Hlty Beings Solutionec

Real-World **Primary Healthcare (PHC) Transformation** to Tackle Child Obesity – Policy Paper

Executive Summary

The rising prevalence of childhood obesity has emerged as a significant global public health concern, with profound implications for both individual health and public health systems. Obesity, once associated primarily with affluent populations, is increasingly affecting low- and middle-income countries, including India. As highlighted by the UNICEF Child Nutrition Global Report 2025, obesity has overtaken undernutrition as the most common form of malnutrition globally among school-aged children and adolescents.[1]

This shift is evident in India, where the obesity rates among children have risen sharply, exacerbating the burden of noncommunicable diseases (NCDs) like diabetes, cardiovascular diseases, and certain cancers. India is projected to be home to over 27 million children and adolescents living with obesity by 2030, representing 11% of the global burden.[2]

This policy paper aims to highlight the urgent need for Primary Health Care (PHC) transformation to address childhood obesity effectively. By focusing on integrating obesity management into the PHC framework, this paper will explore sustainable and inclusive strategies that can be implemented at the community level, with particular emphasis on low- and middle-income settings like India. The goal is to propose a real-world, actionable pathway for the integration of childhood obesity management within PHC systems, acknowledging the complexity of the issue while focusing on feasible interventions.

Justification and Purpose

India's Childhood Obesity Burden: Problem and Epidemiological Profile

The prevalence of childhood overweight and obesity has demonstrated a consistent upward trajectory over the past two decades. According to the National Family Health Survey (NFHS-6), India continues to face a substantial early-life overweight burden: when the latest under-five overweight indicator is translated into absolute population terms, nearly 1.5 million children under five are already living with excess weight, underscoring the need for early prevention before unhealthy weight trajectories consolidate later in childhood.[3-4]

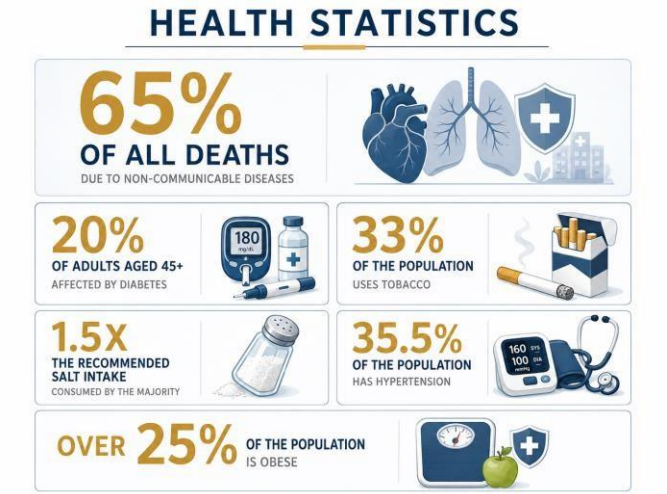
The Comprehensive National Nutrition Survey (CNNS, 2016-2018) reported prevalence of overweight and obesity ranging from 2% among children aged 0-4 years to 5% among children and adolescents aged 10-19 years.[5]

According to the World Obesity Atlas 2024, about 33.8 million children aged 5-19 years had high BMI, which means 9% of children in this age group were overweight. By 2035, the prevalence is expected to grow to 24%, with more than 83 million children affected. Overweight prevalence is higher (14%) in several southern states and more urban or better off regions such as Tamil Nadu, Goa, and Delhi, while it is lower in many north and central states such as Bihar, Madhya Pradesh, Uttar Pradesh, and Jharkhand.[6]

As more children become obese, health problems related to obesity also increase. In 2020, 2.2 million children with high BMI had high blood pressure caused by obesity, and this number is expected to grow to 6.4 million by 2035. The number of children experiencing hyperglycaemia due to obesity is projected to increase by 2.5 times, rising from 1.1 million in 2020 to 2.8 million by 2035. In addition, the prevalence of children with low HDL cholesterol levels attributable to obesity is expected to more than double, from 3 million in 2020 to 7.8 million by 2035.[7]

This is particularly concerning given that India ranks 99th out of 183 countries in obesity preparedness.[8] Obesity likely persists into adulthood, leading to a greater burden on healthcare systems and society.

The economic burden of childhood obesity extends beyond direct health costs. Current obesity-related costs are estimated at USD 29 billion annually (1% of GDP), with projections that without intervention, these costs will escalate catastrophically to USD 839 billion (2.5% of GDP) by 2060, representing a 28-fold increase.[9]



Rising Burden of Non-Communicable Diseases in India[17]

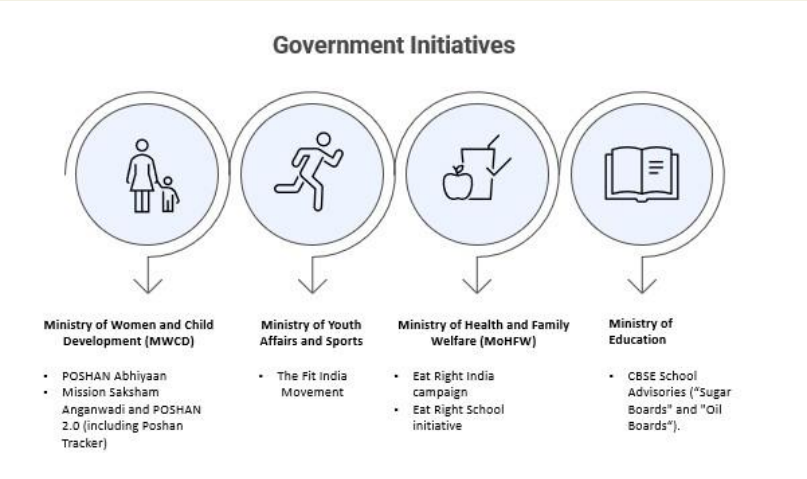
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Obesogenic Environments

Childhood obesity is a systemic, multifactorial condition shaped by the interaction of biological susceptibility with social, economic, physical, and commercial drivers. Obesogenic Environment is defined as the sum of influences that the surroundings, opportunities, or conditions of life have on promoting obesity in individuals or populations.[10]

India's rising obesity burden is being driven by a cluster of interacting obesogenic forces that extend well beyond individual biology. Diets are shifting toward higher fat, sugar, and ultra processed packaged foods, while physical activity is declining due to sedentary routines and rapid urbanization that reduces walkable spaces, green areas, and safe active commuting. At the same time, Indians tend to develop higher body fat and central adiposity at lower BMI, increasing cardiometabolic risk earlier, with genetics and chronic systemic inflammation, including effects of air pollution, further amplifying vulnerability.[11]

Current Government Policies and Initiatives in India



Government Initiatives Supporting Childhood Obesity Prevention in India

Note: This figure was drawn using Napkin

India has begun to mobilize a multi sector response to unhealthy diets and low physical activity among children. Key initiatives that can support obesity prevention include POSHAN Abhiyaan and Mission Saksham Anganwadi and POSHAN 2.0, the Fit India Movement, and FSSAI's Eat Right India campaign, which collectively strengthen nutrition counselling, promote healthier food choices, and encourage routine physical activity. [12]

In 2025, CBSE also issued school advisories introducing simple behaviour change tools such as "Sugar Boards" and "Oil Boards" to discourage excessive sugar and oil intake in school settings. This aligns with school health platforms such as FSSAI's Eat Right School initiative and the Ayushman Bharat School Health and Wellness Programme, where trained Health and Wellness Ambassadors support structured health education on nutrition and healthy lifestyles in CBSE affiliated schools.[13]

However, childhood obesity is still not consistently treated as an explicit programme target within major nutrition schemes. POSHAN 2.0 continues to prioritise stunting, wasting, underweight, and anaemia, supported by the Poshan Tracker.[14] While this system can help identify children who are overweight through routine growth monitoring, prevention and early management of childhood obesity are not yet framed as a core programme outcome with dedicated targets, service protocols, implementation checks, monitoring of programme rollout, and accountability.

