Primary Healthcare Services

Mr Rashed from Save the Children presented early life health promotion through strengthened primary healthcare services. He positioned child health within community systems shaping survival, growth, and development outcomes. The presentation emphasized the first 1,000 days as a decisive window for lifelong wellbeing.

He explained that preventable diseases remained dominant causes of child mortality in vulnerable settings. Pneumonia, diarrhea, neonatal complications, and undernutrition disproportionately affect underserved communities. These outcomes reflected systemic barriers rather than solely clinical failures.

Mr Rashed highlighted geographic isolation and limited access as persistent obstacles to child healthcare. Overburdened facilities and workforce shortages further delay timely diagnosis and treatment. Community-level solutions were presented as necessary complements to facility-based care.

The presentation described integrating community case management with IMNCI service delivery models. This integration strengthened early detection, referral pathways, and continuity of child healthcare. Community health workers were emphasized as trusted providers within local care ecosystems.

Mr Rashed discussed digital innovations supporting frontline health workers in community settings. AI-enabled e-CDSS and mHealth tools enhanced diagnostic accuracy and real-time decision support. Evidence showed improved protocol adherence and monitoring across multiple implementation contexts.

Community engagement was emphasized as essential for building trust and sustaining care seeking behaviors. Social and behavior change communication strengthened acceptance of community-based health interventions. These approaches improved compliance and long-term service utilization.

In conclusion, Mr Rashed emphasized community health workers as foundational pillars of resilient health systems. He stressed scalability, contextual adaptation, and evidence-based digital tools for sustainable implementation. Policy alignment and sustained investment were identified as critical for improving child health outcomes.

2.4.4. Q&A Session

Mr Surat, a delegate from Thailand, described his economy’s efforts to expand healthcare access while strengthening health literacy. He highlighted three core strategies focusing on early contact, continuity of care, and behavior change interventions, contributing to a significant reduction of approximately 400,000 births at risk. He also described Thailand’s dual burden of stunting in rural areas and rising childhood obesity in urban settings, driven by geographic and information barriers. To

address this, Thailand combines traditional tools, such as the Maternal and Child Health Services (MCS) handbook and preterm baby care guides, with digital innovations including WhatsApp-based communication and hybrid parenting education models.

Responding to the discussion, Mr Rashed emphasized the importance of context-specific planning and scalability in adopting digital health solutions. He noted that while many digital applications showed promising results, not all are suitable for large-scale implementation without sufficient evidence. Mr Rashed cited AI-based digital stethoscopes as an example of emerging tools still under evaluation before broader adoption. He acknowledged Thailand's program as a strong example of scalable and integrated implementation.

Ms Hang commended the presentation and shared challenges in delivering community-based healthcare across diverse settings. She highlighted differences between urban, remote, and culturally diverse communities, noting that Viet Nam comprises 54 ethnic groups requiring tailored approaches. She expressed interest in learning from Mr Rashed's presentation to adapt interventions across varied community contexts.

2.4.5. Focus Group Discussion Phase 2

Challenges and Solutions for Improving Child Health in Their Respective Economies

Dr Zaahirah binti Mohammad facilitated the discussion on child health challenges. She represented the Ministry of Health, Malaysia, during the focus group session. Participants identified critical health issues across various APEC member economies. These included stunting, malnutrition, and rising obesity rates among children.

Stunting and malnutrition remained persistent problems for several member economies. Delegates from the following economies reported high infant mortality and stunting: Indonesia; Viet Nam. MAS also prioritizes addressing stunting and developmental delays in children. BD focused on managing obesity and increasing ASD cases.

THA highlighted developmental and behavioral problems as a major priority. VN focused on parenting programs to tackle malnutrition and growth. JPN emphasized the need for better access to pediatric specialists. Economies strive to improve early detection for common childhood disabilities.

A shortage of health professionals and therapists hampers regional service delivery. Limited health facilities and poor infrastructure create significant barriers to care. Overcrowded facilities often lead to delays in essential child treatments. Financing constraints further limit the expansion of healthcare.

Remote, mountainous, and jungle areas presented significant access challenges. Urban slums and fragile contexts create additional health risks for children. Vulnerable populations, including migrants and indigenous groups, faced many barriers. Disparities between urban and rural areas persisted across the region.

Poverty and parental education levels deeply impact child health outcomes. Busy parents may have limited knowledge or time for follow-up care. Traditional customs and religious beliefs influence vaccine acceptance and nutrition. Food security and housing conditions also play critical roles.

Paternal decision-making heavily influences a child's health and medical outcomes. Strategies now aim to increase parents' role as a decision-maker. Engaging parents helps improve the success of community led health interventions. This shift supports more holistic care within the household.

Many economies successfully utilize MCH handbooks. These handbooks serve as health passports from pregnancy until age six. The MCH handbook was described as effective in the following economies: Japan; Viet Nam. THA incorporates standardized developmental screening into their version.

INA implements eleven specific interventions to reduce stunting prevalence. VN uses the HECCD scheme. MAS utilized food baskets and formula milk for low-income groups. These targeted programs address the unique needs of vulnerable children.

Telemedicine bridges the gap for families living in rural areas. Japan; Thailand use remote monitoring and online help systems. These digital tools provide access to specialists without long travel. This technology improves health equity across diverse geographical landscapes.

BD uses the BruHealth app for personal health management. MAS integrates digital systems for vaccination scheduling and health records. INA employs a web-based system for real-time maternal death notifications. These applications streamline data sharing and patient communication.

A digital divide exists between young parents and rural populations. Low connectivity and high costs hinder technology adoption in some areas. Workforce readiness and sustainability are common challenges for digital integration. Member economies must improve digital literacy for both parents and providers.

Successful child health programs required collaboration between health and education. Global NGOs and the private sector provide essential funding and outreach. School health teams help identify disabilities and promote early literacy. Intersectoral networking is key to reaching the most marginalized groups.

Cross ministry frameworks ensure consistent service delivery for every child. Unified policies help sectors understand their role in health programs. Indonesia coordinates health initiatives through its Coordinating Ministry. Collaboration ensured all components of the nurturing care framework are met.

Participants suggested joint training and mentoring programs for APEC member economies. Member economies should share best practices and successful innovations regularly. Workshops help build technical capacities and foster regional cooperation. Raising public awareness remained a top priority for reducing disparities.

