

INSIGHTS FROM THE HEXAVALENT SWITCH:

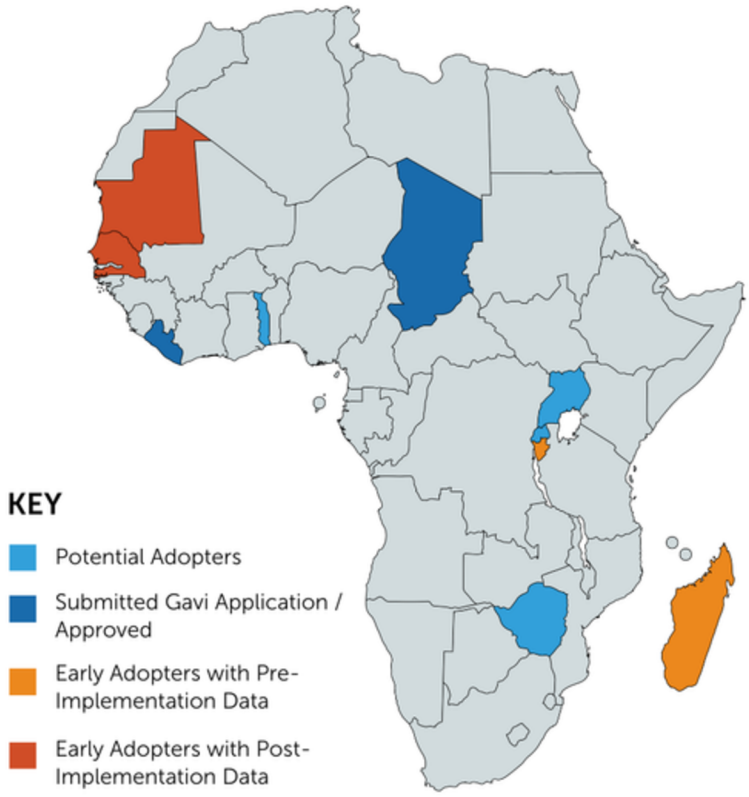
A Process Point Risk Mitigation Compendium

January 2026

EXECUTIVE SUMMARY

INTRODUCTION

The transition from separate pentavalent (penta) and inactivated poliovirus (IPV) vaccines to the combined hexavalent (hexa) vaccine represents a major programmatic shift for national immunization systems. While the hexa vaccine offers clear advantages—fewer injections, simplified schedules, logistical efficiencies, and stronger integration of polio vaccination into routine services—the switch requires coordinated action across policy, financing, supply chains, service delivery, data systems, workforce capacity, communication, and vaccine safety surveillance. Experience from early adopters shows that success depends not on a single decision, but on the alignment of multiple interdependent system components over time.



Hexa Early Adopter Countries Attending the Workshop

To support countries navigating this complexity, the Hexavalent Vaccine Switch Early Adopters Workshop, convened in Dakar, Senegal in November 2025, brought together national immunization leaders, Immunization Technical Advisory Group (NITAG) members, regional partners, and global technical agencies from ten African countries at different stages of readiness. The workshop was intentionally designed as a practice-oriented, peer-learning platform, moving beyond information sharing to collective problem solving and tool co-creation. Through country case studies, structured discussions, interactive exercises, and facilitated group work, participants identified and discussed common risks, contextual constraints, and practical solutions encountered across the hexa switch pathway.

This Policy Brief Compendium translates those workshop outputs into applied, country-relevant tools. It is organized around ten process points across three programmatic phases that reflect the full vaccine switch lifecycle:

Planning Phase:

1. Decision-making, governance and policy
2. Financial planning
3. Demand forecasting and procurement planning

Pre-implementation:

4. Logistics and cold chain management
5. Health worker training and supportive supervision
6. Service delivery implementation

Implementation:

7. Communication and social mobilization
8. Program management and coordination
9. Monitoring, evaluation, and reporting
10. Adverse events following immunization (AEFI) surveillance

Each process point is presented as a mini policy brief, summarizing background considerations, key risks and barriers identified by countries, and actionable solutions drawn from early adopter experience and peer exchange.

Complementing these briefs, the compendium includes a crowd-sourced Health System Adaptation Checklist, co-developed during the workshop. Using the same process points, the checklist translates shared experience into time-bound operational prompts that national teams can use to assess readiness, prioritize actions, and strengthen coordination across the switch timeline. While developed specifically for the hexavalent vaccine transition, these tools are deliberately designed to be adaptable and may be applied to other vaccine switches, schedule changes, or major programmatic transformations within national immunization programs.

HOW TO USE THIS COMPENDIUM

This compendium is intended as a practical planning and coordination resource, not a prescriptive blueprint. Users are encouraged to engage with the process points most relevant to their current stage of decision-making or implementation and are designed to be usable in a standalone manner.

National immunization teams may use the mini policy briefs to identify common risks and inform internal discussions across Expanded Program on Immunization (EPI), NITAGs, finance units, logistics teams, and communication leads. The Health System Adaptation Checklist can be used for pre-implementation planning and verify order of operations, determining what adaptations of specific tools or guidance may be needed and assist in appropriate timing of key activities pre-switch.

Countries at earlier stages may use the compendium to inform advocacy and decision-making, while countries closer to implementation can use it to stress-test operational readiness, reduce vaccine coexistence (hexa vs. penta and IPV) and safety risks, and align stakeholders. Partners and donors may also use the compendium to identify priority areas for targeted technical assistance and system strengthening support.

Together, these tools aim to support more deliberate planning, reduce avoidable risks, and help transform the hexa vaccine switch into a broader opportunity for strengthening immunization systems.

DECISION-MAKING, GOVERNANCE & POLICY

BACKGROUND

Effective decision-making, policy formulation, and governance are central to a smooth and timely transition from pentavalent + inactivated polio vaccine (IPV) to hexavalent vaccines. These functions determine whether evidence is synthesized appropriately, whether deliberative bodies act with clarity and accountability, and whether national plans align with global recommendations and financing requirements. When governance processes are structured and predictable, countries move from deliberation to implementation quickly, safely, and with broad stakeholder confidence.

Strong governance ensures harmonization across Immunization Technical Advisory Groups (NITAGs), Interagency Coordinating Committees (ICCs), Ministries of Health, and financial authorities, with each contributing technical guidance, political endorsement, and resource mobilization. Functional, well-supported NITAGs help contextualize global recommendations, such as SAGE's recommended three-dose primary hexavalent schedule with a potential booster dose in the second year of life (the 3+1 schedule), to national realities, strengthening credibility and uptake.

Early-adopting countries such as Senegal and Mauritania highlighted that structured decision-making pathways accelerate submission timelines, reduce procedural bottlenecks, and enable rapid clarification cycles with Gavi on co-financing applications. Madagascar's experience shows that weak or newly established governance structures require extensive support, training, and coordinated partner engagement to generate high-quality, consensus-based recommendations.

Across settings, decision-making processes directly shape program readiness: they determine vaccine schedules, stock withdrawal plans, communication strategies, and budget integration. Where pathways are clear and functional, implementation can progress in months; where they are fragmented, delays extend into years and weaken alignment between policy, financing, and operational planning.