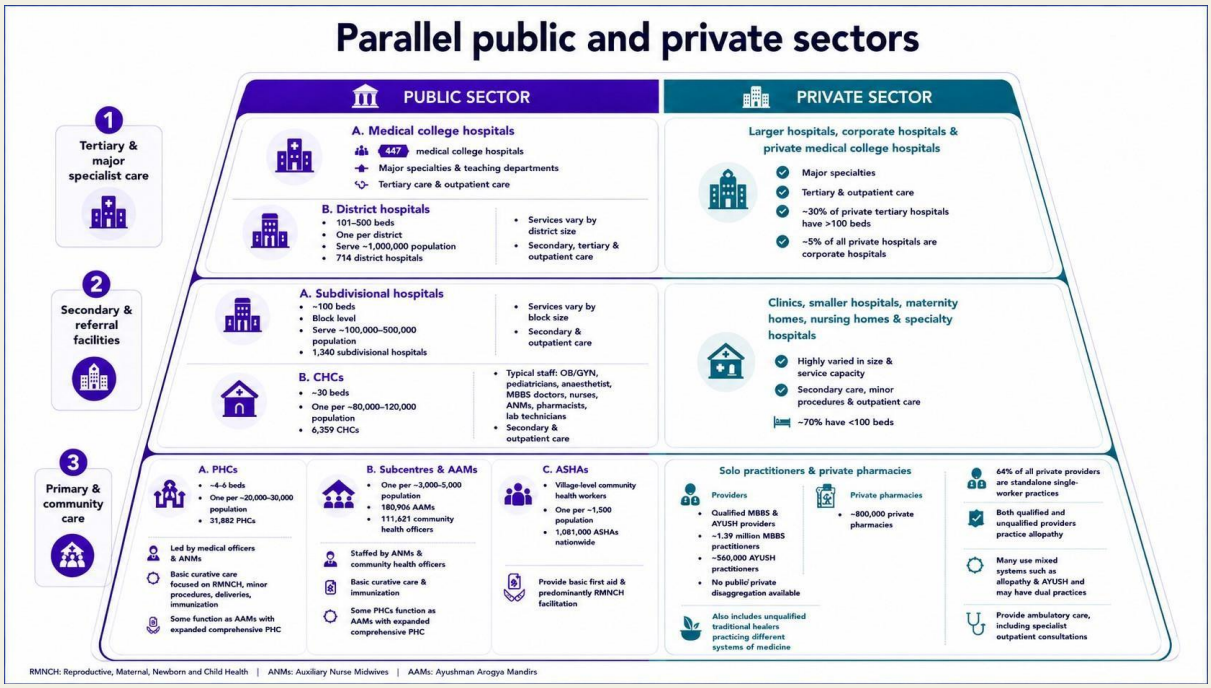
India's Healthcare Structure

India's healthcare system operates on a multi-tiered framework, with Primary Health Centres (PHCs) and Sub-Health Centres (SHCs) serving as the cornerstone of community health delivery. These centres serve as the first point of contact for rural and urban populations, providing essential health services such as maternal and child health (RMNCH+A), immunization, and treatment for common ailments.

In February 2018, the government announced the creation of 1,50,000 HWCs by transforming existing SHCs and PHCs. These HWCs are envisioned as the base pillar of Ayushman Bharat, offering Comprehensive Primary Health Care (CPHC) and ensuring that healthcare services are brought closer to people's homes. The transformation aims to expand the scope of services to include both maternal and child health (RMNCH+A) as well as non-communicable diseases (NCDs), ensuring access to free essential drugs and diagnostic services. Through this initiative, the government seeks to strengthen the foundation of primary healthcare, making it more accessible and inclusive for India's vast population.[15]

In 2023, the Health and Wellness Centres (HWCs) were renamed *Ayushman Arogya Mandirs*. These grassroot centres play a vital role in addressing unmet healthcare needs and improving care quality at the community level, ensuring a seamless continuum of care from primary to secondary and tertiary healthcare facilities.[16]

Private primary care exists, but it is not structured like government PHCs with fixed catchment areas, assigned populations, and a standardized package of services. Instead, it is made up of nearby first contact providers such as solo doctors (MBBS and AYUSH), small clinics, maternity and nursing homes, and pharmacies, and people choose to visit them based on access, cost, and trust. For early catchment area, target must be both private and public primary care institutions.



India's Healthcare System Across Public and Private Sectors

Adapted from Patel et al., "The Lancet Commission on a citizen-centred health system for India" [17]

Note: This figure was drawn using AI Tools

Double And Triple Burden of Malnutrition

Evidence from India's Comprehensive National Nutrition Survey shows that this overlap is not rare. Triple burden malnutrition affected 14.4% of children aged 5 to 9 years and 12.7% of adolescents aged 10 to 19 years, while about half of children and adolescents experienced at least two concurrent forms of malnutrition. Hence, India needs grassroots, prevention first obesity policy action that is anchored in primary health care, schools, and local food environments, so that early identification, family counselling, healthier diets, and routine physical activity become the default in every community rather than isolated pilot efforts.[18]

This policy paper will explore the necessary steps to effectively integrate childhood obesity management into India's Primary Health system.

Methodology

This policy paper is based on insights gathered from an expert roundtable discussion conducted with a panel of specialists in childhood obesity, public health, nutrition, and related fields. The expert panel, comprising professionals from government, academia, and the private sector, contributed their expertise to shape the recommendations and actionable steps in this report.

The methodology involved a structured discussion facilitated by the moderator, which focused on the key challenges and opportunities in tackling childhood obesity in India. The panellists reviewed existing evidence, analysed current policy gaps, and proposed integrated solutions based on their collective knowledge and experience in the field.

Through this collaborative process, the panel identified essential barriers to addressing childhood obesity, explored effective policy frameworks, and discussed the role of governance, inter-sectoral coordination, and community involvement in driving change. The outcome of this discussion has directly informed the policy options and recommendations presented in this paper.

Recommendations

To effectively address childhood obesity within India's Primary Health Care system, a comprehensive and multi-dimensional approach is required. Childhood obesity is no longer an isolated issue but a growing public health crisis that intersects with malnutrition, dietary patterns, socioeconomic factors, and cultural norms.

Tackling childhood obesity requires a dual approach that not only focuses on strengthening the healthcare system's capacity to prevent and manage obesity, but also on shaping societal attitudes and behaviours that influence children's health outcomes. By improving the health system's infrastructure and aligning it with efforts to change public perceptions and behaviours, we can ensure a long-lasting and sustainable solution to this growing public health challenge.

DOUBLE AND TRIPLE BURDEN OF MALNUTRITION

Double burden of malnutrition refers to the coexistence of undernutrition alongside overweight, obesity, or diet related noncommunicable disease risk. This can be observed at multiple levels, including the country, city, community, household, and individual.

Triple Burden of Malnutrition is defined as the coexistence of the anthropometric undernutrition, anaemia or micronutrient deficiency, and overweight, obesity, or diet-related noncommunicable diseases.[18]



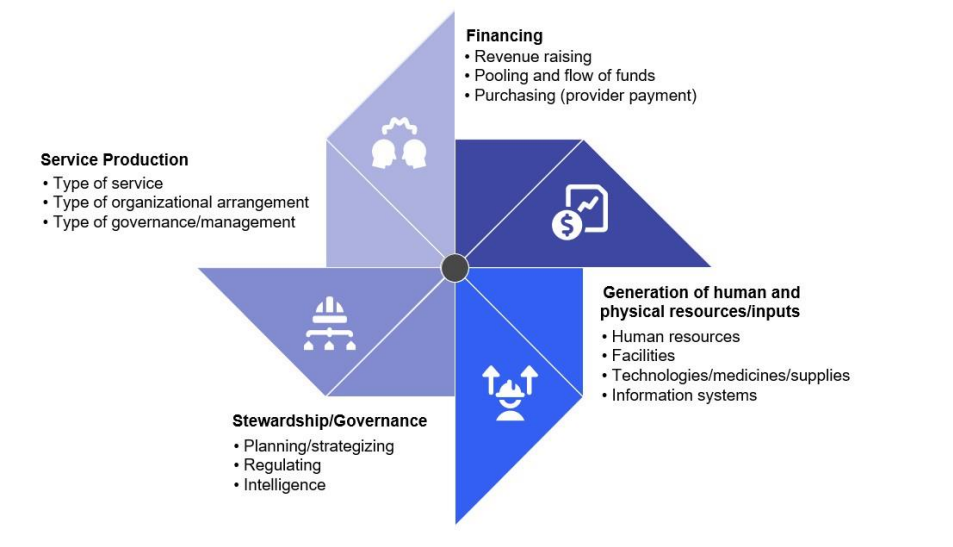
Two-Pronged Approach to Childhood Obesity Prevention