2.5. Session 4: Strengthening Health Systems and Innovation

2.5.1. Presentation by Mr Badwi Amin, UNICEF

Strategic Priorities 2026-2030 for Improving Child Healthcare Infrastructure: Envisioning the Future of Child Health and Well-being in Indonesia

Mr Badwi presented UNICEF's strategic vision for improving child healthcare infrastructure in Indonesia. His presentation aligned UNICEF's global health strategy with Indonesian government priorities for 2026-2030. The discussion outlined current health situations, strategic priorities, and collaborative implementation frameworks. This comprehensive approach addresses child health challenges through multi-sectoral partnerships and system strengthening.

UNICEF's Strategy for Health 2016-2030 envisions a world where no child dies from preventable causes. The strategy encompasses three strategic pillars: survive, thrive, and transform. Survival targets included maternal mortality below 70 per 100,000 live births. Newborn and under-five mortality targets are 12 and 25 per 1,000 live births respectively.

The thrive pillar focused on improving nutrition and strengthening access to healthcare. Environmental health and early childhood development programs support optimal child outcomes. The transform pillar addresses poverty reduction, access to education, and the prevention of violence. Safe water, sanitation, innovation, and legal identity complete the transformation framework.

Mr Badwi explained UNICEF’s life cycle approach to improving access to quality care across all stages of life. The approach integrates health with education, nutrition, HIV prevention, and social support. Health system strengthening improves infrastructure, vaccine supply chains, and WASH services. Special attention focused on vulnerable contexts and populations requiring additional support.

Indonesia’s long term development vision, “Towards a Golden Indonesia 2045,” guides strategic planning. The government outlined key economy priorities to support this vision. These priorities include strengthening human resource development, education, science, and technology. They also promoted inclusive development and support for populations facing higher risks.

The 2024-2029 government program prioritizes ensuring healthcare service availability for all Indonesian citizens. Program Seven improves the Economy-level Health Insurance system and provided medicines economy-wide. Quick-win programs include free health check-ups and reducing tuberculosis by 50%. Building fully equipped quality hospitals in every district expands infrastructure capacity.

The Ministry of Health proposed a comprehensive birthday screening program for all ages. This program targets 52,210,525 beneficiaries with age-appropriate health screenings. Children receive 10-20 screening types depending on their age group. BPJS covers 14 essential screening types including cancer, diabetes, and infectious diseases.

Additional quick-win programs advance ten referral hospitals from class D to class C-Madya. Priority locations included eastern Indonesia districts without adequate hospital infrastructure. Nine mobile ship hospitals would serve approximately 50,751 people in remote archipelagic areas. These deployments improve access to healthcare across different geographic areas.

Indonesia's life expectancy reached 74.18 years for women and 70.17 for men in 2023. The economy ranked sixth among ASEAN member economies in life expectancy indicators. Maternal mortality declined from 228 to 183 per 100,000 live births between 2005 and 2022. However, this remained above RPJMN target of 70 and SDG targets.

Obstetric hemorrhage and hypertensive disorders cause over half of maternal deaths. Neonatal mortality decreased from 32 to 9.3 per 1,000 live births (1991-2020). Under-five mortality dropped from 97 to 19.83 per 1,000 live births. Intrapartum events, respiratory disorders, and prematurity cause most neonatal deaths.

Immunization coverage faced challenges from vaccine hesitancy among families with young children. Forty-five percent worry about side effects while 47% faced family opposition. Half of hesitant families have higher education backgrounds. Rural areas experienced 11.7% accessibility challenges to immunization services.

Mr Badwi outlined health priorities aligned between global focus and Indonesian application. Primary healthcare strengthened facilities and rural outreach for universal access. BPJS economy-level insurance covers 201 million people for affordable healthcare. Digital health innovations improve immunization tracking and maternal health monitoring.

UNICEF's support focused on maternal, child, and adolescent healthcare. Priorities included emergency obstetric care, mental health promotion, and disease prevention. Reaching zero-dose children and strengthening immunization supply chains are essential. Health systems strengthening ensured sustainable service delivery and community health worker alignment.

Disease prevention targets malaria elimination, childhood tuberculosis, pneumonia, and diarrhea control. Environmental safety addressed lead exposure, air pollution, and injury prevention. Digital transformation improves mortality surveillance and evidence-based decision-making processes. Public health infrastructure strengthening built emergency preparedness and laboratory capabilities.

2.5.2. Presentation by Prof Naohiro Yonemoto, University of Toyama, Japan

Leveraging Technology to Support Child Health

Prof Naohiro Yonemoto presented innovations in digital health technologies for monitoring child health. The Department of Biostatistics faculty member from University of Toyama discussed telemedicine applications. His presentation examined mobile health interventions and drone technology for vaccine delivery. The discussion emphasized evidence-based approaches to implementing digital health solutions.

Current digital innovations included telemedicine platforms for nutrition consultations and child development monitoring. Mobile applications track immunization schedules and infant development using WHO's e-IMCI framework. Drone technology enabled vaccine delivery to hard-to-reach populations in remote areas. AI-based tools offer promising applications for enhancing child healthcare.

Prof Yonemoto emphasized that digital innovations required careful consideration of implementation challenges. Strategies must overcome digital infrastructure limitations through offline-first application designs. Sustainability required long-term budgets, maintenance planning, and technical support systems. User acceptance depends on comprehensive training for health workers and communities.

Multiple systematic reviews examined mobile phone interventions for improving immunization coverage outcomes. Studies from 2021-2025 analyzed SMS reminders and mobile health interventions globally. Evidence showed that mobile interventions significantly improved childhood immunization coverage by 16%. Voice messages combined with SMS proved more effective than SMS alone.

Reviews included studies from Africa, Asia, and Latin America with varied designs. Analysis of over 21,000 participants showed mHealth had odds ratio of 2.15. However, high heterogeneity existed across studies indicating context specific factors affect outcomes. GRADE assessments indicated moderate quality evidence supporting mobile health intervention effectiveness.

Prof Yonemoto presented evidence on SMS based interventions for enhancing antenatal care services. Twelve studies showed reminders in 91.7% and educational content in 75% of interventions. SMS interventions positively impacted antenatal care attendance and maternal health knowledge. Effectiveness varied based on intervention type, content frequency, and implementation approach.

Mobile health interventions improved breastfeeding initiation, exclusive breastfeeding, and children's health behaviors. Children showed better sleep, diet, physical activity patterns, and reduced screen time. The 2024 review of 131 studies found text reminders improved antenatal attendance. Child immunization timeliness improved but facility-based delivery findings remained inconclusive.

A 2023 systematic review found mobile technology highly effective for maternal and neonatal healthcare. Studies varied substantially in research designs and methodological approaches across settings. Challenges included technology misuse, rich poor discrimination, and phone ownership disparities. Public health practitioners must address confidentiality and safety of health data.