KEY RISKS & SOLUTIONS

The most prioritized risks and solutions to efficient decision-making, policy development, and governance of immunization programs include:

More Prioritized ↕

Most Prioritized Solutions	Most Prioritized Risks
Institutionalize clear, sequenced decision-making pathways. Countries should formalize national guidelines that define roles, decision points, documentation requirements, and expected timelines from evidence review through implementation authorization. Standard operating procedures and process maps that link ICC endorsement, NITAG recommendations, ministerial approval, and Gavi submission reduce ambiguity, ensure accountability, and prevent premature or poorly sequenced applications.	**Fragmented or unclear decision-making pathways.** Without codified steps linking technical deliberation, political endorsement, and Gavi submission among relevant policy and decision-making bodies, processes become parallel, poorly sequenced, or premature (as seen in Madagascar), requiring rework and delaying implementation.
Strengthen NITAG capacity, functionality, and sustainability. Investing in annual training cycles, mentoring, and refreshers on EtR frameworks, evidence synthesis, and vaccinology supports high-quality recommendations. Dedicated secretariats, regular meeting schedules, and budget lines for operations safeguard independence and continuity. Cross-country exchanges and peer learning reinforce quality and help newer NITAGs mature more quickly.	**Limited capacity of governance bodies.** Newly formed or under-resourced NITAGs may lack experience in evidence appraisal, Evidence to Recommendation (EtR) methodologies, or drafting recommendation notes. Weak secretariat support leads to infrequent meetings and slower outputs.

Establish coordinated drafting and review mechanisms. Dedicated technical working groups and shared drafting platforms facilitate aligned contributions from WHO, UNICEF, Gavi consultants, civil society, and national programs. Clear review calendars, documented comment cycles, and defined focal points reduce duplication and ensure that every revision strengthens coherence across policy, operations, and financing.	**Procedural delays across ministries and signatories.** Obtaining approvals from Ministries of Health, Finance, or higher offices can take weeks to months, stalling submissions and pushing back introduction timelines.
Integrate technical, political, regulatory, and financial decision-making. Routine joint review meetings that bring together NITAG, ICC, Ministry of Health, Ministry of Finance, and regulatory authorities help resolve divergences early. These forums enable synchronized decisions on schedules, booster considerations, OPV discontinuation, co-financing commitments, and regulatory requirements—accelerating approvals and reducing downstream rework.	**Insufficient alignment between technical and political authorities.** Divergence between NITAG and ICC decisions, or shifting ministerial priorities, complicates schedule determinations and undermines coherence across stakeholders.
Develop financial governance early — not after policy approval. Countries benefit from aligning co-financing agreements, national budget updates, and operational cost estimates before Gavi submission. Using Gavi budgeting tools and integrating vaccine costs into medium-term expenditure frameworks closes gaps between policy endorsement and actual implementation capacity.	**Weak coordination among stakeholders.** Inconsistent communication channels lead to late partner inputs, fragmented documentation, and slippage of decision milestones.
Strengthen stakeholder coordination platforms throughout the process. Standing steering committees and focused subcommittees (logistics, data, communications, supply chain, and finance) provide continuity from deliberation through rollout. Regular reporting, clear escalation channels, and frequent touchpoints support rapid troubleshooting and shared accountability.	**Lack of integrated financial governance.** Budget integration, co-financing confirmation, and updates to national strategies often lag behind policy decisions, widening the gap between approval and operational readiness.
Enhance transparency and documentation. Maintaining detailed records of deliberations, evidence reviews, rationales, and approval steps supports institutional memory, eases partner support, and strengthens accountability during audits or external review. Consistent documentation also streamlines future vaccine introductions.	**Risk of accelerated timelines.** Rapid cycles (e.g., Senegal's 6–7 months) can be efficient but reduce opportunities for review and heighten risks of errors or unvetted assumptions.
Embed iterative clarification and adaptive management. Countries that treat Gavi/IRC comments as part of a structured improvement cycle progress more quickly. Establishing internal systems for rapid clarification, mid-course adjustments, and schedule refinements during planning and rollout allows programs to respond to evolving evidence, supply realities, and operational lessons.	

Less Prioritized

When governance systems are fragmented or under-resourced, risks compound as timelines lengthen, budget cycles fall out of sync, and programs become more vulnerable to supply shocks and implementation gaps. Taken together, the prioritized solutions strengthen governance by anchoring decision-making in predictable, evidence-driven processes that align policy, financing, and implementation, supporting timely and credible hexavalent vaccine introduction while reinforcing long-term immunization governance.

FINANCIAL PLANNING

BACKGROUND

Sound financial planning ensures that the introduction and ongoing delivery of the hexavalent vaccine are sustainable and resilient over time. This involves estimating full resource needs, including procurement, distribution, training, communication, supervision, waste management, and monitoring, and identifying how they will be financed at national and subnational levels. As external support declines, countries must plan deliberately for increased domestic contributions and integrate vaccine costs into health-sector budgets.

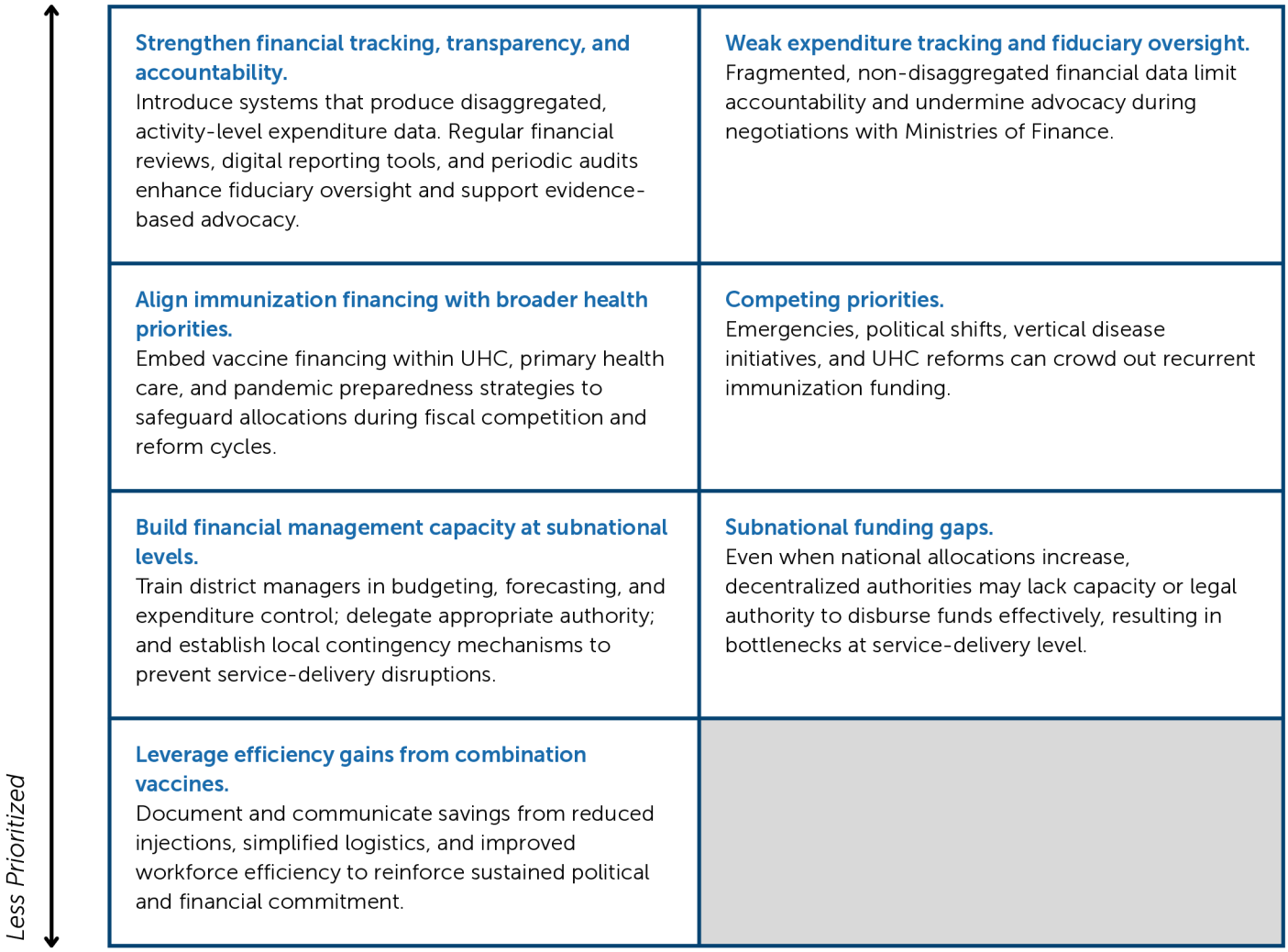
Transparent costing and expenditure tracking strengthen accountability and enable decision-makers to advocate effectively with Ministries of Health and Finance. Financial planning should also capture potential efficiency gains associated with combination vaccines, including reduced injections, streamlined logistics, and workforce savings. Embedding immunization financing within broader health and universal health coverage (UHC) frameworks protects allocations during periods of fiscal competition. Strong financial management allows countries to maintain uninterrupted supply, prevent coverage losses, and preserve the achievements of the hexavalent introduction well beyond the initial rollout.