Note: This figure was drawn using Napkin

Strengthening Healthcare Systems to Combat Childhood Obesity

The recommendations provided for addressing childhood obesity are aligned with key health system strengthening blocks, ensuring a comprehensive and integrated approach. By focusing on areas such as service delivery, workforce training, financing, governance, and the generation of human and physical resources, these recommendations aim to optimize the primary health care system to tackle childhood obesity effectively. These recommendations also address cross-sectoral collaboration, real-time data usage, and community-based interventions, ensuring the sustainable and equitable transformation of health services for obesity prevention and management.

The purpose of dividing the recommendation according to the following headers is because of its ease to explain any PHC related program- it covers all the aspects of the Primary health care obesity related programme management.



Health System Blocks for PHC Transformation

Note: This figure was drawn using Napkin

A real-world transformation of PHC to address childhood obesity requires the following:

Health System Block	Objectives	Key Recommendations and Actionable Insights
Service Production • **Type of service** • **Type of organizational arrangement** • **Type of governance and management**	To enhance the service production capacity within Primary Health Care (PHC) systems by integrating childhood obesity management as a routine service, ensuring standardized protocols for screening, diagnosis, counselling, and referral that promote access, equity, and quality of care for all children at risk of or affected by obesity.	✓ Define a standardized childhood overweight service package at PHC level (**Ayushman Arogya Mandirs** as the delivery hub) and integrate childhood obesity screenings risk stratification, counselling, follow up, referral, and family engagement into routine services, formally locating this package within existing national platforms such as the RBSK programme and the Ayushman Bharat CPHC service package (for example, as an additional "childhood obesity prevention and management" service alongside the existing 12 services). ✓ Integrate overweight and over nutrition into existing POSHAN ABHYAN and Ayushman Bharat School Health and Wellness Programme so it is not treated as an add on or cosmetic issue. ✓ Establish a clear risk stratification pathway - normal, at risk, overweight with complications, and urgent referral - with decision support prompts for frontline staff, and set service quality standards covering time per counselling encounter, minimum counselling components, and a family goal-setting template. ✓ Create clear referral pathways and workflows between schools (positioned as first-level health/nutrition liaison hubs, with health ambassadors as SPOC), Anganwadi centres, and Ayushman Arogya Mandirs - including mandatory annual BMI screening in schools with obesity prevalence reported to district PHC platforms, referral slips or digital referrals, confirmation of first PHC visit, and escalation pathways for comorbidities and mental health risk. ✓ Embed BMI and growth checks into routine child touchpoints such as school health days, immunization visits, and adolescent health sessions, with a documented pathway back to Ayushman Arogya Mandirs. Height and weight should be plotted monthly on the child's vaccination growth chart

		- using WHO 2006 Growth Standards for children under five and IAP 2015 Growth Charts for children aged 5–18 - with any indicator falling in the overweight or obese range flagged immediately for follow-up. ✓ Deliver a combined counselling package to families via school coordinators that links nutrition, physical activity, sleep, screen time, stress, and family norms, with culturally adapted scripts. ✓ Standardize non stigmatizing communication across PHC, ICDS, and schools using consistent terminology such as "child with overweight" and "child at risk due to over nutrition." Use community platforms for demand generation that celebrates "fit, energetic, emotionally secure children" and explicitly rejects body shaming. ✓ Physical education programmes in schools should be designed to be fully inclusive, ensuring children of all fitness levels, abilities, and body types can participate equally and without stigma -moving away from competitive or performance-based models toward activity formats that encourage every child's engagement. ✓ Advocate for safe, accessible open spaces for play and active recreation within school and community catchment areas. Coordinate with urban and local planning bodies to improve walkability and pedestrian infrastructure on roads near schools and residential areas, positioning the physical environment as a modifiable determinant of childhood obesity.
Financing • **Revenue raising** • **Pooling and flow of funds** • **Purchasing and provider payment**	To establish a sustainable and integrated financing model for childhood obesity prevention and management, leveraging a combination of resource generation, innovative financing mechanisms, and coordinated funding flows across public and private sectors.	✓ Reallocate Health Program Funds: Conduct an audit of underutilized health programs and redirect funds to childhood obesity prevention initiatives, ensuring PHC infrastructure and workforce are adequately funded. ✓ Increase and implement Tax on High in Fat, Sugar, and Salt (HFSS) Foods: Push for a sugar tax or HFSS levy to generate targeted revenue for obesity programs, using funds to support BMI tracking devices and workforce training. ✓ Establish District-Level Pooled Funds: Set up district financing pools by combining resources from Health, WCD, Education, and Urban Development, funding coordinated

		obesity management programs across schools and PHCs. ✓ Leverage PPP for Infrastructure: Fund necessary infrastructure at PHCs and schools - including point-of-care (PoC) devices and safe play spaces - through a combination of public allocation and public-private partnerships (PPP), engaging private sector investment in public health. ✓ Align Incentives for Routine Screening and Counselling: Recognize obesity-related services as core PHC outputs, not optional. ✓ Adopt Outcome-Based Payment Models: Shift PHC and school payments to outcome-based models, where financial incentives are tied to reducing childhood obesity rates and increasing screening compliance. ✓ Leverage Innovative Financing Mechanisms: utilize Results-Based Financing (RBF), Public-Private Partnerships (PPP), Social Impact Bonds (SIB), and Blended Finance to secure sustainable funding for childhood obesity interventions.
Generation of human and physical resources and inputs • **Human resources** • **Facilities** • **Technologies** • **Medicines, supplies** • **Information systems**	To strengthen the health workforce and implement robust information systems that enable real-time monitoring and data-driven decision-making for childhood obesity management, ensuring health professionals and educators are equipped with the necessary skills, tools, and infrastructure to effectively screen, manage, and counsel children at risk, while integrating these systems into routine health and education services for timely interventions and policy responsiveness.	✓ Workforce Training: Train PHC workers, ANMs, ASHAs, Anganwadi workers, schoolteachers, and counsellors to recognize overweight and over-nutrition as part of malnutrition and to deliver supportive, non-stigmatizing counselling - through a structured training curriculum covering obesity prevention, BMI interpretation, and non-stigmatizing communication for both health workers and educators, with regular workshops on screening, data collection, and follow-up. ✓ CHO-Led Supervision and Reporting: CHOs should promote and supervise the 3A triad, ASHA, AWW, and ANM, to ensure monthly height and weight checks, growth chart plotting, childhood obesity screening, risk stratification, and referral coordination with Ayushman Arogya Mandirs. They should also compile and submit periodic reports to the district convergence platform for review and follow-up action. ✓ Equip Facilities: Ensure Ayushman Arogya Mandirs, Anganwadi centres, and school health teams are equipped with validated height boards, calibrated digital scales, and a basic