Prof Yonemoto discussed drone technology as an innovative solution for vaccine distribution challenges. Drones improve vaccine delivery in limited infrastructure regions while maintaining cold chains. The Vanuatu case study illustrated drone use for distributing routine childhood vaccines. The model incorporated multiple drone types, recharging stations, and cold chain limits.

Economic analyses in Ghana and India demonstrated cost-effectiveness of drone vaccine delivery. Results showed large potential cost savings and improved service quality. However, systematic reviews found significant deficiency in maternal healthcare drone studies. Future research frameworks should focus on maternal healthcare specific drone applications.

The presenter introduced Japan's experience with electronic Maternal and Child Health handbooks. The traditional MCH handbook enabled families to possess healthcare information at home. Electronic versions faced implementation challenges including legacy system integration and data standardization. Data protection, management, and address changes complicate maternal health record continuity.

Prof Yonemoto concluded that technology supporting child health showed almost universally positive effects. However, high heterogeneity indicates context-specific factors critically affect intervention outcomes. Localization is essential for achieving high acceptance and operability in communities. AI tools would introduce even more complexity requiring careful evaluation.

The presenter emphasized there is "no free lunch" in digital health implementation. Pilot studies in local contexts are essential before scaling interventions economy-wide. Implementation planning must ensure sustainability alongside existing legacy systems for gradual transition. Educational training programs prepare health workers and communities for technology adoption.

Monitoring and evaluation frameworks must assess both process and outcome indicators continuously. Technology implementation required ongoing assessment to identify challenges and adapt strategies. Evidence-based approaches ensure resources are invested in proven effective interventions. Comprehensive evaluation guides continuous improvement of digital health programs.

2.5.3. Q&A Session

Mr Agus asked Professor Yonemoto to explain heterogeneity despite technology's positive effects. Professor Yonemoto responded that outcomes vary widely across settings due to contextual factors. Heterogeneity reflected differences in digital infrastructure, connectivity, device access, and user literacy. Technology works best when aligned with local needs and supported by strong health systems.

Prof Rudi Hartono asked how Asia-Pacific lessons can strengthen future maternal and child health programs. He questioned how primary healthcare and referral systems improvements affect regional outcomes. His third question explored digital health innovations and community engagement for program sustainability. Prof Yonemoto addressed scaling challenges and technology diversity barriers in responses.

Scaling successful programs from pilots remained challenging due to technology diversity and infrastructure costs. Strengthening primary healthcare required well-designed pilots and strong connectivity between community services and hospitals. Member economies must prioritize based on most pressing maternal and child health

needs. Digital health innovations support monitoring and continuity but required meaningful community engagement for sustainability.

Mr Ryza asked about government-private sector responsibility sharing for affordable health technologies. He also questioned how APEC member economies should address widespread sugary product availability. Professor Yonemoto emphasized strong public-private collaboration sharing infrastructure, systems, budgets, and knowledge. Private sector roles need careful regulation to ensure affordability and equity.

Pilot projects required multisectoral support to sustain implementation beyond initial phases. Establishing minimum service standards and strengthening cross economy APEC collaboration support scalability. Knowledge sharing among member economies helps address different settings and varying levels of access. Mr Badwi also highlighted the impact of sugary products on childhood obesity and diabetes.

Stronger regulatory measures including taxation on high-sugar beverages have proven effective regionally. While easier for high-income economies, taxation remained critical for developing member economies. Indonesia faced long-term challenges with UNICEF pilots often unsustainable after completion. Reducing sugar consumption required shared responsibility among governments, society, and private companies through strong policies and multisectoral collaboration.

2.6. Session 5: Collaboration among APEC Member Economies

2.6.1. Presentation by Fatima Safira Alatas, Sp.A(K), Ph.D - Child Health Collegium, Indonesia

Interprofessional Collaboration to Improve Child Health: Providing Holistic Care for Children

Dr Fatima Safira Alatas focused on the strategic role of interprofessional collaboration (IPC) in addressing the increasing complexity of child health challenges, particularly in large, diverse health systems such as Indonesia. The presentation framed IPC as a structured and mutually accountable partnership among health professionals, sectors, and families, aimed at delivering holistic, patient- and family-centered pediatric care.

Dr Fatima contextualized the discussion within Indonesia's demographic and health system landscape, characterized by a large pediatric population, geographic fragmentation, and a high proportion of under-five mortality occurring during the neonatal period. These conditions underscored the need for coordinated, multi professional approaches across the continuum of care from community based prevention and early detection to hospital-based management and post discharge follow up.

She emphasized that advances in medical care have transformed many childhood conditions into chronic and multifactorial problems, requiring collaboration across clinical practice, education, and research domains. Evidence was presented demonstrating that effective IPC improves quality of care, patient safety, and system

efficiency, while also enabling shared learning, pooled expertise, and more sustainable service delivery.

A core component of the session addressed interprofessional competencies, highlighting clear role definition, shared leadership, communication, and accountability as prerequisites for effective teamwork. In pediatric care, parents and families were explicitly positioned as integral members of the interprofessional team, reinforcing a rights-based and family centered care model.

Drawing on Indonesia's experience, Dr Fatima illustrated how IPC has been operationalized across community, primary care, and hospital settings, including through Posyandu, primary health centers, referral hospitals, and early childhood education platforms. Particular attention was given to collaboration in growth and developmental monitoring, nutrition interventions, immunization, stunting management, and early referral systems. Community health cadres and nurse coordinators were highlighted as critical connectors between families and formal healthcare.

The presentation also acknowledged limitations to IPC, including professional hierarchy, role overlap, communication barriers, workforce constraints, and risks to professional identity. To address these challenges, strategic implementation principles were proposed, emphasizing selective use of collaboration, alignment of goals, trust building, outcome monitoring, and long-term institutional commitment.

The session concluded by reaffirming that interprofessional collaboration is not optional but essential for improving child health outcomes in complex health systems. Strong leadership, particularly from pediatricians as clinical experts and care coordinators, combined with empowered nursing roles, community engagement, and clear governance structures, was identified as key to sustaining effective IPC. The experience shared offers policy relevant lessons for APEC member economies seeking to strengthen integrated, people centered child health systems in support of long-term human capital development.

2.6.2. Q&A Session

Dr Miko from the Philippines raised a question regarding neonatal mortality, noting that reducing neonatal deaths is a shared priority. He asked whether the approach presented involved collaboration with maternal healthcare, particularly obstetricians and gynecologists, and whether such collaboration takes place at the hospital level, the community level, or both.