KEY RISKS & SOLUTIONS

The most prioritized risks and solutions to ensuring a sustainable hexavalent vaccine introduction include:

More Prioritized ↕

Most Prioritized Solutions	Most Prioritized Risks
Adopt comprehensive, full-system costing. Use tools that capture both direct and indirect expenses — cold-chain (both equipment and ongoing energy and maintenance costs), transport, training, supervision, surveillance, communication, AEFI management, and capital upgrades — to avoid underestimation and ensure realistic budgeting.	**Underestimation of total system costs.** Costing exercises often emphasize vaccine price and commodities while omitting recurring operational expenses (energy, transport, human resources, supervision, communication, surveillance, AEFI management, wastage) and one-time investments such as warehouse upgrades and training.
Integrate domestic financing early. Initiate sustainability planning before donor support declines. Establish dedicated, predictable immunization budget lines at national and subnational levels, with contingency reserves for emergencies and surge needs.	**Delayed or insufficient domestic budget allocation.** Financial sustainability discussions may begin only as Gavi support declines, leaving limited time to secure national and subnational budget lines. Operational shortfalls ultimately disrupt service delivery.
Mitigate exposure to currency and price volatility. Negotiate multi-year procurement arrangements through UNICEF or PAHO, explore hedging options where feasible, and diversify funding sources to buffer against exchange-rate shocks and post-subsidy price adjustments.	**Currency fluctuations and price uncertainty.** Countries procuring through UNICEF Supply Division or the Pan American Health Organization (PAHO) Revolving Fund remain vulnerable to exchange-rate shifts and future price increases once subsidies end.



When financial planning is insufficient or poorly aligned, these barriers increase the risk of vaccine shortages, reduced coverage, and potential disease resurgence. Taken together, the prioritized solutions strengthen financial predictability and transparency, helping secure uninterrupted vaccine supply, sustain high coverage, and protect the long-term value of hexavalent vaccine introduction.

DEMAND FORECASTING & PROCUREMENT

BACKGROUND

Procurement systems determine whether vaccines and supplies reach facilities on time, in the right quantities, and under the right conditions. For the hexavalent vaccine, accurate forecasting and procurement planning are essential to ensure a smooth transition from pentavalent and polio vaccines to the combined formulation. This requires reconciling existing stocks, sequencing orders appropriately, updating procurement mechanisms, and confirming that all associated materials—such as syringes, safety boxes, diluents, and waste-management needs—are bundled and delivered coherently.

Integrating procurement planning into national and subnational workplans helps align deliveries with training schedules, cold-chain readiness, communication activities, and supervision plans. Transparent documentation of procurement decisions, supplier performance, and delivery timelines strengthens accountability and supports advocacy with Ministries of Health and Finance for sustained resource allocation.

When forecasting is accurate and routinely validated, countries can anticipate demand fluctuations, manage buffer stocks, and detect early warning signs of shortages. Conversely, weak or fragmented procurement systems risk stock-outs, coexistence of multiple vaccine formulations, wastage, and erosion of confidence among health workers and communities. Strong systems enable uninterrupted supply, minimize wastage, and ensure a predictable, credible rollout during and after the switch.

KEY RISKS & SOLUTIONS

The most prioritized risks and solutions to ensuring smooth demand forecasting and procurement in advance of a successful hexavalent vaccine introduction include:

More Prioritized ↓

Most Prioritized Solutions	Most Prioritized Risks
Institutionalize routine data validation and stock reconciliation. Build regular (monthly or biweekly) reconciliation cycles linking stock balances, doses administered, wastage, and denominator updates. Incorporate reviews into routine supply-chain management meetings and supervisory visits so that procurement decisions consistently reflect real data. Digital platforms such as DHIS2, eLMIS, and Logistimo can support near–real-time visibility and early corrective action.	**Inaccurate or unreliable forecasting data.** Outdated denominators, incomplete facility reporting, irregular stock reconciliations, and poor visibility of buffer stocks undermine quantification and increase the likelihood of overstocking, stock-outs, or wastage. Enhanced visibility through digital tools is often limited or inconsistently used.
Adopt and standardize forecasting tools and joint review processes. Use harmonized tools—such as the UNICEF Forecasting Tool, WHO Epilog, or Power BI dashboards—to align assumptions, visualize trends, and refine quantification. Joint forecasting sessions with national programs and partners improve ownership, ensure quantification occurs before procurement, and strengthen advocacy with finance authorities.	**Weak stock management and coexistence risks.** Without structured withdrawal procedures, pentavalent, IPV, and hexavalent vaccines may coexist at facilities, raising the risk of administration errors and complicating logistics. Tracking residual stocks and redistributing supplies before expiry remains a challenge.

Implement structured withdrawal, redistribution, and reverse logistics protocols. Develop SOPs that clearly define how pentavalent and IPV will be withdrawn, tracked, transferred, or shared when appropriate, and how hexavalent stocks will be phased in. Embed procedures into microplans, checklists, and supervisory tools. Integrate waste-management planning, including safe disposal capacity, as part of the switch.	**Transport and last-mile distribution constraints.** Irregular transportation schedules, insufficient vehicles, inadequate refrigeration capacity, and delays between central, regional, and district levels create distribution bottlenecks and impede retrieval of obsolete vaccines.
Strengthen procurement governance and alignment with financing. Establish switch-specific working groups to oversee timelines, co-financing approvals, customs clearance, and supplier coordination. Use data to advocate for adequate financing and coordinate early with UNICEF SD or RF procurement channels. Document procurement decisions and delivery milestones to support accountability and institutional memory.	**Procurement and administrative delays.** Slow internal approvals, delayed co-financing disbursements, customs clearance challenges, fragmented decision-making processes, and poor alignment between procurement calendars and rollout milestones can postpone orders and disrupt sequencing.
Improve distribution and transport reliability. Create systematic delivery calendars, map transport routes, and ensure access to refrigerated vehicles and contingency options. Link distribution schedules with training and facility readiness so vaccines arrive only when systems are prepared to use them.	**Insufficient cold-chain, warehousing readiness, and waste management.** Storage capacity constraints at central and peripheral levels can limit accommodation of new volumes—particularly when deliveries arrive in batches or obsolete vaccines remain in storage. Waste management plans, including incineration and safe disposal of used commodities, are often incomplete or absent.
Develop national and subnational procurement and logistics capacity. Provide targeted training in quantification, supply chain analytics, warehouse management, contract oversight, and reverse logistics. Clearly delegate roles at regional and district levels to enable timely decision-making and reduce dependence on central-level or external support.	**Limited technical capacity within procurement and logistics teams.** Gaps in forecasting, shipment planning, reverse logistics, and supplier management reduce responsiveness and make it difficult to adapt to changing supply conditions or delays.
Expand digital visibility across the supply chain. Scale use of LMIS/HMIS tools for real-time monitoring of stock levels, consumption, and wastage. Dashboards that flag anomalies help identify bottlenecks quickly and support equitable redistribution across districts.	
Maintain coordination platforms for continuous alignment. Regular supply-chain review meetings—bringing together Expanded Program on Immunization (EPI), procurement, finance, partners, and logistics units—help synchronize procurement calendars with training, communication, and cold-chain assessments, reducing rollout disruptions.	