		private space for counselling where possible. ✓ Digital Upgrading and Real-Time Monitoring: Upgrade existing digital tools at Ayushman Arogya Mandirs and PHCs to automatically capture height and weight, compute BMI, classify nutrition status across undernutrition and over-nutrition, generate follow-up lists, and send color-coded alerts to healthcare providers for children with BMI in the overweight or obese range. ✓ GIS Mapping: Use GIS mapping to identify and monitor community activity assets (health centres, parks, playgrounds, open gyms) within districts, supplementing open gym infrastructure with child-friendly equipment to target access gaps. ✓ Family Support Programme: Pilot a structured 6–8 week small-group family support programme delivered by trained ASHAs/ANMs to parents of children under 5 - building parenting confidence around feeding, activity, sleep, and screen time. ✓ Family Support Tools and Parent Outreach: Introduce culturally adapted counselling prompts in local languages, simple take-home action cards, and mobile tips on healthy habits - covering eating, play, and sleep - aligned with counselling sessions. ✓ Pilot AI Tools: Test AI platforms to offer empathetic, non-stigmatizing support to families, as an optional supplement to in-person counselling.
Stewardship and Governance • **Planning and strategizing** • **Regulating Intelligence**	To establish robust stewardship and governance frameworks that promote policy coherence, strategic planning, and multi-sectoral collaboration in addressing childhood obesity, ensuring that all relevant stakeholders, including health, education, and local government, are aligned and accountable in driving collective action toward sustainable solutions.	✓ Redefine Malnutrition: Emphasise on the childhood obesity and overweight aspect in the definition of malnutrition and issue formal guidance that updates terminology, reporting formats, and training content across PHC, ICDS, and school programs. ✓ Build the Evidence Base: Establish overweight/obesity cause-effect evidence comparable to underweight malnutrition to drive policy prioritization and adapt existing underweight stunting protocols to include overweight risk pathways for district planning.

		✓ District Convergence Platforms: Mandate district level convergence platforms led by PHC leadership to convene Health, WCD, Education, Food Safety, Agriculture, Urban Development, Local Government, and civil society organizations/NGOs around local child malnutrition data in all its forms - with civil society supporting community mobilization, nutrition awareness, accountability, and advocacy - setting clear terms of reference including monthly reviews, shared indicators, named nodal officers, and documented action plans linked to budgets. ✓ Overweight Indicators in Monitoring Systems: Add overweight and obesity to existing district and state malnutrition monitoring frameworks, including HMIS and Poshan Tracker, through a common indicator framework with explicit indicators such as screening coverage, overweight and obesity prevalence trends, risk stratification status, counselling completion, school referrals completed, and follow up adherence, and use local intelligence to identify high risk school clusters and neighbourhoods and link these insights with district and urban planning to improve safe walking routes, play spaces, and other supportive community environments. ✓ School Food Environment Regulation: Strengthen regulation of HFSS foods in and around schools - especially in tiffin boxes and mess - through a phased enforcement approach near schools, incentive-based healthy canteen adoption, and partnership with parent groups to reduce backlash from commercial interests. ✓ Front-of-Pack Food Labelling: Mandate larger and more explicit front-of-pack food labelling, including clear calorific values and easy-to-understand nutrition warnings, to help families and children identify high-fat, high-sugar, and high-salt foods more easily. ✓ School Menu Guides: Partner with government-endorsed nutrition experts to develop and distribute free, monthly school menu guides rooted in seasonal Indian food wisdom - for

		adoption by school canteens, tiffin planning, and parent communities. ✓ Protect Play and Activity Time: Guarantee minimum physical activity time and safe, gender-sensitive play spaces in schools so girls have equal access to physical activity. ✓ Health and Food Systems Education in Schools: School boards should establish rules and guidelines for incorporating food systems education and obesity prevention into the formal curriculum as a structured, recurring subject component - not merely as a one-time add-on - so that children build and reinforce public health literacy early in life, equipping them with the knowledge to make informed, independent decisions about their health. Educational content must be carefully designed to build collective awareness without targeting, shaming, or singling out individual children. ✓ Community Mobilization for NCD Prevention: Strengthen community mobilization, awareness generation, and integrated service delivery to build an early prevention framework for non-communicable diseases, beginning with childhood obesity. This should include embedding NCD prevention into school health programmes, primary healthcare systems, and community-based platforms, supported by outreach, behaviour change communication, and family engagement. India's reproductive health programmes offer a useful example of how sustained community outreach and health system integration can help mainstream prevention-oriented health priorities. ✓ Advocacy and Public Communication: Normalize the framing that overweight is a form of malnutrition and a PHC priority - while keeping undernutrition focus intact - through a public communication package with consistent, stigma-free language and child wellbeing framing that connects healthy weight with learning, energy, and emotional security.

Shaping Public Attitudes and behaviours to Prevent Childhood Obesity

Successfully tackling childhood obesity requires not only a shift in **policy** but also in **individual and community psychology**.

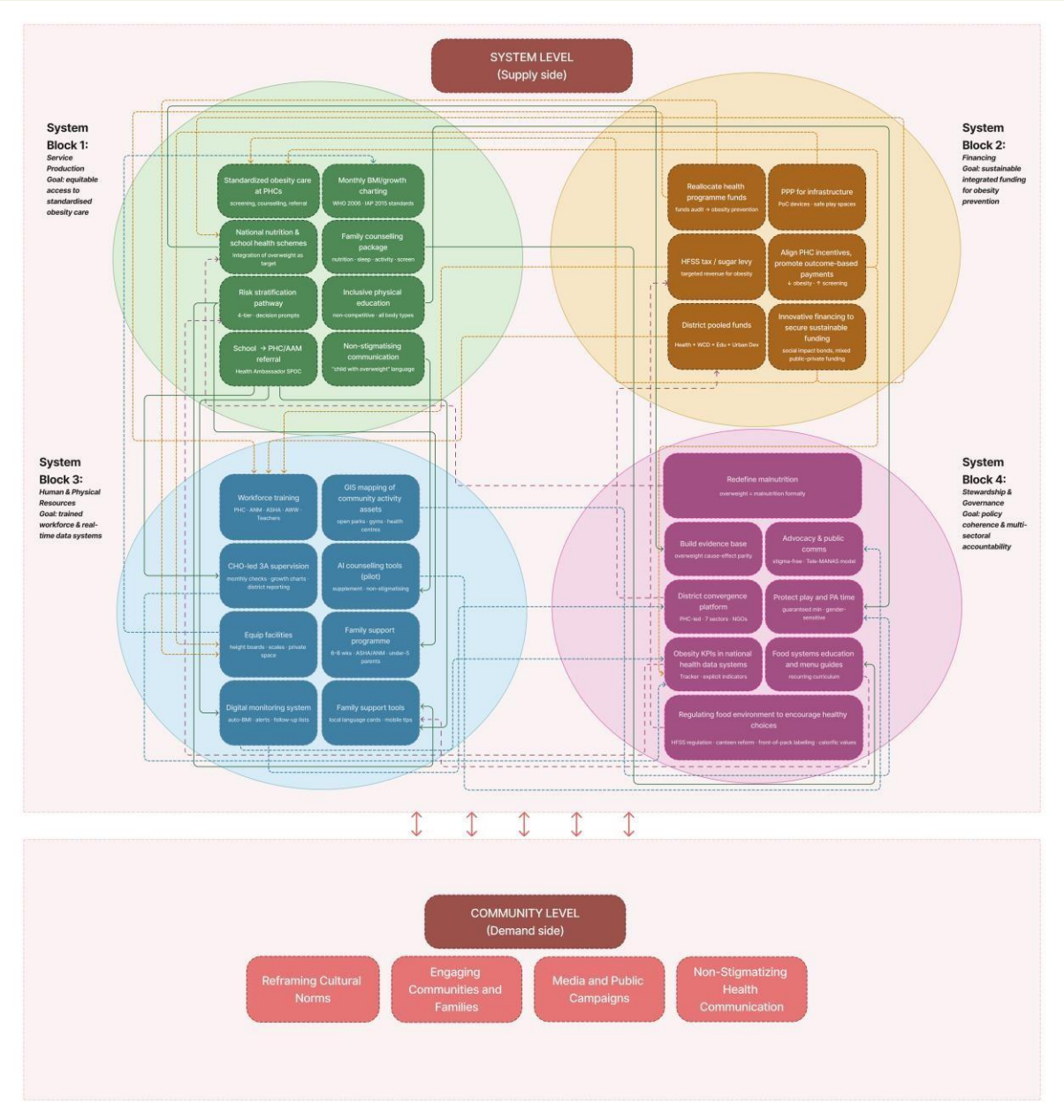
Objective: Foster societal shifts by promoting healthier lifestyles and creating supportive environments for childhood obesity prevention.

