Securing Medical Supply Chains in a Post-Pandemic World

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Medically supply chains are increasingly internationalised

➢ World trade of medical goods has *steadily increased* over the last 30 years

In the European Union, Japan and the United States, the foreign share in value added of finished pharmaceutical products accounted respectively for 35%, 26% and 49% in 2019.

Although the contributions of foreign economies in quantities would be different…

Source: Based on Figure 1.5 in OECD (2024), Securing Medical Supply Chains in a Post-Pandemic World, available at https://doi.org/10.1787/119c59d9-en.
Shortages of medical products are worrying...

> Shortages of **medicines** already common and increasing prior to COVID-19, still prevalent
  > E.g., 60% increase in notifications between 2017 and 2019 in 14 OECD countries

> Prior to COVID-19, shortages of **medical devices** received less attention than medicine shortages
...but there are many causes

**Medicines**

- Problems in manufacturing (~50-60%)
- Prices “too low” in some contexts
- Surges in demand
- Distribution failures

**Medical devices**

Risks to future supply:

- Stricter regulation being implemented in EU
- Shortages of critical raw materials
- Price inflation

➢ **COVID-19** aggravated shortages due to surge in demand, interruptions in manufacturing, panic buying and trade barriers
Policies must strengthen supply chains **now** and in anticipation of **future** crises

During routine circumstances

**Anticipating risks**
- Enhancing visibility across the whole supply chain
- Identifying “critical” products for closer monitoring and information sharing

**Mitigating (or reducing exposure to) risks**
- Addressing root causes of shortages
- Encouraging flexibility and agility into the system

In preparation for severe crises

**Developing additional crisis capabilities**
- Preparing for severe crises
- Ensuring mechanisms are in place to mitigate risks

Collaborating and sharing information among stakeholders

Enhancing international co-operation among governments

e.g., Regulators already collect some information on manufacturing supply chains of medicines (24 regulatory authorities)

Source: Based on Table 2.1 in OECD (2024), Securing Medical Supply Chains in a Post-Pandemic World, available at https://doi.org/10.1787/119c59d9-en.
Anticipating risks - Enhance visibility (cont.)

➢ Enhance visibility and use information better across the whole supply chain

- Harness information collected by regulators to better assess supply chain vulnerability
- Ensure that information can be shared with relevant stakeholders where needed
- Include ‘track-and-trace systems’ in the distribution chain
- Requires closer monitoring for ‘critical products’
Anticipating risks - Identify critical products

What are critical products, for closer monitoring?

- No consensual definition or terminology but “medicines/medical devices that should be available at all times”

- Countries consider two dimensions:
  - Clinical dimension
  - Supply chain dimension

- In some cases, ‘critical’ only refers to clinical importance, in others, it is a combination of clinically essential and a vulnerable supply chain
Mitigate risks – Address root causes of shortages

- Encourage improvements in quality management
  - Require manufacturers to maintain quality management systems to highest established standard and monitor their implementation

- Market shaping - relieve pressure on prices when needed, better predict demand
  - **Strategic public procurement approaches**
    - Criteria other than price alone
    - Diversification of supply as a rationale for splitting awards
  - **Cooperation through cross-country pooled procurement**
Mitigate risks – Address root causes of shortages (cont.)

Expand and diversify production capacities

- High on policy agenda
  - to respond to ever-increasing worldwide demand for medical products,
  - to reduce dependency on highly-concentrated manufacturing of some intermediate inputs
- Re-shoring and near-shoring?
  - Requires building capacities or adapting existing equipment
  - Requires trained human resources
  - Expected to increase production costs … and prices for health system purchasers
Mitigate risks - Encourage agile and flexible systems

➢ Trade facilitation to allow movement of supply
  • Implementation of trade facilitation measures e.g. streamlining and harmonising processes

➢ Regulatory co-operation and flexibility
  • Harmonisation of regulatory requirements e.g. e-leaflets for hospital-administered products

➢ Co-ordinated and efficient stock management strategies
  • Encourage appropriate inventory strategies
  • Regional and co-ordinated stockpiling to respond to short-term supply-demand mismatches

➢ Harness digital technologies
  • Digital technologies to better understand and improve predictions of supply and demand and movement of goods
Prepare now for rapid responses to future severe crises

➢ Prepare for more rapid responses

• Establish processes and criteria for defining “crisis-specific” lists of critical products; put in place mechanisms to monitor international and regional flows

• Enact appropriate regulatory flexibilities or requirements

➢ Ensure mechanisms in place to facilitate worldwide access to needed products

• Enhance co-operation among governments

• Support expanding production capacity and mandate the prioritisation of the medical sector for the supply of raw materials and electronic components

• Support development of new vaccines and treatments developed in response to specific crises
Anticipate, Mitigate, Prepare for the worst!

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