Less Prioritized

When weaknesses in demand forecasting and procurement planning go unaddressed, they can slow the transition, increase the risk of vaccine coexistence, and undermine service quality and public trust. Taken together, the prioritized practices strengthen forecasting and procurement into predictable, accountable systems that protect supply continuity, support efficient rollout, and build resilience against future shocks.

LOGISTICS & COLD CHAIN MANAGEMENT

BACKGROUND

Logistics systems are central to any vaccine introduction, ensuring that products are stored, transported, and distributed safely to every service delivery point. For many countries transitioning from pentavalent plus inactivated polio vaccine (IPV) to hexavalent, the switch typically involves moving from a 10-dose pentavalent vial and a 5-dose IPV vial to a single 10-dose hexavalent vial that combines both products. While cold chain space requirements may change depending on country-specific procurement choices and packaging, the hexavalent switch often simplifies vaccine handling and distribution by reducing the number of products that must be stored and managed.

National and subnational teams should assess whether existing cold-chain and dry-storage capacity can accommodate the selected hexavalent presentation and whether distribution schedules require adjustment to prevent shortages or overstocking. Effective temperature monitoring, accurate inventory records, and consistent application of first-expiry–first-out stock rotation remain essential to maintaining vaccine quality. In addition, the hexavalent vaccine generally reduces the number of injections per child, which can lower demand for needles, safety boxes, and sharps waste management. Efficient logistics planning not only protects vaccine potency but also supports smoother service delivery, reduced operational burden, and more sustainable immunization systems.

KEY RISKS & SOLUTIONS

The most prioritized risks and solutions to ensuring adequate cold chain capacity and reliable logistics for a successful hexavalent vaccine introduction include:

More Prioritized ↕

Most Prioritized Solutions	Most Prioritized Risks
Develop and implement a national cold-chain strengthening plan. Establish a structured strategy that integrates updated inventories, rehabilitation needs, resource mobilization, and alignment with vaccination rollout timelines. This plan should guide procurement, redistribution, and prioritization of investments across levels.	**Stock overlap between pentavalent, IPV, and hexavalent vaccines.** Parallel stocks increase the risk of confusion, expiry, and incorrect administration when withdrawal and sequencing plans are unclear.
Conduct updated cold chain inventories and needs assessments. Regular assessments of storage capacity, equipment status, and geographic distribution inform procurement decisions and ensure that facilities are prepared before receiving hexavalent doses.	**Uneven distribution of cold chain capacity.** Storage space varies widely across regions, leaving some districts and facilities unable to accommodate hexavalent volumes or safely store ancillary materials.
Rehabilitate and replace malfunctioning equipment. Systematically identify aging or non-functional units and implement a rehabilitation and replacement plan to reduce failure risk and improve reliability.	**Cold chain failure due to unreliable or aging equipment.** Frequent breakdowns, unstable electricity, and limited preventive maintenance increase temperature excursions and compromise vaccine potency.

Institutionalize preventive maintenance systems. Schedule routine checks, establish maintenance registers, and recruit or train technicians to improve uptime and reduce emergency repairs. Clear escalation and response protocols help resolve breakdowns rapidly.	**Inequitable distribution of qualified logistics personnel.** Urban centers typically have more trained staff, while rural and remote sites face shortages of personnel capable of managing inventory, monitoring temperatures, and responding to alarms.
Strengthen workforce capacity for logistics and maintenance. Targeted training for logisticians, cold-chain managers, and maintenance staff — especially at provincial, regional, district, and operational levels — improves stock control, temperature monitoring, equipment operation, and troubleshooting.	**Limited staff training in logistics and equipment management.** Gaps in stock control, equipment operation, cold-chain monitoring, and troubleshooting contribute to preventable losses.
Expand the use of digital logistics tools. Training and supportive supervision on tools such as eSOIT improves visibility of equipment status, stock levels, and distribution needs, supporting real-time corrective action.	**Insufficient transport and logistical resources.** Inadequate vehicles, fuel, and routing plans constrain timely distribution and retrieval of both new and vaccines being phased out.
Plan hexavalent deliveries to minimize stock overlap. Sequence shipments, coordinate delivery windows with withdrawal plans, and conduct regular monitoring of remaining pentavalent and IPV stocks to prevent coexistence and reduce errors.	**Understaffing at provincial and district levels.** Too few logisticians or maintenance personnel reduces capacity to respond to breakdowns, stock imbalances, or alerts.
Strengthen transport and distribution systems. Ensure availability of vehicles and fuel, map delivery routes, and integrate contingency options to maintain predictable distribution schedules.	**Insufficient operational maintenance capacity.** Lack of trained technicians and clear repair protocols results in prolonged downtime for key equipment.
Integrate logistics financing into national workplans. Secure dedicated funding for equipment, transport, maintenance, digital tools, and training to sustain improvements beyond the introduction period.	**Limited use of logistics tools such as eSOIT.** Inconsistent adoption or data entry reduces visibility into equipment performance and stock needs, weakening decision-making.
Recruit and train maintenance agents. Expanding the number of qualified technicians increases repair capacity and shortens equipment downtime, safeguarding vaccine potency.	

Less Prioritized

When weaknesses in cold chain and logistics systems persist, the risk of temperature excursions, stock imbalances, and delays during the hexavalent transition increases. Taken together, the prioritized measures reinforce cold chain integrity, ensure safe and reliable vaccine delivery during the switch, and strengthen the foundation for long-term immunization system performance.

HEALTH WORKER TRAINING & SUPPORTIVE SUPERVISON

BACKGROUND

Training and supportive supervision ensure that all health workers have the knowledge, skills, and confidence to deliver the hexavalent vaccine safely and effectively. Comprehensive training should cover vaccine characteristics, storage and handling, injection technique, waste management, data recording, and caregiver communication. Because hexavalent vaccination simplifies delivery by reducing injections, providers must also be equipped to explain schedule changes clearly and address caregivers' questions.

Cascade training models can rapidly expand reach; however, maintaining consistency and quality requires strong oversight, standardized materials, and structured follow-up. Supportive supervision reinforces learning, identifies operational challenges early, and provides mentorship that improves confidence and performance. When supervision incorporates coaching, problem-solving, and feedback, it promotes motivation, accountability, and continuous improvement.