1. **Reframing Cultural Norms Around Health and Weight**
   - **Recommendation**: Shift focus from weight-based ideals to promoting **active, energetic children** as the ideal of health.
   - **Actionable Insight**: Use public health messaging to emphasize holistic health, including physical activity, balanced nutrition, and emotional well-being, not just weight.
2. **Promoting Non-Stigmatizing Health Communication**
   - **Recommendation**: Use neutral terms like "children at risk due to over-nutrition" instead of "obese child."
   - **Actionable Insight**: Develop health communications that focus on positive, supportive behaviour change without judgment, creating an inclusive environment for families.
3. **Leveraging Media and Public Campaigns**
   - **Recommendation**: Collaborate with influencers to promote healthy eating, physical activity, and family involvement.
   - **Actionable Insight**: Launch media campaigns encouraging simple activities like walking together after meals and cooking healthy as a family, making health behavior easy and accessible. Use culturally adapted children's media - with proven evidence of improving nutritional knowledge in low-income Indian settings - to embed health messaging into entertainment before children enter formal schooling.
4. **Engaging Communities and Families in Obesity Prevention**
   - **Recommendation**: Implement community-based programs to educate parents and caregivers about healthy lifestyles, that position nutrition and activity as fun family activities rather than chores (e.g., gamified lunch times, family challenges).
   - **Actionable Insight**: Create local support networks and provide educational resources on healthy eating, exercise, and family health habits, alongside accessible public support pathways such as helplines or tele-counselling models for childhood obesity prevention, family lifestyle guidance, and referral support, drawing on existing government service models such as Tele-MANAS for inspiration.

The outlined above are essential components of a comprehensive approach to childhood obesity prevention that requires collaboration across sectors and stakeholders. By shaping public attitudes and promoting positive behaviour changes, improving the food environment, and engaging communities, we can create a supportive and sustainable system for preventing and managing childhood obesity. These efforts must be combined with strengthened healthcare services to ensure a holistic response to this complex public health challenge.

Complex Adaptive System

Childhood obesity is not a simple, linear problem amenable to single-sector solutions. It is a complex adaptive system in which biological, behavioural, social, economic, and environmental factors interact dynamically and non-linearly. Interventions in one domain create feedback effects across others. A child who receives BMI counselling at school is more likely to have supportive parents if the community norm around healthy weight has shifted. A district that integrates overweight data into HMIS can identify obesity clusters and redirect urban planning resources to create safer play spaces. The four reforms in this roadmap are designed to function as a mutually reinforcing system — each strengthening the others — rather than as isolated programme components.



Childhood Obesity as a Complex Adaptive System

Note: This figure was drawn using Figma

Way Forward

Policy Options: Detailed Reform Assessment

The four suggested reforms below represent the core levers for transforming India's primary health care system to address childhood obesity. Each is assessed across six dimensions to support evidence-informed decision-making and stakeholder alignment.

Policy Options	Service Delivery at PHC: Integrated Screening & Care with Task-Shifting	Schools as Childhood Obesity Prevention Centres	Governance, Accountability & District Multi-Sectoral Convergence	Evidence-Driven Behaviour Reframing
Description	Elevates childhood obesity to the 13th core CPHC (comprehensive primary healthcare) service at 1.5 lakh Ayushman Arogya Mandirs, integrating BMI screening into all PHC child health contacts. Team-based care model task-shifts responsibilities to CHOs, nurses, ASHAs, and ANMs. Includes standardised BMI measurement, risk-stratified care pathways, family counselling, home-based reinforcement, and PHC-coordinated referral within POSHAN 2.0/RBSK platforms.	Establishes schools as primary obesity prevention sites by integrating health and education sectors through trained Health and Wellness Ambassadors. Empowers teachers as change agents with tools for classroom nutrition education, physical activity promotion, and student health monitoring. Model includes curriculum integration, growth monitoring, HFSS tiffin standards, daily 30-min PA, and school-PHC referral coordination.	Establishes a multi-sectoral governance structure integrating health, education, WCD, and nutrition sectors through DM-led district convergence platforms. Includes formal convergence committees, results-based financing, unified data systems, and accountability frameworks with shared overweight indicators across PHC-school-Anganwadi networks.	Drives psychological transformation by generating overweight cause-effect evidence, standardising "child at risk due to over-nutrition" terminology, and launching stigma-free campaigns that reframe healthy lifestyles as fun family activities, delivered through school coordinators and ASHAs.
Main advantages	• Leverages existing ASHA, ANM, and CHO infrastructure without new institutions. • Seamlessly integrates with RBSK and POSHAN 2.0. • Task-shifting is cost-effective with remote reach. • Standardised pathways ensure equitable access. • Creates visible, measurable touchpoints that	• Schools aggregate children at consistent touchpoints — high coverage potential. • Health and Wellness Ambassadors already trained under Ayushman Bharat. • Dual dividend: improves health outcomes and academic performance. • Early detection enables timely referral before	• Creates accountability structures spanning siloed ministries. • Data harmonisation enables evidence-based adjustments. • DM-led platforms carry political authority. • Results-based financing incentivises performance. • Builds institutional capacity beyond any single	• Addresses root cause — stigma and norms — that undermine clinical interventions. • Protects mental health and improves treatment-seeking. • Broad societal appeal of health-as-energy framing. • Low cost with high multiplier effect embedded in community platforms.

Policy Options	Service Delivery at PHC: Integrated Screening & Care with Task-Shifting	Schools as Childhood Obesity Prevention Centres	Governance, Accountability & District Multi-Sectoral Convergence	Evidence-Driven Behaviour Reframing
	build community trust in PHC.	complications arise. • Benefits all children, not only those at risk.	programme cycle.	• Evidence generation sustains long-term policy advocacy.
Main disadvantages	• Task-shifting requires sustained training and supervision. • Risk of overburdening stretched frontline workers. • Counselling quality is hard to standardise at scale. • Referral compliance may be low without follow-up systems. • Equipment procurement and maintenance requires dedicated infrastructure at every AAM.	• Dependent on teacher willingness and capacity — requires substantial training. • HFSS bans may face resistance from commercial interests and parents. • Risk of stigmatising overweight children if screening is mishandled. • Quality varies across private vs. government and urban vs. rural schools.	• Multi-sectoral convergence is complex — ministries have competing priorities. • DM capacity and motivation varies significantly across districts. • Risk of convergence meetings becoming procedural without real accountability. • Data harmonisation is technically challenging. • Results-based financing requires M&E capacity many districts lack.	• Behaviour change is slow and hard to measure, creating political impatience. • Risk of victim-blaming perception if campaigns are not sensitively designed. • Evidence generation takes time and delays visible impact. • Commercial food marketing actively counteracts public health messaging.
Cost and feasibility of implementation (includes acceptability, organizational factors etc.)	• Moderate cost, largely absorbable within existing RBSK and AAM budgets. • Main costs: training, equipment (scales, height boards), digital upgrades, supervision. • Integration is feasible within existing PHC-RBSK-POSHAN workflows. • Acceptability high — health actors recognise obesity as growing burden. • Key friction: frontline	• Moderate incremental cost. Schools already have Ambassadors and basic infrastructure. • Incremental costs: teacher training, measuring equipment, curriculum materials. • High acceptability — educators increasingly link child health to academic performance. • CBSE's 2025 advisories signal institutional readiness.	• Low direct cost but high coordination complexity. • Primarily an investment of human capital and political will, not capital expenditure. • Acceptability depends on non-health ministry buy-in and DM leadership — variable across states. • Results-based financing requires upfront design investment but generates	• Low to moderate cost. Leverages existing ASHA community visits, school assemblies, and mass media platforms. • Incremental costs: campaign design, material printing, training. • High acceptability — stigma-free positive messaging has broad societal support. • Low complexity for message dissemination; higher for evidence