Dr Fatima explained that there is strong collaboration with fetomaternal specialists to support neonatal outcomes. Congenital conditions are detected during pregnancy and communicated early to neonatologists, especially in cases where complications during delivery are anticipated. Advanced technologies, including fetal echocardiography, are used to detect conditions before birth so that appropriate preparations can be made in advance.

She further explained that efforts focus on ensuring newborn survival and stabilization, with support extending beyond hospitals into the community. Primary healthcare services and general practitioners play a key role in identifying maternal problems that may lead to premature delivery. These detection and management efforts are supported by the Ministry of Health as part of a strategy to reduce neonatal mortality.

Dr Fatima also noted that team-based collaboration is reinforced through audit mechanisms. Audits are now conducted not only at hospital level but also at district level, allowing the health system to review neonatal deaths and strengthen system responses to prevent avoidable neonatal mortality.

Dr Rizana from Brunei Darussalam expressed interest in the approach presented, particularly regarding the role of trained gynecologists in performing ultrasound examinations. She explained that in Brunei Darussalam, maternal and child healthcare are not managed by general practitioners but by pediatricians. As a result, primary healthcare doctors have limited involvement in child health components, including growth monitoring and vaccination, which are mainly handled by pediatricians at the community level, even when services are located within the same facility.

Dr Rizana asked how general practitioners are trained in the presented model, particularly in relation to ultrasound use, growth monitoring, and follow-up. She sought clarification on whether these competencies are included as part of general practitioner training or provided through additional post training.

Dr Fatima explained that, in relation to child growth and development, general practitioners receive training before graduation through pediatric departments as part of their medical education. Core competencies for general practitioners included immunization, growth and development screening, and nutrition. However, they are not trained to perform ultrasound examinations during their undergraduate medical training.

She further explained that after entering primary healthcare practice, the Ministry of Health introduced additional capacity building for ultrasound use. She noted that the Ministry had supported ultrasound services at the primary healthcare level for approximately two years before the workshop. Obstetricians, gynecologists, and radiologists provide training to enable general practitioners to conduct antenatal care, while ultrasound examinations remained primarily under specialist supervision.

Dr Fatima emphasized that this approach responds to geographic and workforce challenges. In many district areas, including remote regions, the number of pediatricians and obstetricians is limited and not proportional to the needs of a large archipelagic context. In contrast, there are substantially more general practitioners distributed across the economy.

She concluded that, following discussion and policy consideration, the Ministry of Health decided to train general practitioners in basic ultrasound use to support early detection, allowing timely identification of maternal needs and referral when necessary.

2.6.3. Focus Group Discussion Phase 3

Knowledge and Technology Exchange among APEC Member Economies to Improve Child Health

Ms Sri Wahyuni Awaluddin facilitated the FGD on child health technology exchange. This session explored current knowledge sharing and technology transfer among APEC member economies. The discussion focused on improving child health through effective global collaboration.

Member economies utilize digital platforms and training programs for knowledge exchange. Technical assistance and joint research programs strengthen regional healthcare capabilities. However, many economies report a significant lack of exchange visits and fellowships. These existing mechanisms support continuous learning across the Asia-Pacific.

Child healthcare benefits most from these global collaborations. Immunization programs also showed significant improvement through shared knowledge and practices. INA specifically shared its success in comprehensive monitoring for children under five. These shared lessons help economies identify and adopt regional best practices. INA has successfully used the MCH handbook since 1994. This tool was originally adapted from JPN health monitoring systems. It tracks health data from the fetus stage until age six. The handbook now serves as an economy-wide source for information and monitoring.

Economies faced significant challenges in accessing advanced medical knowledge and technology. Funding constraints and a lack of skilled workforce hinder progress in many regions. Limited infrastructure and poor internet connections disrupt digital health implementation. Data system limitations also prevent effective monitoring and evaluation of health programs.

Imported technologies often fail because they do not fit the local context. Disparities between urban and remote areas create unequal access to services. Many mobile applications do not work well in areas with low connectivity. Experts suggest tailoring solutions to fit specific economy-level and community settings.

Vaccine hesitancy was reported by participants from the following economies: Indonesia; The Republic of the Philippines. This issue required strengthened communication strategies and improved public healthcare. Both traditional paper-based methods and new digital tools are necessary for documentation. Shared experiences help economies find common solutions for these complex problems.

Health data systems and research capacity are top priorities for regional development. Economies also prioritize pediatric training to improve the quality of child care. Digital health implementation remained essential for modernizing urban and rural healthcare. Participants aim to integrate multiple health information systems for better coordination.

Solutions from developed economies required core principles over raw technology. Health authorities should simplify processes while preserving the original purpose.

Small scale pilot tests must occur before any large-scale implementation. This approach ensured that the technology meets the needs of local families.

The APEC Child Health Knowledge Hub served as a central platform for exchange. Virtual learning platforms and communities of practice support continuous professional development. Partnerships between government, academia, and the private sector drove health innovation. These mechanisms allow for the sharing of clinical guidelines and best practices.

UNICEF and relevant non-governmental organizations provide vital technical and financial support. These partners facilitate the piloting of innovative digital tools and health platforms. Save the Children supports the testing of new mobile health approaches in member economies. Collaborative efforts help ensure that training modules meet recognized professional standards.

INA is currently adapting the Practical Approach to Care Kit (PACK) Child Guidelines. These guidelines support clinical decision-making and standardize primary healthcare. They empower health workers to provide evidence based care in resource limited settings. This system simplifies symptom based guides for various pediatric patient groups.

VN proposes training programs based on the “Nobody's Perfect" parenting model. These initiatives focus on holistic early childhood development and growth. Participants also highlight the need for social worker training in child protection. This training helps protect children from abuse and other social risks.

THA recommends a regional digital platform for pediatric health knowledge sharing. This platform would include AI-assisted screening for child development and nutrition. Other proposals included using SMS reminders and drones for vaccination coverage. These innovations aim to reach children in the most remote areas.

A unified digital framework allows for flexible and specific economy needs. Policy support for sustainable technology ensured the long-term success of health programs. Economies should strengthen existing programs instead of creating entirely new ones. Standardized monitoring and evaluation systems help track regional health progress.

Interventions must adapt to local economic, cultural, and healthcare contexts. Social workers play a vital role in strengthening primary healthcare services. Combining traditional practices with digital innovations creates a sustainable health framework. This holistic approach maximizes the impact of every health intervention.

Indicators for success included capacity improvement and better health outcomes. Member economies also measure the adoption rate of new health technologies. Improved maternal and neonatal death surveillance response is a key recommendation. These metrics help identify areas that required further investment and support.

Investing in early childhood ensured a resilient and globally competitive future workforce. Site visits and in-person discussions help resolve specific barriers to care. Member economies should regularly exchange knowledge on new medical technologies. These joint efforts strengthen the quality of services across the APEC region.