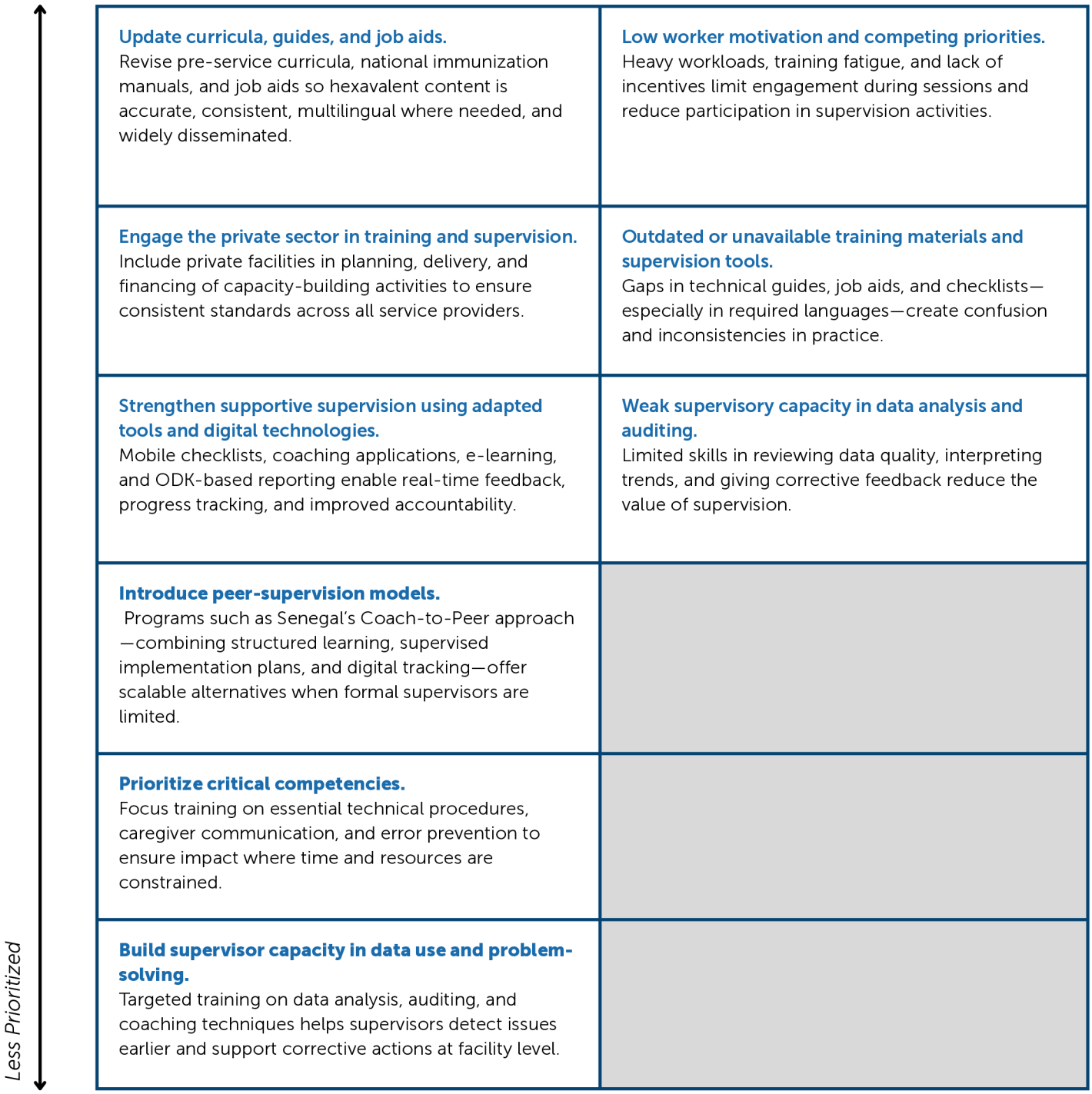
Embedding refresher training, peer support, and routine supervisory visits into program operations helps sustain competencies, detect problems such as stock gaps or data errors earlier, and maintain caregiver trust. Strong training and supervision systems therefore play a critical role in ensuring safe rollout, minimizing administration errors, and strengthening overall immunization quality during and after the hexavalent transition.

KEY RISKS & BARRIERS

The most prioritized risks and solutions to ensuring effective health worker training and supportive supervision for a successful hexavalent vaccine introduction include:

More Prioritized ↑

Most Prioritized Solutions	Most Prioritized Risks
Strengthen motivation through financial and non-financial incentives. Modest allowances, recognition, certification, and mentorship opportunities help reduce burnout and support consistent participation in training and supervision.	**Insufficient funding for training and supervision.** Limited financial and logistical resources constrain cascade trainings, refresher sessions, and supervisory visits, reducing consistency and coverage.
Integrate training with supportive supervision. Link initial training to early follow-up visits and embed coaching into routine supervisory rounds (including those tied to other programs such as malaria, TB, or nutrition) to reinforce skills and maximize limited resources.	**Shortages of qualified trainers and supervisors.** Too few skilled facilitators, along with outdated competencies on new procedures or data use, weaken the quality of instruction and follow-up.
Expand the trainer and supervisor pool. Engage nurses, midwives, and other cadres as trainers and supervisors to address human-resource gaps and improve reach, particularly in underserved areas.	**Incomplete coverage of frontline and private-sector providers.** Cascade approaches may not reach remote districts or private facilities, leading to uneven capacity and higher risk of administration errors.



When gaps in training and supportive supervision persist, health workers may struggle to communicate confidently, apply procedures consistently, and identify problems early, undermining service quality and trust. Taken together, the prioritized actions strengthen health worker competence, confidence, communication, and accountability, supporting a safe, consistent, and sustainable hexavalent vaccine rollout.

SERVICE DELIVERY IMPLEMENTATION

BACKGROUND

Effective service delivery ensures that the hexavalent vaccine reaches every eligible child through fixed, outreach, and mobile strategies. Integrating the new vaccine into existing schedules requires adjustments to session planning, vaccine flow, documentation, and staff workloads. Facilities must confirm that cold-chain capacity, injection supplies, and session logistics are sufficient for anticipated demand, and that vaccinators are confident with the new injection schedule and workflow.

Close coordination between central, district, and facility levels helps prevent service disruptions — particularly in remote, urban-poor, or high-volume areas. Early monitoring of coverage and session data can identify drop-out trends, stock imbalances, or missed opportunities. Flexibility for catch-up activities and proactive community engagement further support continuity of services.

When delivery systems are well prepared and responsive, the hexavalent switch can streamline operations, reduce caregiver burden, improve session quality, and reinforce confidence in routine immunization.

KEY RISKS & SOLUTIONS

The most prioritized risks and solutions affecting the readiness, consistency, and quality of service delivery during hexavalent vaccine introduction include:

More Prioritized ↕

Most Prioritized Solutions	Most Prioritized Risks
Strengthen and expand health worker capacity. Tailored modules, structured onboarding, refresher sessions, and planned on-site mentorship ensure vaccinators understand schedules, injection techniques, documentation, and session planning adjustments. Targeted supervision reinforces skills in the early months.	**Insufficient and unevenly distributed vaccination staff.** Too few trained vaccinators, high workloads, and limited allowances reduce the number and quality of fixed, outreach, and mobile sessions, and limit flexibility for catch-up.
Mobilize operational funding and expand resources. Secure adequate transport, fuel, per diems, and outreach supplies so districts can maintain predictable fixed, outreach, mobile, and catch-up sessions. Advocacy supports sustainable budgeting and partner alignment.	**Inadequate operational funding and logistics resources.** Gaps in transport, fuel, per diem support, and outreach materials restrict session availability and create missed opportunities.
Implement structured withdrawal and redistribution protocols. Clear SOPs and coordinated timelines prevent coexistence of antigens, reduce errors, streamline vaccine flow, and minimize wastage.	**Coexistence of pentavalent, IPV, and hexavalent vaccines.** Without clear withdrawal protocols, facilities may retain multiple antigens, increasing risk of errors, confusion, and wastage.