Policy Options	Service Delivery at PHC: Integrated Screening & Care with Task-Shifting	Schools as Childhood Obesity Prevention Centres	Governance, Accountability & District Multi-Sectoral Convergence	Evidence-Driven Behaviour Reframing
	workload requires realistic task allocation.	• Feasible within existing school health day infrastructure.	efficiency gains over time.	generation and attitude measurement.
Equity considerations (gender, socioeconomic, ethnicity, geographical)	• Strong equity potential if designed for universality. • ASHAs and ANMs operate in underserved areas, reaching populations excluded from private care. • Risk of urban-rural inequity in equipment and training quality. • Must ensure girls are reached equally — cultural norms may de-prioritise adolescent girls' health. • Geographic equity requires active effort in tribal and remote areas.	• Equity is a central risk. Private schools implement reforms faster than government schools. • Girls face additional barriers — PE programmes must be gender-sensitive with safe, private spaces. • Socioeconomic disparities in tiffin content mean HFSS restrictions affect wealthier children more. • Curriculum must be accessible to children from low-literacy families.	• High equity potential through accountability architecture. • Convergence platforms can direct resources to underserved geographies. • Unified data systems identify equity gaps for targeted investment. • Risk that DM attention gravitates to urban districts. • Gender equity must be an explicit shared monitoring indicator.	• Most equitable reform — universal messaging not dependent on ability to pay. However, reach varies by language, literacy, and media access. • Rural and low-literacy populations harder to reach through digital channels. • Non-stigmatising communication especially important for families facing dual burdens of malnutrition.
Stakeholders' responsibilities	MoHFW (policy, funding, protocols); NHM State Teams (implementation oversight); CHOs (supervision of 3A triad); ASHAs, ANMs, Anganwadi workers (screening, counselling, referral); PHC Medical Officers (clinical oversight, referral validation); District Health Officers (monitoring and accountability); Families (engagement and adherence).	Ministry of Education and State Education Departments (curriculum integration, mandates); CBSE and State Boards (advisory issuance); School Principals and Teachers (daily implementation); Health and Wellness Ambassadors (screening, nutrition liaison); FSSAI (school food standards); Parents and Parent Associations (tiffin norms, cultural change).	District Magistrates (convergence platform leadership); MoHFW, MoE, Ministry of WCD, Urban Development, FSSAI, Agriculture (convergence members); State Planning Departments (results-based financing); Civil Society and NGOs (community accountability, advocacy); HMIS and Poshan Tracker technical teams (data integration).	MoHFW and MoE (campaign ownership); ASHAs and school coordinators (community delivery); Media organisations and influencers (amplification); Academic institutions (evidence generation); FSSAI and food industry (labelling, marketing regulation); Panchayati Raj Institutions (norm-setting); Parents and families (primary audience and change agents).

Phased Implementation Roadmap

The following phased roadmap translates the four core reforms into a politically feasible, sequenced plan of action. Reforms are tiered by priority and designed for simultaneous execution across tracks. The roadmap is anchored in India's existing institutional architecture - Ayushman Arogya Mandirs, POSHAN 2.0, RBSK, and the Ayushman Bharat School Health Programme - to maximise political traction, minimise disruption, and demonstrate visible wins early.

Prioritisation is based on three criteria: (1) readiness - what can be initiated immediately within existing systems; (2) political visibility - what generates public confidence and media attention; and (3) long-term systems change - what creates durable institutional reform that outlasts any single government cycle.

Priority tiers:

- Tier 1 — Critical path (immediate activation)
- Tier 2 — Enablers (mid-phase scaling)
- Tier 3 — Systemic integration (national & legacy)

Phase / Timeline	Priority Tier	Reform 1 Service Delivery at PHC	Reform 2 Schools as Prevention Hubs	Reform 3 Governance & Convergence	Reform 4 Behaviour Reframing
Phase 1 Months 1–3 Foundation	**Tier 1** Critical path	**Policy recognition & protocols** • Issue MoHFW advisory: childhood obesity as 13th core CPHC service • Formalise overweight/obesity within POSHAN 2.0 & RBSK as explicit programme targets • Define standardised service package at AAMs (screening, risk stratification, counselling, referral) • Add overweight indicators to HMIS & Poshan Tracker	**School system orientation** • Issue MoE/CBSE circular: annual BMI screening in all schools • Designate Health & Wellness Ambassadors as nutrition SPOCs • Pilot school–AAM digital referral slips in 2–3 states	**Convergence architecture** • Redefine malnutrition formally to include overnutrition across PHC, ICDS, school systems • Mandate district convergence platforms (Health + WCD + Education + FSSAI + Urban) with named nodal officers • Select 2–3 pilot states; 5 districts each	**Terminology & evidence base** • Standardise "child at risk due to over-nutrition" terminology across all platforms • Commission overweight cause-effect evidence study comparable to undernutrition evidence
Phase 1 Months 2–5 Workforce activation	**Tier 1** Critical path	**Frontline workforce training** • Train ASHAs, ANMs, Anganwadi workers, CHOs: BMI interpretation, IAP 2015 growth charts, risk stratification • CHO-led supervision of 3A triad (ASHA + AWW + ANM):	**Teacher training & tools** • Train school teachers as change agents: nutrition education, PA promotion, health monitoring • Train Health & Wellness Ambassadors	**First convergence meetings** • Convene pilot district convergence platforms; set terms of reference, shared indicators, monthly review cadence	**Anti-stigma communications** • Design state-level anti-stigma campaign: healthy weight = energy + learning (not appearance) • Distribute local-language counselling kits & take-home

Phase / Timeline	Priority Tier	Reform 1 Service Delivery at PHC	Reform 2 Schools as Prevention Hubs	Reform 3 Governance & Convergence	Reform 4 Behaviour Reframing
		monthly height/weight checks, growth chart plotting, referral coordination • Non-stigmatising counselling curriculum deployed across pilot districts • Equip AAMs & Anganwadis: calibrated digital scales, height boards, private counselling space	on BMI measurement, non-stigmatising screening • Distribute calibrated scales & height boards to pilot schools • Develop culturally adapted family counselling scripts for school coordinators	• Link civil society/NGOs for community accountability & advocacy	action cards (feeding, activity, sleep, screen time) • Deploy culturally adapted children's media with health messaging for pre-school age
Phase 1 Months 3–6 Delivery activation	**Tier 1** Quick wins	**Screening & care delivery live** • Embed BMI/growth checks into school health days, immunisation visits & adolescent health sessions • Height/weight plotted monthly on vaccination growth charts (WHO 2006 for under-5; IAP 2015 for 5–18) • Risk-stratified care pathways activated: normal / at-risk / overweight with comorbidities / urgent referral • Deliver combined family counselling: nutrition + PA + sleep + screen time + stress, via school coordinators and ASHAs • Pilot 6–8 week small-group family support programme (ASHAs/ANMs, parents of under-5s)	**Schools as first-line hubs** • Annual BMI screening institutionalised in all pilot schools • HFSS tiffin advisory issued (CBSE + state boards); begin phased enforcement • Daily 30-min physical activity minimum established; PE designed to be fully inclusive • Pilot food systems curriculum module in 2 grade levels • School–PHC referral pathway confirmed with first-visit tracking	**Regulation & monitoring** • Begin HFSS food zone enforcement near pilot schools (incentive-based healthy canteen approach) • Mandate front-of-pack food labelling: explicit caloric values & nutrition warnings • Add screening coverage, overweight prevalence, risk stratification, counselling completion, referral adherence as shared district indicators	**Community mobilisation** • Embed NCD prevention into school health programmes & community platforms • Engage Panchayati Raj Institutions & community leaders for norm-setting • Launch media campaign via influencers: walking after meals, cooking healthy as family

