"My only worry is getting medicines for my 35-year-old son. Often, I am asked to return to the district hospital for different medicines. He is better only when he takes them regularly." – A 70-year-old widow who travels over 80 km to collect her son's medicines.

"I support my family and buy my father's medicines from a local pharmacy, spending ₹1500 monthly…. I do not know what else to do for his medicines." – A 19-year-old girl working in a community organisation.

"My brother spends about ₹3,000 monthly to buy my medicines from the city, as they aren't available here." – A 31-year-old woman from a remote village, supported by her natal family.

These quotes from our formative study in mental health (2024, rural Satara, Maharashtra) reveal the difficulties in accessing mental health medicines in rural areas and highlight the urgent need to understand drug availability, distribution, access, and drug literacy—key components of effective supply chain management for mental health drugs.

The present desk review builds on the findings of this formative study and other documents.

Background

Mental health conditions, including mental disorders and psychosocial disabilities, affect a large and growing number of people in India. In 2017, about 197 million people (14.3% of the population) were impacted, contributing to nearly 5% of the country's total health burden. Although global goals emphasise universal health coverage and access to essential mental health drugs, their consistent availability at the primary care level remains low, especially for the marginalised and remote communities.

Key reasons for these gaps include poor integration of mental health into primary care, limited finances and workforce, stigma, and **weaknesses in drug supply chain management (DSCM)** with challenges such as inaccurate demand forecasting, slow procurement, inadequate storage, fragmented distribution, and complex regulations leading to frequent medicine shortages. Mental health conditions require continuous treatment, and this is where efficient DSCM comes in. There is a need for sustainable and long-term investments in DSCM to ensure reliable access to quality and affordable medicines.

Purpose of this review: Covering the road from challenges to good practices

But a first step to bringing in investment or building strategies for a well-oiled supply chain is gaining a deeper insight into the current scenario and best practices. However, there is no document that covers the breadth of Indian policies, programmes, and the challenges and opportunities in this area. This document is a policy brief of report based on desk review which aims to consolidate the current evidence on Indian policies and programmes and innovative global promising practices, and the learnings for mental health DSCM in India. It intends to guide the formulation of strategies and policies to strengthen DSCM and improve mental health service delivery as an integral component of India's primary healthcare.

What is the Indian context for DSCM?

Drug supply chain management (DSCM) involves regulating the flow of medicines, finances, and information from procurement to delivery at health facilities. Efficient DSCM ensures timely and adequate supply of quality drugs, yet it remains an under-prioritised part of Indian public health system.

At the national level, the Central Drugs Standard Control Organization (CDSCO) sets policies and standards, while state procurement agencies manage purchasing and distribution. State-level variations are significant—Tamil Nadu, Kerala and Rajasthan have established transparent, cost-efficient models that ensure reliable medicine supply.

However, systemic gaps in mental health DSCM—such as weak forecasting, procurement delays, poor storage, and fragmented distribution—limit access, especially in rural areas. Uneven quality control across states adds to the risk of substandard drugs entering supply chains.

Additional challenges arise due to licensing barriers, social stigma, low demand forecasts, and low-profit margins for manufacturers.

Addressing these weaknesses requires integrated planning, investment, and stronger coordination across levels of governance.

Understanding the public supply chains in India

A comprehensive understanding of India's public health supply chain is crucial before delving into the specific mechanisms that govern the distribution of mental health drugs. Major programmes, schemes, and innovations that shape the landscape of medicine supply in India's public health system include- flagship initiatives such as the Jan Aushadhi Scheme, which aims to make generic medicines affordable and accessible, and digital platforms like e-Aushadhi, which enhances the availability of essential medicines across the government facilities by streamlining and automating the drug supply chain; along with the challenges and bottlenecks of these initiatives.

In India persistent shortages of inspectors and limited testing infrastructure continue to allow substandard medicines to infiltrate the public supply chain.

India has recently proposed a World Health Organization-led independent audit and benchmarking of its drug regulatory system to address quality assurance and enforcement gaps. This evaluation will identify systemic weaknesses, guide reforms, and boost transparency for better public health protection.

Moreover, to ensure safe and reliable access to essential medicines, India must effectively implement the proposed Drugs, Medical Devices and Cosmetics Act, 2025 and strengthen regulatory staffing and laboratory capacity.

The state-level innovations, including the robust supply chain models in Tamil Nadu, Kerala, and Rajasthan, have demonstrated success in improving the availability, affordability, and quality of essential medicines through pooled procurement, transparent tendering, and efficient logistics. These models offer a roadmap for Maharashtra and other states for designing and implementing an effective DSCM.

Further, India's supply chain mechanisms for non-communicable diseases (NCDs) and tuberculosis (TB) demonstrate two distinct yet complementary models within the public health system- a decentralised approach for NCDs emphasizing integration, digitalisation, and patient continuity of care, and a vertically structured, centrally managed model for TB ensuring programmatic control and quality assurance. While both systems have shown progress in improving access to medicines, challenges continue in coordination and last-mile delivery. It is important to strengthen the linkages between different disease programmes and improve the integration of digital data systems.