Revise, adapt, and digitalize service-delivery tools. Updated job aids, microplans, registers, supervisory checklists, and e-learning modules standardize practice and improve documentation across facilities.	**Knowledge gaps and insufficiently adapted training materials.** Inconsistent understanding of schedules, documentation, and workflow adjustments undermines vaccinator confidence.
Improve session availability and service quality. Optimize unit distribution, address reception and crowd-flow challenges, and refine outreach and mobile microplans to ensure predictable, equitable access.	**Weak service availability and delivery quality.** Irregular sessions, scheduling conflicts, and poorly organized reception areas reduce access and caregiver trust.
Enhance cold chain readiness and maintenance. Ensure availability of ECF, cold boxes, syringes, and spare parts. Preventive maintenance plans — including contracts with certified technicians — reduce equipment downtime.	**Cold-chain and tool readiness challenges.** Insufficient extended controlled temperature conditions, cold boxes, syringes, or fragile session tools disrupt delivery — especially in outreach and mobile settings.
Use digital tools for visibility and adaptive management. Mobile supervision apps, e-LMIS platforms, dashboards, and remote training tools improve real-time monitoring, problem-solving, and accountability.	**Poor documentation and limited data visibility.** Outdated forms and incomplete session reporting impede timely identification of drop-outs and stock issues.
Map and engage hard-to-reach communities. Updated microplans, partnerships with community leaders, and tailored communication strategies help address hesitancy and reach mobile or marginalized populations.	**Hard-to-reach populations and vaccine hesitancy.** Migrant groups, urban informal settlements, and hesitant caregivers require tailored approaches that may not be consistently planned or resourced.

Less Prioritized ↓

When service delivery challenges persist, services become unpredictable, coverage declines, and confidence in vaccination weakens, particularly among underserved communities. Taken together, the prioritized strategies support reliable, equitable, and high-quality service delivery, enabling a smooth hexavalent rollout while strengthening routine immunization systems.

COMMUNICATION & SOCIAL MOBILIZATION

BACKGROUND

Clear, consistent communication builds public confidence and supports informed acceptance of immunization across communities. Prior to hexavalent introduction, messages should emphasize that the new vaccine offers the same protection as existing vaccines while reducing the number of injections — simplifying visits for families and health workers alike.

Effective communication requires collaboration between national and local levels to ensure accuracy, cultural relevance, and adaptation to multiple languages and contexts. Bidirectional engagement through trusted community channels — including local leaders, schools, health volunteers, faith-based organizations, and media — helps surface questions, address misinformation, and maintain dialogue. Equipping health workers and other key messengers to communicate confidently with caregivers is equally important, especially in environments where rumors and misinformation circulate rapidly.

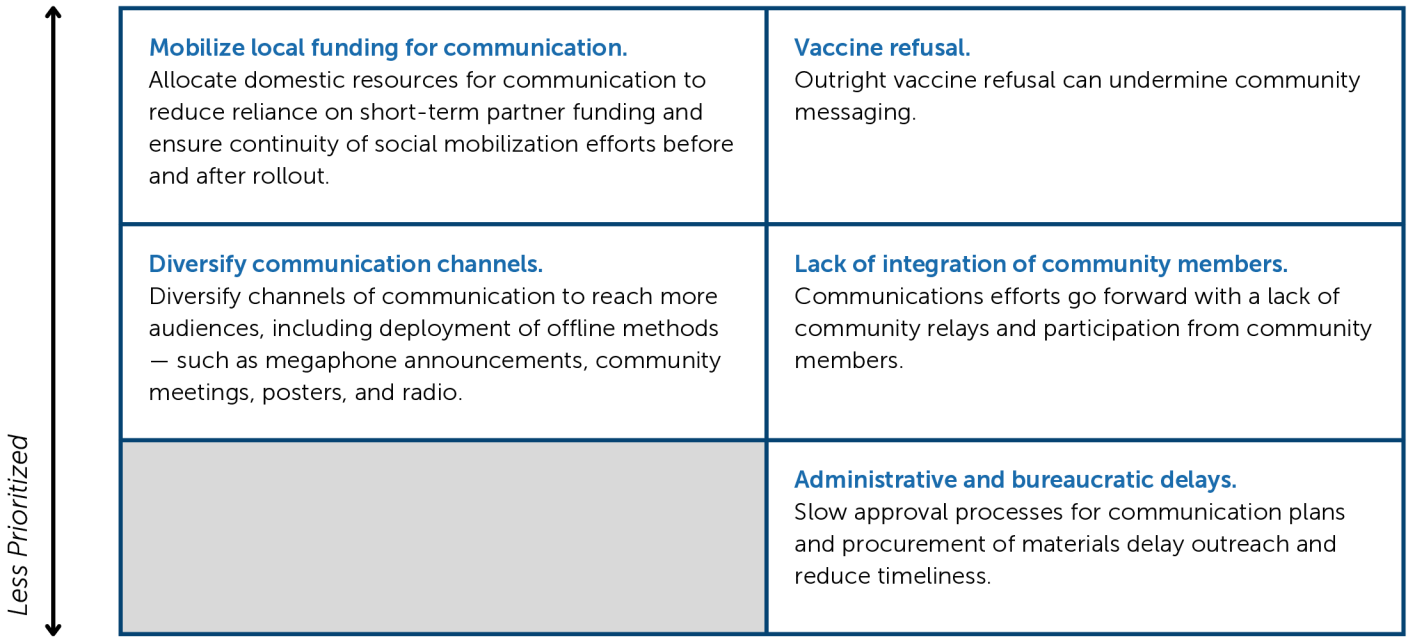
Engaging communities early, continuing communication after rollout, and monitoring rumor trends and feedback in real time help sustain trust and ensure communication strategies remain responsive and equitable.

KEY RISKS & SOLUTIONS

The most prioritized risks and solutions related to building public understanding, trust, and acceptance through communication and social mobilization for hexavalent vaccine introduction include:

More Prioritized ↕

Most Prioritized Solutions	Most Prioritized Risks
Adapt messages to local context. Confirm messaging is in line with local context to ensure that community-specific needs and perspectives are addressed.	**Vaccine mis- and disinformation.** Persistent rumors and misinformation undermine trust, complicate decision-making, and can quickly spread through social networks and digital platforms.
Leverage social media. Track social media and community feedback to detect emerging rumors early and deploy rapid, corrective messaging using trusted channels.	**Messages not tailored to local contexts and languages.** Centralized messaging without community adaptation reduces relevance and effectiveness and may miss priority audiences
Sustain strategic community engagement. Maintain ongoing dialogue with caregivers and community leaders through local networks so information on benefits, schedules, and possible side effects is accessible, culturally appropriate, and delivered in local languages.	**Limited funding for communication and mobilization.** Resource constraints restrict production, adaptation, translation, and dissemination of materials tailored to local audiences.



When communication strategies are not adaptive or locally grounded, efforts may arrive too late, fail to address misinformation, or miss the communities most in need. Taken together, the prioritized strategies strengthen decentralized, flexible, and equity-focused communication systems that can respond to evolving concerns, reinforce trust, and support a confident and successful transition to the hexavalent vaccine.

PROGRAM MANAGEMENT & COORDINATION

BACKGROUND

Strong program management ensures that all aspects of the hexavalent introduction — from planning through monitoring — are coordinated, sequenced, and executed efficiently. Clear governance structures, defined roles, and reliable communication channels allow national and subnational teams to align activities, anticipate risks, and respond quickly to challenges. Regular coordination meetings and progress reviews maintain accountability and momentum.

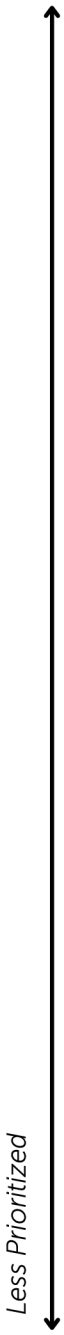
Interagency committees and technical working groups help translate policy into action by aligning ministries, partners, and donors around shared plans, timelines, and responsibilities. Effective management also prioritizes documentation of lessons learned to inform future introductions. When governance structures function well and decision-making is informed by timely data, program managers can maintain oversight, strengthen collaboration, and ensure the hexavalent switch contributes to broader immunization system resilience.