Phase / Timeline	Priority Tier	Reform 1 Service Delivery at PHC	Reform 2 Schools as Prevention Hubs	Reform 3 Governance & Convergence	Reform 4 Behaviour Reframing
Phase 2 Months 4–9 Digital & financing	**Tier 2** Enablers	**Digital infrastructure & financing** • Upgrade AAM digital tools: auto-compute BMI, classify nutrition status, colour-coded alerts, follow-up lists • Integrate overweight flags into NCD screening workflow at PHC • Pilot AI-assisted empathetic family support tool as supplement to in-person counselling • Conduct audit of underutilised health programme funds; reallocate to obesity prevention • Pilot outcome-based payment model in 1–2 states: incentives tied to screening compliance & overweight trend	**School food environment** • Partner nutrition experts to develop monthly school menu guides (seasonal Indian food) • Expand HFSS enforcement nationally; partner parent groups to reduce commercial pushback • Guarantee gender-sensitive PA spaces in schools; safe play zones for girls • Coordinate with urban planners: walkability, pedestrian infrastructure near schools & residential areas	**Financing & GIS mapping** • Establish district-level pooled funds: Health + WCD + Education + Urban Development • Push for HFSS levy; revenue ring-fenced for AAM equipment & training • Leverage PPP for infrastructure (PoC devices, safe play spaces) • Launch Social Impact Bond pilot in 1 state • GIS mapping: community activity assets (parks, playgrounds, open gyms); supplement with child-friendly equipment	**Helplines & support pathways** • Integrate family obesity prevention helpline into Tele-MANAS model • Create local parent support networks & community-based educational resources • Launch gamified family engagement: gamified lunchtimes, family health challenges
Phase 2 Months 6–12 Governance deepening	**Tier 2** Accountability	**Structured follow-up & referral fidelity** • Clear referral pathway: school → Anganwadi → AAM → escalation for comorbidities & mental health risk • Escalation protocols for comorbidities (hypertension, hyperglycaemia) activated • Results-based financing: PHC outputs recognised as core, not optional	**Curriculum integration** • School boards issue rules embedding food systems education as structured, recurring curriculum (not one-off) • Health & food systems literacy established as formal subject component • Content designed to build collective awareness, not shame individual children	**Convergence & accountability maturity** • District convergence platforms: monthly reviews operational; documented action plans linked to budgets • Publish district overweight prevalence league tables to create peer competition • GIS insights shared with urban planning bodies: safe	**Evidence generation & advocacy** • Academic institutions commissioned for cause-effect evidence on overweight interventions • Normalise public framing: "overweight is a form of malnutrition, a PHC priority" • FSSAI & food industry engagement: front-of-pack labelling, marketing

Phase / Timeline	Priority Tier	Reform 1 Service Delivery at PHC	Reform 2 Schools as Prevention Hubs	Reform 3 Governance & Convergence	Reform 4 Behaviour Reframing
				walking routes, play spaces • Results-Based Financing (RBF) & Blended Finance structures formalised	regulation near schools
Phase 3 Months 10–18 Scale & evidence	**Tier 3** National reach	**National rollout** • Expand training, screening, referral systems to all districts nationally • Independent evaluation of pilot outcomes; protocols refined based on evidence • Outcome-based payment models introduced in 3–5 states • PHC child health contacts nationally include routine BMI & overweight management	**National school screening & curriculum** • Annual BMI screening & HFSS standards extended to all state board schools • NCERT/state boards mandate food & health literacy as structured curriculum nationally • First national school-level overweight prevalence report published	**National data & accountability** • National overweight report card published via Poshan Tracker dashboard • Performance-linked district incentives introduced (screening targets, prevalence trends) • HFSS levy enacted nationally; revenue ring-fenced • India submits childhood obesity SDG addendum — positions India as global health leader	**Sustained norm change** • Anti-stigma campaigns running at scale in all states • Pilot evidence drives national policy advocacy • India champions childhood obesity indicator at WHO & SDG review fora
Phase 3 Months 12–24 Legacy	**Tier 3** Systemic integration	**Gazetting & permanent integration** • Gazette notification: childhood obesity formally the 13th core CPHC service in all 1.5 lakh AAMs • Safe, accessible open spaces for play mandated near all school & community catchment areas • Align obesity indicators with	**Permanent curriculum** • Food & health systems education fully embedded in national school curriculum (generational reach) • Inclusive PE (non-competitive, body-type inclusive) standard in all schools	**Systemic governance permanence** • HFSS levy fully operational; funds flow to AAM equipment, workforce training, community programmes • District convergence platforms institutionalised beyond pilot;	**Global health leadership** • India leads SDG advocacy on childhood obesity at multilateral fora • Sustained public communication: stigma-free language, child wellbeing framing, connects healthy weight to learning, energy &

Phase / Timeline	Priority Tier	Reform 1 Service Delivery at PHC	Reform 2 Schools as Prevention Hubs	Reform 3 Governance & Convergence	Reform 4 Behaviour Reframing
		Viksit Bharat 2047 & SDG monitoring frameworks	• Healthy school canteen model adopted nationally with PPP support	replicated nationally • Blended Finance & SIB models scaled to additional states	emotional security

Key Design Principles for Political Feasibility

- Anchor in existing programmes: Every reform is explicitly embedded within POSHAN 2.0, Ayushman Bharat, RBSK, or the Fit India Movement — framing childhood obesity as a natural extension of existing political commitments, not a new agenda.
- Lead with visible wins: Early phases prioritise quick, visible actions — BMI screening in schools, district convergence meetings, frontline training — that generate media attention and public confidence before long-term systemic change takes hold.
- Frame as a systems investment: The roadmap links childhood obesity prevention to Viksit Bharat 2047, SDG reporting, and India's global health leadership — elevating the issue from a public health niche to a national development priority.
- Avoid zero-sum framing: The roadmap is designed to complement — not compete with — existing undernutrition priorities. Shared infrastructure, convergence platforms, and unified data systems serve both malnutrition and obesity, making the case for joint resourcing.
- Demonstrate fiscal responsibility: Results-based financing, HFSS levy revenue recycling, and PPP models frame obesity prevention as a financially prudent investment that reduces future healthcare costs — appealing to Finance Ministry and development finance actors.

Barriers to Implementation

Implementing health policies often faces several challenges, particularly when multiple ministries and departments are involved. **Bureaucratic coordination** can create inefficiencies, as different government sectors may have competing priorities and distinct governance structures. This fragmentation can slow down decision-making and hinder effective policy execution.

Resource limitations are another significant barrier. Many healthcare facilities, especially in rural and underserved areas, lack the necessary infrastructure, equipment, and trained staff. These gaps can prevent policies from being effectively implemented, as the required resources may not be available to support new initiatives.

Cultural and social factors also play a critical role in policy implementation. In many regions, long-standing cultural norms and social beliefs can result in resistance to health policies, especially if they challenge established behaviours or require significant lifestyle changes. This resistance is particularly strong in communities with limited health education or awareness.

The **political will and leadership** behind a policy are crucial for its success. If there is a lack of strong, ongoing political support, policies may not receive the necessary funding or attention, leading to delays or inadequate execution. Changes in leadership or shifting political priorities can further complicate this issue.

Finally, **implementation fidelity** is a challenge for many policies. Even when a policy is well-designed, inconsistent application, poor training, and weak monitoring can undermine its effectiveness. Without robust quality control and accountability measures, there can be significant disparities in how policies are executed across different regions.

Economic Case for Action

Projected Economic Burden

India's obesity-related economic costs are projected to grow from USD 29 billion annually in 2019 to USD 839 billion by 2060, a 29-fold increase over four decades. This trajectory is not a single straight line. The World Obesity Atlas 2024 provides three source-anchored data points: USD 29 billion in 2019, USD 81.53 billion in 2030, and USD 839 billion in 2060.

These figures imply two compounding growth phases: costs rising at approximately 9.85% per year between 2019 and 2030, followed by 8.08% per year from 2030 to 2060. By 2025, the implied annual obesity-related economic cost has already reached approximately USD 51 billion.

All future benefits and costs are converted into today's value using a 3% discount rate, because money saved in the future is worth less than money saved today. A 5% discount rate is also used as a sensitivity check.

Operating Within Existing Fiscal and Institutional Architecture

The proposed four-reform primary health care roadmap is designed to operate within India's existing fiscal and institutional architecture. Reforms 1 and 2 can be embedded within existing NHM, RBSK, and Samagra Shiksha budget lines that already support training, community worker incentives, school health platforms, and related infrastructure. Reform 3 relies on established district convergence mechanisms. Reform 4 builds on the existing ASHA incentive system and public communication channels.