Ms Sri Wahyuni Awaluddin concluded the discussion on institutionalized child health learning networks. Knowledge and technology exchange remained a strategic pillar for regional development. Member economies commit to building sustainable and simple health solutions. These outcomes provide a roadmap for better child health in the future.

2.7. Session 6: Developing Workshop Recommendations

2.7.1. Focus Group Discussion Phase 4

Drafting Recommendations to Improve Child Health

Supartina Hakim, S.Ft.Physio., M.Sc led the discussion on drafting child health recommendations. This session focused on strategic priorities across the Asia-Pacific region. Participants identified critical areas for urgent healthcare attention.

Digital health and long term follow up represented top priorities for various economies. Access to Mental healthcare also required more integration into primary care. These initiatives aim to improve the quality of life for all children. Addressing developmental delays and childhood obesity remained a significant challenge. Health systems must manage respiratory infections and dental caries effectively. Accidental injury prevention also required immediate medical and social focus.

Limited training for local officers hampers child development services in remote areas. Suboptimal referral systems and funding gaps restrict synchronized program implementation. Low parenting knowledge regarding holistic health remained a major barrier.

Geographic barriers and infrastructure gaps often hinder access to healthcare for all. Socio-economic factors and limited workforce capacity create significant service disparities. Policy and regulatory constraints further complicate the delivery of essential services.

Fragmented data systems often lead to inconsistent child health monitoring. Some regions struggle with insufficient skilled labor and high patient volumes. Member economies work to harmonize diverse health data and reporting systems.

Universal health coverage schemes ensure essential healthcare for the most vulnerable populations. Economy-level immunization programs achieve high coverage through strong primary infrastructure. These programs provide vital vaccinations and growth monitoring without financial hardship. MCH handbooks track growth from pregnancy to early childhood. Traditional paper records are gradually transitioning into standardized digital applications. This transition ensured secure data storage and easier access for families.

Telemedicine and digital monitoring systems provide critical care in underserved regions. Newborn screening programs help detect health issues at the earliest possible stage. These successful interventions serve as models for regional adaptation and scaling.

Government agencies must provide stable funding and strong governance for health. They develop comprehensive policies to drive economy-wide child health promotion. Coordinating with diverse networks ensured efficient resource allocation for local hospitals.

The private sector supports public operations by sharing new health innovations. Enterprises and companies empower health workers through feasible and adapted training. These collaborations facilitate the adoption of modern technology in local settings.

Academic institutions conduct research to develop new bodies of medical knowledge. They cultivate specialized experts and co-design curricula for child health. Published evaluations provide evidence for the effectiveness of various interventions.

Non-governmental organizations and private associations provide critical funding and support. They focus on protecting children's rights and improving social services. These stakeholders ensure a multisectoral approach to complex health challenges.

Regional conferences and consensus papers facilitate effective knowledge and data sharing. Economies exchange systematic reviews on the effectiveness of digital health tools. Face to face forums allow for deeper dialogue on common health challenges.

Joint research partnerships foster specialized expertise in maternal and child health. Collaborative studies evaluate the cost effectiveness and scalability of new technologies. These efforts generate the evidence needed for informed policy decisions.

Member economies shared strategies for overcoming infrastructure challenges in remote areas. They develop "offline first" applications to ensure service continuity without internet. Standardizing digital infrastructure enabled secure cross-border knowledge sharing and benchmarking.

Sharing data from pilot projects, like drone delivery, inspires regional innovation. Economies discuss frameworks for data management, privacy, and system integration. These discussions align policies to protect sensitive patient information.

Developed economies offer technical support and evaluation to help build capacity. They shared specialized training and human resource development strategies with partners. Financial and budgetary planning support ensured the viability of new programs.

Exchange programs and study visits allow for hands on learning from experts. Research partnerships and technical exchanges strengthen the primary healthcare

foundation. These mechanisms promoted continuous learning across the entire Asia-Pacific.

High potential technologies included telehealth, artificial intelligence, and mobile health applications. Digital monitoring systems streamline data collection and improve child health outcomes. These tools help bridge the gap between urban and rural care.

Governments must secure long term budgets for the technical maintenance of platforms. Sustainable planning requires moving beyond initial pilot funding for lasting impact. This ensured the continuous operation of essential digital health systems.

Comprehensive training for health workers and parents ensured high technology acceptance. Users must understand how to operate new tools like digital handbooks. Educational programs are critical for the successful adoption of health innovations.

Hybrid systems allow digital tools to coexist with legacy paper records. This gradual transition prevents data loss and ensures service continuity. It provided a reliable safety net during the modernization of health systems.

Ms Supartina Hakim emphasized the strategic value of knowledge and technology exchange. Member economies commit to evidence-driven scaling of successful health interventions. Joint efforts aim to strengthen the coverage and quality of child services.

2.8. Session 7: Final Presentation of Workshop Recommendations

2.8.1. Presentation by Anna Kurniati, S.KM., M.A., Ph.D - Directorate of Health Human Resources Provision, Ministry of Health, Indonesia

Dr Anna Kurniati presented the final workshop recommendations for APEC member economies. She represented the Indonesian Ministry of Health during this final session. Her presentation highlighted evidence-based strategies to strengthen regional health systems. These recommendations address critical issues like stunting and malnutrition.

APEC member economies strengthen policies for optimal early childhood development. Member economies promoted parental empowerment to reduce childhood obesity. Government agencies coordinate with academic institutions for better collaboration. Multisectoral approaches tackle complex health challenges across the region.

Member economies should expand the adoption of digital health solutions. Integrated information systems facilitate regional knowledge sharing. Health authorities strengthen professional development for all health workers. These programs build digital competencies to ensure quality services.

Universities integrate child health priorities into research and teaching. Academic institutions generate evidence-based solutions for practical policy design. Regional

partners prioritize sustainable and culturally appropriate health interventions. Collaborative learning platforms support the exchange of best practices.

2.8.2. Presentation by Dr Carlos Chicalote Castillo - Ministry of Health, Mexico

Actions and Projections 2025–2026: A Case Study from Mexico

Dr Carlos Chicalote Castillo presented Mexico's economy-level approach to child health for 2025–2026, highlighting integrated, evidence-based strategies led by the Technical Sub Directorate of Child Health under CENSIA. The presentation positioned child health as a multisectoral priority, spanning early childhood development, nutrition, disease prevention, and health system governance.