KEY RISKS & SOLUTIONS

The main program management and coordination risks and solutions to a timely, well-governed introduction include:

More Prioritized ↕

Most Prioritized Solutions	Most Prioritized Risks
Reinforce governance and coordination mechanisms. Hold regular Expanded Program on Immunization (EPI), CCIA, and technical working group meetings to strengthen shared decision-making and ensure alignment across ministries, partners, and donors. Establish dedicated working groups and leverage existing structures (such as polio platforms) to avoid duplication and maintain operational discipline.	**Weak data management systems and outdated or complex tools.** Limited access to updated, user-friendly planning and monitoring tools undermines progress tracking and accountability. Partial digitization and slow tool distribution exacerbate gaps.
Build program management capacity at all levels. Provide structured training on new vaccine introduction, risk assessment, supervision, and data use. Strengthen human resources across all administrative levels to address attrition and workload pressures.	**Insufficient management capacity and training.** Many managers lack structured training on new vaccine introduction, risk assessment, or data use. Staff turnover further weakens planning, oversight, and supervision.



Update, digitize, and disseminate management tools. Modernize planning, reporting, and monitoring tools and ensure they are widely distributed. Simple, user-friendly tools expand real-time visibility and enable performance-based monitoring.	**Governance and coordination challenges.** Delayed or inconsistently functioning committees, fragmented intra-ministerial collaboration, and weak horizontal coordination slow decision-making and resource mobilization.
Strengthen multisectoral and horizontal coordination. Improve communication across directorates and reinforce collaboration among program managers responsible for service delivery. Drawing on proven polio coordination models can accelerate problem-solving and resource flow.	**Limited involvement of regional and district levels.** Subnational teams may be insufficiently engaged in planning, readiness checks, and communication — resulting in gaps during rollout, including delays in activating the second-year-of-life platform for delivery of the hexavalent booster dose.
Enhance subnational engagement and readiness. Involve regional and district teams in planning, readiness assessments, communication, and activation of the second-year-of-life platform to strengthen local ownership and consistency.	**Insufficient funding and resource constraints.** Delays in financing key activities — including demand generation for the fourth dose — and delayed distribution of tools reduce preparedness.
Mobilize resources and strengthen reporting. Advocate for predictable funding — particularly for the fourth dose — while reinforcing management and reporting routines to improve accountability and transparency.	**Limited understanding and mitigation of introduction risks.** When operational, communication, and coordination risks are not systematically assessed, emerging issues go unaddressed and disruptions become more likely.
Engage communities through targeted outreach. Partner with community groups and media to reinforce demand and ensure policies translate into equitable implementation, including among underserved populations.	

Without strong program management and coordination, rollout efforts risk fragmentation, inconsistent service activation, and weakened supervision. Taken together, the prioritized strategies promote clarity, accountability, and timely action, enabling coordinated execution of the hexavalent rollout while strengthening overall immunization system performance.

DATA SYSTEMS, MONITORING & REPORTING

BACKGROUND

Accurate, timely data enable effective planning, monitoring, and accountability throughout the hexavalent introduction. Integrating the new vaccine into existing recording and reporting tools ensures that every dose administered is captured consistently. Health facilities should update child registers, tally sheets, and monthly reports to reflect the new formulation and schedule, while districts and national programs routinely review coverage, wastage, and stock trends.

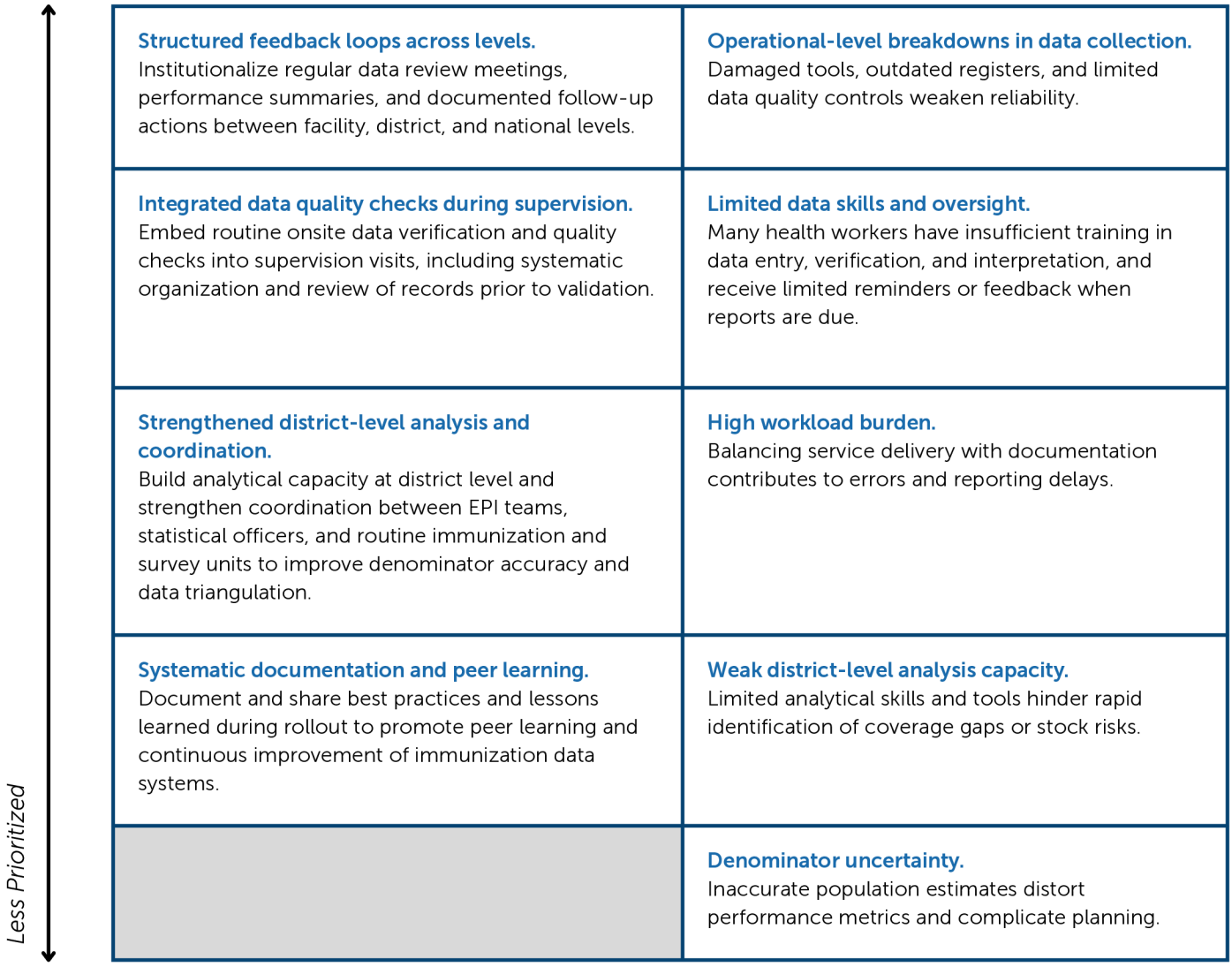
Regular feedback loops between facility, district, and national levels promote shared learning and course correction. Strengthening monitoring and learning systems during the rollout not only improves the quality of hexavalent implementation, but also reinforces the broader immunization data ecosystem, enabling programs to make evidence-based decisions and track progress toward national goals.