As a result, the programme does not require the creation of a large new financing structure. Its main requirement is better prioritisation, coordination, and use of existing delivery platforms.

The total programme investment is estimated at about USD 129 million, spread across the four reforms: PHC service delivery, schools as prevention hubs, governance and convergence, and behaviour reframing. After discounting, the present value of this cost becomes about USD 122 million. The benefits are calculated as avoided obesity related economic costs under the business-as-usual scenario. The model assumes that India's obesity cost burden rises from about USD 51 billion in 2025 toward the projected USD 839 billion annual burden by 2060. The intervention is assumed to reduce a portion of these future costs, starting at 0% in the first year, rising gradually to 15%, then 20%, and eventually reaching a conservative maximum effectiveness of 25%.

Using the full horizon model, the present value of total benefits is about USD 1.18 trillion, while the present value of costs is only about USD 122 million. This gives a Benefit Cost Ratio (BCR) of approximately 9,663:1 at a 3% discount rate. This means that every USD 1 invested in the roadmap could generate about USD 9,663 in discounted future economic benefits. Even under a conservative 10-year scenario with only 15% maximum effectiveness, the ratio remains high at 644:1, showing that the investment remains strongly cost beneficial even with cautious assumptions.

$$BCR = \Sigma [B_t \div (1+r)^t] \div \Sigma [C_t \div (1+r)^t]$$

B_t = benefit in year t
C_t = cost in year t
r = discount rate (typically 3–5% in public health; reflects the fact that a dollar today is worth more than a dollar in 2060)
t = each year from now until the end of the analysis period
Σ = sum across all year
If BCR is greater than 1, benefits exceed costs and the intervention is worthwhile. If BCR is less than 1, costs exceed benefits

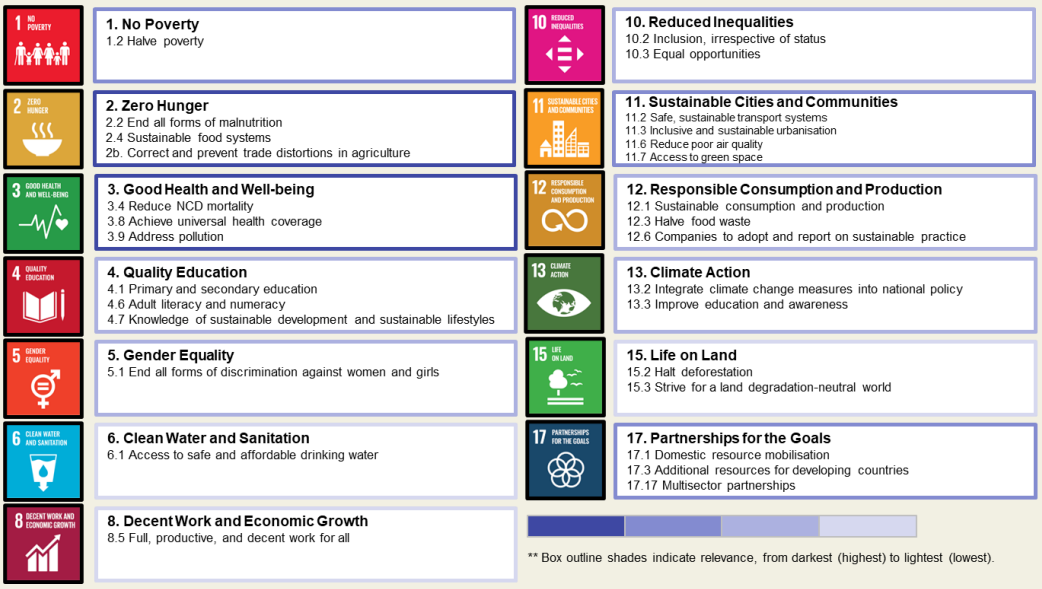
The ratio is very large mainly because the proposed investment is small compared with the future economic burden of obesity. The model does not assume that the programme eliminates obesity. It only assumes that a modest share of future obesity related costs can be avoided through early screening,

counselling, school-based prevention, governance, and behaviour change. Since the projected national burden is extremely large, even a small percentage reduction creates very high absolute savings. Importantly, the analysis excludes several benefits such as Disability Adjusted Life Years averted, improved school performance, caregiver productivity, mental health gains, and long-term reductions in downstream non communicable disease costs. Therefore, the estimated ratio should be interpreted as a conservative lower bound rather than an inflated estimate.

A Policy Blind Spot: Child Obesity and SDG Alignment

WHO estimates that in 2022, over 390 million children and adolescents aged 5 to 19 years were overweight globally, including 160 million living with obesity.[19] Despite this scale, the Sustainable Development Goals (SDGs) include an explicit target on noncommunicable diseases, yet childhood obesity is rarely named directly. This reduces its visibility in national strategies, SDG reporting, and, critically, in development financing and technical assistance. The result is weaker political prioritisation, limited accountability, and insufficient resource allocation for prevention and care.

This gap matters because child obesity is both a condition in its own right and a major upstream driver of multiple NCDs across the life course, making progress toward SDG 3, including target 3.4, difficult without intentional action on obesity prevention and management. Obesity is also embedded across other SDGs. It is implied in SDG 2.2 through "all forms of malnutrition," shaped by food systems and consumption patterns under SDG 12, reinforced by inequities captured in SDGs 1, 5, and 10, and influenced by environments for activity, transport, and safety under SDG 11. These interlinkages show that childhood obesity is not a standalone health issue. It is a cross sector sustainable development challenge.



SDG Synergies with Obesity: Relevant Goals and Targets

Adapted from Cooper, K., *Obesity and the SDGs: an opportunity hidden in plain sight* [20]

This paper uses the SDGs as a practical lens for action and shows how real-world Primary Health Care transformation can operationalise SDG commitments by integrating prevention into routine care, strengthening referral and follow up, linking PHC with schools and communities, and aligning obesity indicators with SDG monitoring.

We argue for explicit inclusion of childhood obesity within SDG implementation, reporting, and financing so that commitments to "healthy lives" and "ending malnutrition" translate into measurable, funded action.

Conclusion

The evidence to tackle childhood obesity is already well-established, and the main barriers to progress lie in prioritization, coordination, and framing the issue effectively, rather than a lack of knowledge. The World Health Assembly (WHA) Global Nutrition Targets set a clear goal to reduce and maintain childhood overweight in children under five years of age to less than 5%, yet India's current Average Annual Rate of Reduction (AARR) in childhood obesity stands at just -2.4%. This highlights the urgent need for action.

The expert roundtable brought forward several crucial insights:

- **Integration is Key**: Childhood overweight and overnutrition should be addressed as part of the broader malnutrition issue, not as a separate program. It must be embedded into existing frameworks like Primary Health Care (PHC), Integrated Child Development Services (ICDS), and school health programs.
- **Governance as the Driver**: Successful outcomes depend on effective governance. By bringing together different sectors around a shared vision and utilizing local data, resources, services, and technologies can be better aligned.
- **Respect and Support**: The approach must be family-centered and supportive, avoiding stigmatizing labels. The focus should be on creating an environment of respect and collaboration with communities to ensure lasting change.
- **Technology as an Enabler**: Technology has a critical role to play, but it must be designed to integrate seamlessly with existing workflows and support human relationships. This ensures that technology can truly drive impact where it's needed most.

As India works toward its vision of Viksit Bharat by 2047, addressing childhood obesity is crucial for building a healthier, more resilient population. Strengthening health systems and prioritizing obesity prevention within primary healthcare will be essential for the nation's long-term prosperity and well-being.

In conclusion, while the evidence and strategies to combat childhood obesity are clear, urgent action is needed. A coordinated, inclusive approach, driven by effective governance, strong community engagement, and technological innovation, will empower India to meet its global nutrition targets and achieve its Viksit Bharat vision.

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