The presentation emphasized early childhood development as a foundational investment, focusing on coordinated actions from pregnancy through early childhood. Dr Castillo described economy wide implementation of the Child Development Assessment (EDI), large scale workforce training, and collaboration with education and social sectors to strengthen developmental surveillance, early stimulation, and timely referral throughout the economy.

Nutrition and breastfeeding protection formed another core pillar of the strategy. The presentation outlined capacity building initiatives for state level nutrition officers, strengthened monitoring of the economy level breastfeeding code, and targeted training on acute malnutrition management. These efforts aimed to improve nutritional status while reinforcing preventive care within primary healthcare.

Dr Castillo also highlighted strengthened mechanisms for child mortality reduction, particularly through the operation of the Committee on Strategies for the Reduction of Child Mortality (COERMI). The presentation underscored improvements in mortality data quality, interinstitutional coordination, and systematic analysis of deaths related to acute diarrheal and respiratory infections to inform corrective actions and policy alignment.

The session concluded with forward looking initiatives, including policy updates, economy level guidelines, digital monitoring, and expanded care models such as the First 1000 Days program and services for children in contexts of human mobility. Overall, the presentation illustrated how integrated governance, data driven decision making, and sustained workforce development support Mexico's efforts to improve child health outcomes and reduce preventable morbidity and mortality.

2.8.3. Q&A Session

Ms Hang from Viet Nam expressed interest in adopting the external plan presented, particularly for application in an intermediate context. She highlighted appreciation for the first 1,000 days initiative for children, noting that the approach addressed both child survival and overall well-being. She further observed that the initiative is well aligned with holistic early childhood development and care, and expressed interest in learning from the experiences shared.

Dr Carlos responded by welcoming the interest and explained that the external plan was designed to be adaptable across different contexts. He emphasized that the first

1,000 days approach integrates health, nutrition, and developmental components to support holistic early childhood development. Dr Carlos also noted that knowledge sharing and cross economy learning are essential, and encouraged continued exchange of experiences to support effective adaptation and implementation.

2.9. Closing Session

2.9.1. Closing Remarks

The closing remarks were delivered by Dr Muhammadong, representing the Head of the South Sulawesi Provincial Health Office. He formally closed the APEC meeting on child health, emphasizing the forum as a strategic platform for dialogue and knowledge exchange, and reaffirming child health as a critical investment in human capital.

He highlighted that the seven sessions addressed health system resilience and integrated health technologies, with member economies committing to strengthen health systems and health workforce capacity. The meeting generated actionable recommendations for APEC member economies, reflecting a shared commitment to safeguarding child health.

Dr Muhammadong expressed high appreciation to the Makassar Health Polytechnic for its leadership and extended his gratitude to APEC for supporting regional health workforce development. He concluded by urging delegates to translate dialogue into concrete actions and measurable outcomes, providing a foundation for sustained collaboration on child health across the region.

3. OBSERVATIONS AND ANALYSIS

Before the workshop began, participants completed a pre-workshop survey integrated into the registration form. This pre-workshop survey served as a critical baseline assessment designed to align the workshop's objectives with participants' actual needs, experiences, and current realities related to child health.

After the workshop, participants completed a post-workshop survey to assess overall satisfaction, perceived usefulness of the sessions, and key recommendations for improvement. The post-workshop responses provide insights into participants' learning experiences and inform future enhancements of APEC child health activities.

Survey data were processed using JASP for statistical analysis and pivot tables in Microsoft Excel for data organization and summary reporting.

Table 1. Survey response summary

		Response	
	Gender	**Number**	**Percentage**
Pre-Workshop (n=77)	Male	33	42.9%
	Female	44	57.1%
Post-Workshop (n=32)	Male	11	34.4%
	Female	21	65.6%

3.1. Pre-Workshop Survey Responses

Based on the survey data from 77 participants, the following table summarizes the key insights regarding child health management in the APEC region. Participants are generally familiar with the topic but face significant systemic and resource-based challenges.

Table 2. Summary of Child Health Management Pre-Workshop Survey

Category	Key Findings/Most Frequent Responses	Rate
Topic Familiarity	Participants are somewhat familiar with child health management.	45.5%
Primary Expectation	Attendees primarily seek to update their knowledge on child health.	22.1%
Significant Impact	Increased child morbidity and mortality represent the most significant impact.	11.7%
Contributing Factor	Low public awareness and limited parental education drive the health burden.	11.7%
Major Cost Component	Direct medical costs (treatment, medication, hospitalization) are the primary expense.	14.3%
Daily Practice Challenge	Limited resources and facilities pose the greatest obstacle for providers.	14.3%
Main Strategy	Economies rely most on public health campaigns for promotion and prevention.	10.4%
Primary Approach	Strengthening prevention, health promotion, and parental education is considered vital.	15.6%
Strategy Status	Economy-level strategies exist but are not yet fully effective.	57.1%
Lifestyle Promotion	Public awareness campaigns are the leading tool for promoting healthy habits.	18.2%
Health Monitoring	Regular screenings (growth monitoring, immunization) are the main support method.	18.2%
IPC Application	Interprofessional Collaboration (IPC) is implemented only in limited areas.	53.2%
Role Definition	Roles are somewhat defined but often result in overlapping responsibilities.	61.0%
Management Barrier	Lack of training or awareness among workers hinders effective management.	11.7%
Strengthening IPC	A comprehensive mix of policy, training, data, and leadership is required.	9.1%

3.2. Post-Workshop Survey Responses

3.2.1. Overall Assessment of the Workshop

Participants rated the overall workshop experience as excellent, indicating very high satisfaction levels. They perceived the workshop theme as highly relevant to current child health challenges. Participants positively evaluated the quality of speakers, facilitators, content, and session structure. Most respondents confirmed that the workshop achieved its objectives and supported meaningful interaction.