Understanding the complexities and opportunities in India's public health supply chain, with implications for improving mental health drug access and broader health system strengthening is important.

How do Indian programmes and policies address mental health DSCM?

The availability and distribution of essential psychotropic medicines depend on well-designed policies and regulatory frameworks. India's decentralised public health system assigns complementary roles to central and state governments. However, this structure faces several challenges in mental health care, including shortages of human resources, inconsistent programme implementation, limited funding, urban–rural disparities, and systemic gaps.

Sound policies, poor implementation

The DSCM for mental health medicines operates under national policies and legislative frameworks such as the National Mental Health Policy (2014), Mental Healthcare Act (2017), National Health Policy (2017), Drugs and Cosmetics Act (1940), and the National List of Essential Medicines (2022). Programmes like the National Mental Health Programme (NMHP) and District Mental Health Programme (DMHP) further support it. Yet, structural, financial, and operational limitations, inadequately skilled human resources. along with weak communication systems, particularly in rural areas, continue to hinder effective implementation. India further needs to work on ensuring wider access to newer, safer, and affordable psychotropic drugs through subsidies for promoting drug research and innovations. Addressing these systemic gaps requires coordinated planning and streamlined execution despite India's strong pharmaceutical capacity.

How does the global landscape for DSCM look?

Globally, DSCM is evolving towards greater transparency, adaptability, and technological integration. Innovative models from Ethiopia, Ghana, Mozambique, Tanzania, the WHO/AFRO region, and Thailand demonstrate best practices such as digital tools for supply visibility, stronger human resources, public–private partnerships, and integrated monitoring systems.

Additionally, several countries have adopted the integrated and innovative strategies to improve DSCM for mental health medicines. Key examples include- the United Kingdom (National Health Services), Australia (Pharmaceutical Benefit Scheme), Rwanda (electronic logistics system), and Malawi (mobile tracking). These best practices further underscore the significance of a strong commitment to availability of quality services and equitable access. These global experiences offer valuable lessons that India can contextualise to strengthen its DSCM and advance equitable access and responsiveness.

Evidence from best-practice settings further affirms that DSCM is not operated as a separate system for mental health but rather integrated within broader DSCM. Nevertheless, to ensure uninterrupted access to psychotropic medicines, context-specific modifications are necessary to address their particular prescribing practices, demand variability, and regulatory requirements.

How to build human resources for DSCM in India?

Drug supply chain management in India is at a crucial point, with growing recognition of the skills needed among pharmacists, logisticians, and warehouse staff for effective healthcare delivery, especially in low- and middle-income countries. Despite this, formal career paths and competency standards have long been missing. Globally such challenges have been addressed by initiatives like People that Deliver and USAID's Global Health Supply Chain Programme.

Implementing competency frameworks helps improve clarity about job roles and provide guidance on recruitment, training/ refresher training, retention of DSCM personnel, and integration of DSCM within public health systems, making it a respected profession. India is addressing these gaps with efforts such as the Ministry of Health's Competency-Based Training Manual and pharmacist upskilling programmes, though data on state-level training is limited. Adapting global standards through clear job roles, updated curricula,

and ongoing development remains essential to build a skilled, resilient DSCM workforce.

A robust and reliable drug supply chain system can ensure continuous availability of essential psychotropic medicines, reduce the mental health treatment gap and thereby contribute to achieve Universal Health Coverage (UHC) in India. Despite policies supporting mental healthcare, challenges in implementation, workforce, digital infrastructure, and financing limit equitable access.

What should India do to achieve effective DSCM, especially for mental health drugs?

We present key lessons to strengthen India's mental health drug supply chain, drawing on national policies, public sector models, other disease supply chains, and global best practices under four broad themes :

   a) Reform policy
   b) Integrate technology
   c) Build human resources
   d) Improve operational processes

Reform policy...
- Provide targeted budgets for mental health
- Revise National List of Essential Medicines regularly for including newer and safer mental health medicines
- Implement balanced pricing policy for maintaining affordability and offering incentives/ subsidies for promoting medicine inventions and innovations
- Enforce legal provisions for guaranteed access to free drugs
- Improve communication and public engagement

Integrate technology...
- Real-time inventory and procurement platform
- Mobile-based ordering and stock alerts

Build human resources…
- Adapt and institutionalize standard DSCM professionalisation frameworks for improving human resource competencies
- Develop leadership for DSCM
- Include DSCM in pre- and in-service training of healthcare providers for building essential knowledge and skills and generating confidence for prescribing psychotropic medicines

Improve operational processes…
- Uninterrupted fund availability and efficient financial planning
- Hybrid forecasting and procurement mechanism
- Integrated inventory and stock monitoring systems
- Strengthening warehouse infrastructure and last-mile distribution

India's DSCM warrants more systemic, targeted and multi-pronged solutions with additional considerations for mental health - stigma, strict regulations and provider skill gaps. Ultimately, strengthening DSCM is fundamental to ensuring equitable and reliable access to primary healthcare, including mental healthcare.