KEY RISKS & SOLUTIONS

The most prioritized risks and solutions to ensuring robust data systems, monitoring, and reporting for a successful hexavalent vaccine introduction include:

More Prioritized ↕

Most Prioritized Solutions	Most Prioritized Risks
Standardized hexavalent-aligned data tools. Update and harmonize recording and reporting tools across all levels of the health system, ensuring timely distribution and discontinuation of parallel penta+IPV registers.	**Inconsistent reporting across tools and systems.** Parallel tools, weak standardization, and varied interpretation of requirements — combined with uncertain denominators — contribute to inconsistent coverage estimates.
Digitized routine immunization reporting. Expand digital data collection and reporting systems where feasible to improve timeliness, completeness, and visibility of coverage, stock, and wastage trends.	**Under-reporting and timeliness issues.** Paper-based systems, staffing shortages, and competing workloads limit completeness and delay submission.
Targeted data capacity building for health workers. Strengthen health worker and supervisor skills through focused training and supportive supervision on data entry, verification, interpretation, and use for decision-making.	**Use of outdated tools not aligned to the hexa schedule.** Continued reliance on penta+IPV registers increases misclassification and gaps in documentation.



When these data-related challenges persist, they increase the risk of misreporting, reduce visibility into emerging problems, and weaken decision-making during rollout. Taken together, the prioritized solutions strengthen accurate reporting, enable timely course correction, and support sustained learning, reinforcing both effective hexavalent implementation and the broader routine immunization data ecosystem.

ADVERSE EVENTS AFTER IMMUNIZATION (AEFI) SURVEILLANCE

BACKGROUND

Robust AEFI surveillance protects public trust and ensures the continued safety of immunization programs. The introduction of the hexavalent vaccine offers an opportunity to reinforce national systems for detecting, reporting, investigating, and communicating potential adverse events. Health workers should be trained to recognize both expected reactions and unusual events, manage cases appropriately, and communicate clearly with caregivers about what to expect — and when to seek care.

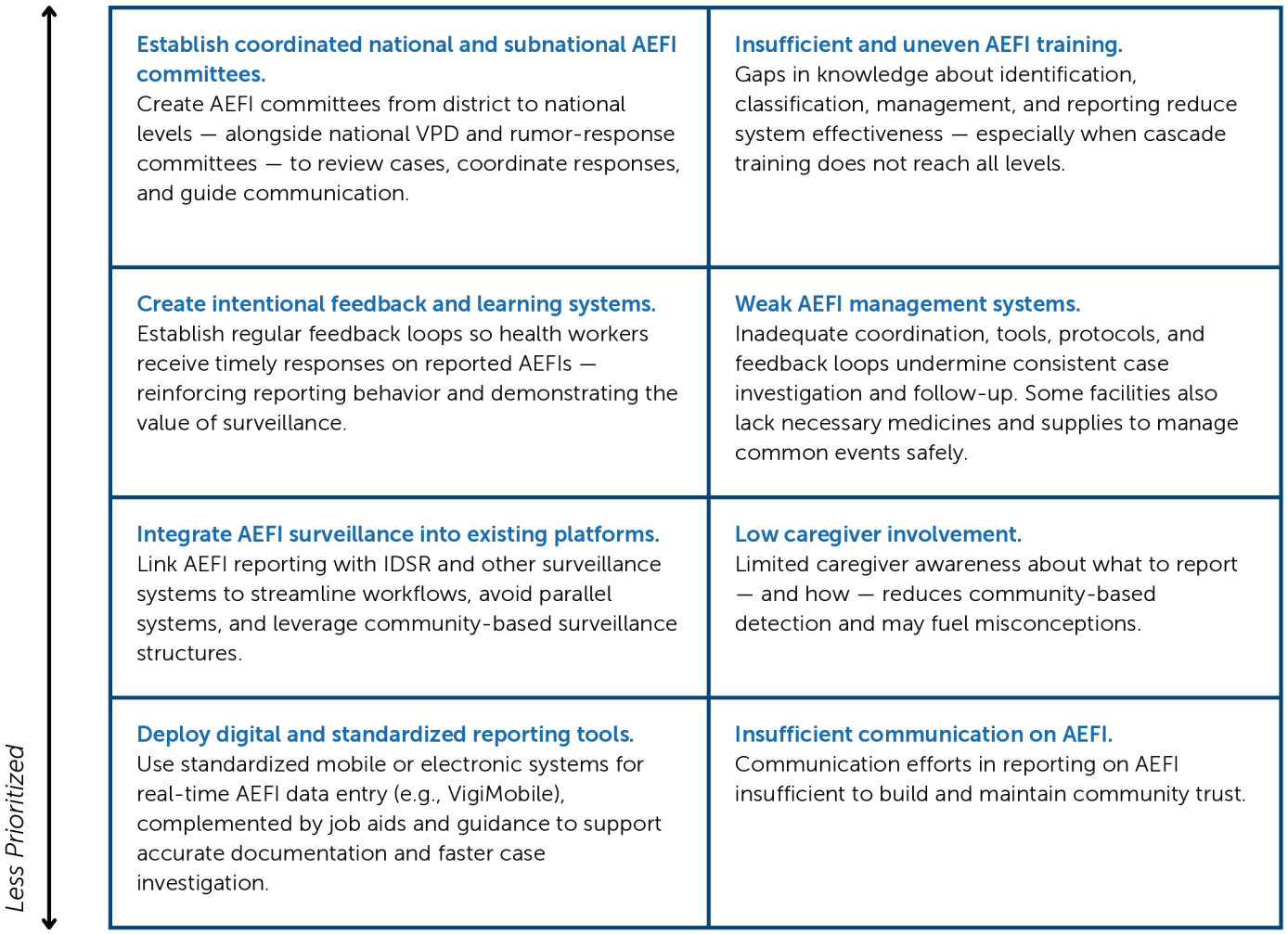
Standardized reporting forms, clear reporting lines, and rapid feedback from district and national levels are essential for timely investigation and response. Transparent, evidence-based communication of findings — both within the health system and to the public — helps prevent rumors, reduce fear, and maintain confidence in vaccines. Strengthening AEFI surveillance during the hexavalent rollout also builds broader pharmacovigilance capacity, ensuring countries are prepared to monitor and respond to safety signals across the entire immunization schedule.

KEY RISKS & SOLUTIONS

The most prioritized risks and solutions affecting the detection, reporting, and management of AEFIs during hexavalent vaccine introduction include:

More Prioritized ↕

Most Prioritized Solutions	Most Prioritized Risks
Strengthen infection prevention and control (IPC) skills for safe vaccination and case management. Reinforce IPC competencies to reduce avoidable events and support safe responses when AEFIs occur.	**Rumor management.** Insufficient systems to monitor and track rumors that develop following AEFI.
Provide continuous training for health workers. Offer ongoing training on AEFI recognition, reporting, case management, caregiver communication, and risk mitigation. Train health workers to support detection and caregiver education at community level.	**Lack of AEFI reporting.** Underreporting AEFI minimizes effectiveness of AEFI surveillance systems.
Standardize AEFI case management and investigation protocols. Develop clear guidance on definitions, classification, investigation steps, and required supplies — ensuring medicines and materials are consistently available.	**Provider perceptions and fear of blame.** Some health workers may minimize reporting or avoid documentation due to concern about criticism or punitive responses.



Without strong AEFI surveillance and response systems, programs risk missing safety signals, delaying appropriate action, and eroding public confidence. Taken together, the prioritized measures strengthen trusted surveillance systems that enable early detection, rapid response, transparent communication, and sustained confidence in the safety of the hexavalent vaccine and the broader immunization program.