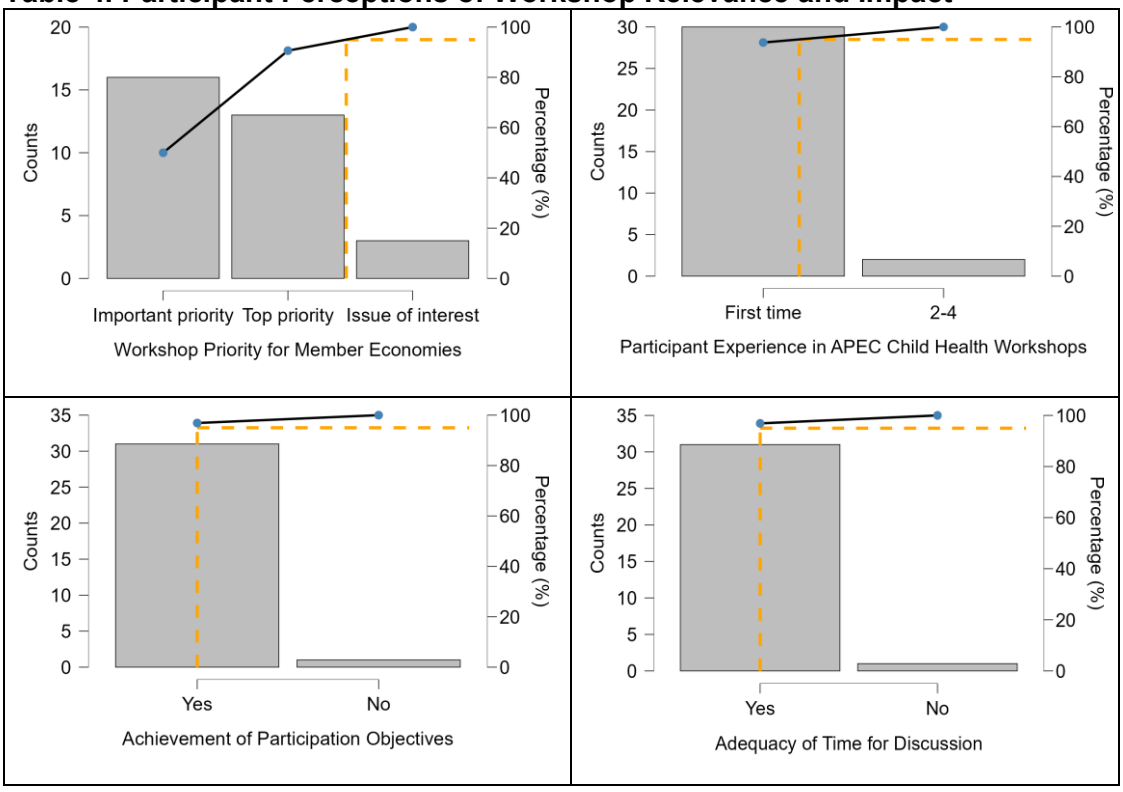
Table 3. Summary of Post-Workshop Overall Assessment

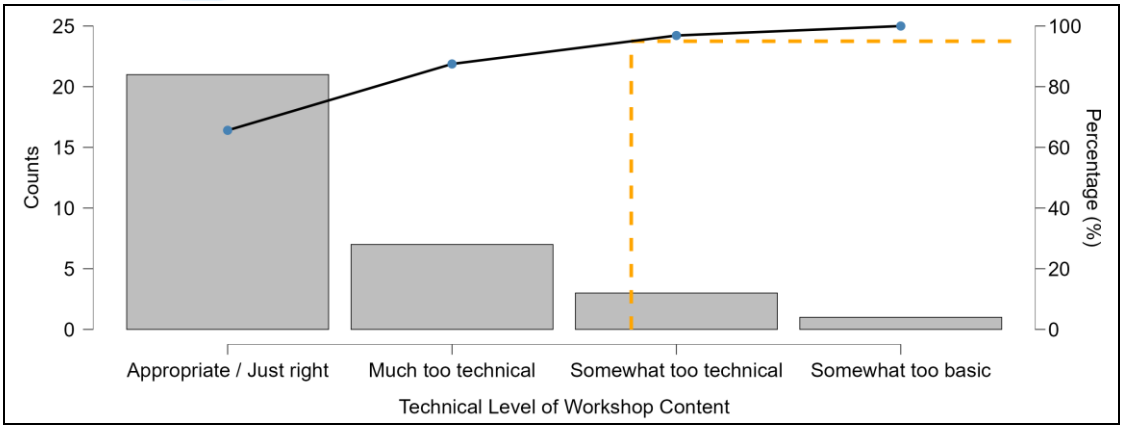
	Excellent	Good	Satisfactory	Unsatisfactory	Poor
Overall workshop experience	81.3%	6.3%	12.5%	0%	0%
Relevance of the workshop theme to child health challenges	81.3%	6.3%	12.5%	0%	0%
Quality of speakers and facilitators	71.9%	18.8%	9.4%	0%	0%
Workshop content and structure	71.9%	18.8%	9.4%	0%	0%
Time allocated for discussions	71.9%	6.3%	18.8%	3.1%	0%
Achievement of workshop objectives	71.9%	15.6%	9.4%	3.1%	0%
Opportunities for interaction and participation	78.1%	9.4%	12.5%	0%	0%

3.2.2. Relevance and Impact

Participants recognized the workshop as a priority issue for their respective economies. They reported achieving their primary objectives through active participation in workshop sessions. Participants considered the technical level appropriate and aligned with professional needs. Most respondents indicated strong potential to apply the knowledge gained in their work.

Table 4. Participant Perceptions of Workshop Relevance and Impact





3.2.3. Assessment of Workshop Sessions

Participants rated all workshop sessions highly, with most sessions receiving excellent evaluations. Sessions on child health challenges and workforce shortages received particularly strong ratings. Knowledge-sharing and innovation-focused sessions effectively engaged participants across economies. Final recommendation sessions successfully consolidated learning and encouraged regional collaboration.

Table 5. Summary of Post-Workshop Session

	Excellent	Good	Satisfactory	Unsatisfactory	Poor
Session 1: Challenges in Child Health in Developing Economies	81.3%	9.4%	6.3%	3.1%	0%
Session 2: Shortages in Child Healthcare Resources and Workforce	81.3%	9.4%	9.4%	0%	0%
Session 3: Sharing Best Practices in Child Health	81.3%	12.5%	6.3%	0%	0%
Session 4: Strengthening Health Systems and Innovation	81.3%	9.4%	6.3%	3.1%	0%
Session 5: Collaboration Among APEC member economies	75.0%	15.6%	9.4%	0%	0%
Session 6: Developing Workshop Recommendations	71.9%	18.8%	9.4%	0%	0%
Session 7: Final Presentation of Workshop Recommendations	71.9%	21.9%	6.3%	0%	0%

3.2.4. Analysis of Open-Ended Survey Responses

Based on the feedback from the workshop participants, the analysis of the results reveals several key insights regarding the value of the event and areas for future growth.

Participants Value Knowledge Exchange and Networking

Participants emphasized that the exchange of best practices, innovations, and challenges among APEC member economies provided the most significant value. They specifically highlighted the importance of:

a. Networking with experts to build a community of practice for child health.

b. Engaging in practical exercises and expert guided discussions that led to the development of actionable workshop recommendations.

c. Learning about digital innovations and successful programs from other developing and developed economies.

