Pharmaceutical Procurement and Supply Chain Management: Approaches and Tools for Strengthening this Aspect of the Pharmaceutical System

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Why is strong procurement and supply chain management important?

- Weak procurement and supply chain management (PSCM) systems lead to
  - Frequent stock-outs of quality-assured products
  - Waste of resources
  - Distribution of substandard products
- Achieving universal health coverage requires addressing issues of access through engagement with the public and private sectors.
- Strong PSCM systems are essential to ensuring uninterrupted access to safe, effective, quality-assured, and affordable medical products.
What does strong PSCM look like?

• Good procurement in pharmaceutical systems is characterized by
  – Transparent, impartial, and accountable processes
  – Integrity and fair and open competition
  – Value for money
  – Optimized use of available resources for quality-assured medical products

• Implementing an effective and efficient supply chain management system involves
  – Good supply chain governance mechanisms with clear structures
  – Strategically planning, designing, and implementing all functions and related processes
  – Investing in human resources and institutional capacity
  – Developing and implementing comprehensive information systems
  – Establishing and implementing effective monitoring and evaluation systems for continuous improvement.
MTaPS PSCM strengthening approaches include:

- Assessing procurement and supply chain system inefficiencies and providing alternative solutions
- Developing strategies to address root causes and implement risk mitigation measures
- Strengthening procurement and supply chain governance capacity to set clear rules and structures and disseminate information
- Building capacity in public procurement and supply chain management
- Leveraging best-practice third- (3PL) and fourth-party logistics (4PL) providers’ capabilities to support the public health supply chain through evidence-based outsourcing
- Supporting improvements in data analytics and data use culture for evidence-based decision making at all levels of the supply chain
- Supporting improvements in good dispensing and product management practices at the point of care, including using electronic dispensing, stock management, and transaction management tools
Approaches and tools MTaPS has been using to strengthen PSCM (2)

Supply chain outsourcing decision framework

• MTaPS has been assessing the potential for implementing best-practice 3PL and 4PL service provider relationships in low- and middle-income countries (LMICs) to support the public health supply chain through evidence-based outsourcing.

• As part of this work, MTaPS developed a supply chain outsourcing decision framework that outlines the process for evaluating whether 3PL and/or 4PL providers could be beneficial for government.
Approaches and tools MTaPS has been using to strengthen PSCM (3)

Forecasting tools to improve the procurement of reproductive, maternal, newborn, and child health (RMNCH) medical products

Increasing access to and appropriate use of RMNCH medical products could save the lives of more than six million women and children a year.

• Availability—a major component of access—requires accurate and timely quantification of supply requirements.

• Systematic and rigorous quantification of RMNCH medical products is often overlooked or data is lacking or is of poor quality.

• MTaPS developed a forecasting supplement that provides practical guidance on estimating future consumption quantities of priority RMNCH medical products by using demographic/morbidity and service data. The package of this supplement consists of the forecasting guide, simple Excel forecasting tools for the health conditions considered, forecasting tools with an example for each condition, and a flyer.
Assessing the Potential for Implementing Best-Practice 3PL and 4PL Service Provider Relationships in the Philippines

Although the Philippines has used outsourcing strategies, these have been traditional fee-for-service contracts, which do not reflect global best-practice relationships.

MTaPS conducted a study to assess the potential for implementing best-practice 3PL and 4PL service provider relationships in the Philippines. Three critical tools developed as part of the study include:

- **Rapid political economic analysis** to understand the major political, economic, social, and cultural incentives, motivations, and constraints that impact decision making in both sectors.
- **Operational capability assessment** to identify strengths and gaps in the public sector supply chain and assess the ability of the private sector to provide required services.
- **Cost-benefit analysis** to measure current supply chain spending and service levels.
Key study findings

• Lack of experience managing best-practice 3PL and 4PL relationships. Effective management of these relationships requires
  – Having a detailed understanding of current cost levels and the required levels of service
  – Managing logistics service providers by holding regular review meetings
  – Presenting future strategy objectives to the logistics provider contract managers

• Although there was consensus among key stakeholders that implementing 3PL or 4PL relationships has the potential to overcome shortcomings in the public sector health supply chains, doing so will require significant education, mentoring, and guidance to ensure that the benefits are realized.
With federalization, local governments (LGs) were given the authority to procure most maternal, newborn, and child health (MNCH) products but had no procurement experience. Procurement prices and methods varied widely among LGs.

MTaPS supported the government to:

- Conduct a mapping study of procurement roles and responsibilities, methods, processes, and financing
- Discuss study findings and identify practices for subnational procurement
- Produce a set of actionable recommendations on procurement, quantification, quality assurance, budgeting, and financial management

The government is working to integrate recommendations into national and local work plans and budgets.

Actions will contribute to improved procurement practices, enabling sustained access to quality MNCH products.
How can you apply these approaches and tools?

- **Forecasting Consumption of Select Reproductive, Maternal, Newborn, and Child Health Medical Products** (MTaPS, 2022): This resource provides practical guidance on estimating the future consumption quantities of priority RMNCH medical products needed by programs as part of national quantification exercises. Forecasting algorithms and forecasting calculation tools are also available to users.


- **Outsourcing Toolkit** (Africa Resource Centre, 2020): This toolkit serves as a resource to support public health decision-making for those who may be considering outsourcing as an option for improving supply chain performance.

- **Supply chain outsourcing decision framework** (MTaPS): This framework outlines the process for evaluating whether 3PL and/or 4PL providers could be beneficial for government.
Additional resources: readings

- **Subnational Procurement Practices of Maternal, Newborn, and Child Health Medicines in Nepal** (July 2022)
- **Procurement and Supply Chain Management Roadmap Helps Implement Universal Health Coverage Law in the Philippines** (July 2022)
- **Modernizing Vaccine Procurement in Jordan** (April 2022)
- **Creating Sex/Gender-Responsive Health Supply Chains: COVID-19 Reminds Us Again** (December 2021)
- **Strengthening Family Planning Supply Chain through Improved Data Usage in Bangladesh** (July 2021)
- **Building Resilient Health Systems: What Has COVID-19 Taught Us About Infection Prevention and Emergency Supply Chains?** (June 2021)
- **Addressing Workforce Gaps in the Philippines for Efficient Supply Chain Management** (January 2021)
Additional resources: e-learning and videos

- **Pharmaceutical Systems Strengthening 101** (available in [English](#) and in [French](#)): This course introduces learners to the basic principles of PSS, including how to address pharmaceutical system problems that advance universal health coverage; combat antimicrobial resistance, HIV and AIDS, malaria, tuberculosis, and other public health threats; and promote maternal and child health.

- **Use of Retail Pharmacies for Public Sector Procurement in Low- and Middle-Income Countries**: This MTaPS webinar discusses the pros and cons and promising policies and strategies of using retail pharmacies to provide medicines and contraceptives to public sector clients in LMICs.
Who to contact

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