Delegates Recommend Operational and Content Enhancements

To improve future workshops, delegates suggested several strategic and logistical adjustments:

a. Improve preparation: Organizers should send worksheets to participants in advance to allow for more comprehensive preparation.

b. Bridge language barriers: Several participants recommended providing translators or interpreters (specifically for Spanish and other languages) to assist those who do not speak English fluently.

c. Refine discussion methods: Delegates suggested allocating more time for FGD and using smaller, more interactive groups to facilitate deeper cross-economy dialogue.

d. Expand case studies: Participants expressed a desire for more case studies from developed APEC member economies to provide broader benchmarks for success.

Respondents Identify Critical Future Activities

The feedback outlines a clear roadmap for follow-up activities to sustain the workshop's momentum:

a. Leverage Technology: Participants prioritized the creation of digital technology platforms or online websites to share best practices and support child health management.

b. Strengthen Capacity: Delegates called for workforce training programs, field visits to successful child health centers, and collaborative research on issues like malnutrition and mental health.

c. Focus on Specific Health Topics: Future activities should target the first 1000 days of life, childhood obesity, non-communicable diseases, and the impact of climate change on maternal and child health.

d. Align Policies: Stakeholders suggested using the APEC HWG to coordinate policies on immunization and emerging health threats.

High Commitment to Future Engagement

A significant majority of participants confirmed their intention to participate in future APEC child health activities. While some noted that their attendance depends on supervisor approval or official assignments, the overall sentiment reflects a strong desire for continued regional collaboration.

3.3. Key Workshop Takeaways

Based on the workshop discussions and the survey data provided in the sources, the following key takeaways summarize the participants' learning outcomes and strategic insights:

a. Deepened Understanding of Health Disparities: Participants gained a comprehensive understanding of disparities in child health indicators, such as infant mortality rates (IMR), and the social determinants influencing these outcomes. This addresses the baseline concern where 11.7% of participants initially identified increased morbidity and mortality as a primary impact in their economies.

b. Valorization of Knowledge Exchange: Delegates successfully exchanged and reflected on key issues, challenges, and successful initiatives. This shared learning and exchange of best practices rated as "excellent" by 81.3% of participants served as a foundation for future program development and the creation of a community of practice.

c. Strategic Strengthening of Health Systems: Participants learned evidence-based strategies and strategic steps to develop effective child health infrastructure. This is critical given that 57.1% of respondents reported that their current economy-level strategies are not yet fully effective.

d. Focus on Contextual and Local Realities: The workshop emphasized the importance of designing and implementing programs tailored to local needs. Participants identified the need for broader benchmarks and case studies to help adapt successful models to their own unique socio-cultural and economic contexts.

e. Motivation for Digital Transformation: Participants explored the potential and applicability of technology within their local environments. They are now motivated to adopt digital solutions, such as technology platforms for sharing best practices, to overcome resource shortages and fragmented data systems.

f. Commitment to Cross-Sector Collaboration: The sessions reinforced the need to strengthen collaboration among academic institutions, government, the private sector, and NGOs. Moving forward, participants aim to move beyond the "limited" IPC currently reported by 53.2% of respondents to enhance the sustainability of health initiatives.

g. Empowerment through Workforce Capacity Building: By addressing the 14.3% of providers who face daily obstacles due to limited resources, the workshop empowered the health workforce to utilize new competencies and task-sharing approaches to improve service delivery.

h. Sustained Regional Engagement: A significant majority of participants confirmed their intention to participate in future APEC activities, reflecting a strong commitment to regional cooperation in managing emerging health threats and clinical priorities like the first 1000 days of life.

4. RECOMMENDATIONS FROM THE WORKSHOP

Workshop participants proposed these key recommendations for APEC member economies. These steps focus on strengthening child health systems and regional collaboration. The following points outline strategic actions for sustainable health outcomes.

a. Strengthen Child Health Systems: APEC member economies strengthen evidence-based strategies and policies for children. Member economies promote parental empowerment to address malnutrition and obesity. These systems prioritize interprofessional collaboration and quality child health services. Strategies support optimal early childhood growth in diverse settings.

b. Promote Cross-Sector Collaboration APEC member economies promote stronger coordination among various government agencies. Healthcare providers, academic institutions, and community organizations collaborate effectively. Multisectoral approaches address complex child health challenges across the region. Stronger partnerships ensure efficient health service delivery for everyone.

c. Advance Technology and Digital Transformation Member economies expand the adoption of digital health solutions. Solutions include mobile applications, telehealth, and digital MCH handbooks. Integrated systems facilitate regional knowledge sharing and continuity of care. Institutionalized data use improves health planning across APEC member economies.

d. Enhance Healthcare Workforce Capacity Health authorities and training institutions strengthen continuous professional development. These bodies build digital competencies among various healthcare workers. Programs ensure the delivery of quality and people-centered services. Digital literacy improvements increase the capacity of community health workers.

e. Integrate Priorities into Higher Education Universities integrate child health priorities into teaching and research. Academic institutions generate evidence-based solutions for practical policy development. These solutions translate into scalable interventions and community programs. Researchers prioritize innovation to solve specific child health issues.

f. Support Regional Cooperation APEC member economies prioritize sustainable and culturally appropriate interventions. Regional cooperation mechanisms support capacity building and knowledge exchange. Collaborative learning platforms help economies share best practices effectively. These partnerships focus on scalable child health programs across the region.

APPENDICES

A. Workshop Agenda

The workshop agenda is available at the following link:
https://drive.google.com/file/d/1qlFYHMchpCkseZoB1cq6UFDm1yT2eaV6/view?usp=sharing

B. Speaker Biographies

Speaker and moderator CVs are available at the following link:
https://drive.google.com/file/d/1f62tl-MUfqmfSdHejwgi5Eewvy3Zm8JC/view?usp=sharing

C. Presentation Materials

Workshop presentation materials are available at the following link:
https://drive.google.com/drive/folders/1Q12b-UdG1QxcwyVg19hjBHZiR9uwlbNo?usp=sharing

D. Survey Questionnaire

D.1 Pre-Workshop Questionnaire

Registration and pre-survey questionnaire can be accessed at the following link:
https://docs.google.com/forms/d/e/1FAIpQLSdHvMr08LEoIJHfUPAQwURTszeIvXi9rOePGtKYeDD6LYzlGg/viewform?usp=sharing&ouid=115547798758224675248

D.2 Post-Workshop Questionnaire

Post-workshop questionnaire is available at the following link:

https://docs.google.com/forms/d/e/1FAIpQLScyqF7vu7H5E3letjVbwxTN_-C5XngApgDNZ1QSVOQ8eAoIKw/viewform?usp=sharing&ouid=100694282183662671508