



## Feasibility of Implementing Antibiotic Stewardship Guidelines Among Rural Healthcare Providers in West Bengal

### About the OASIS Project

The One Health Antibiotic Stewardship in Society (OASIS) project aims to improve antibiotic stewardship across community health systems through context-specific interventions that promote the appropriate use of antibiotics and contribute to addressing antimicrobial resistance (AMR).

### Background

Antimicrobial resistance (AMR) is one of the most significant global public health threats. Rural healthcare providers (RHPs) are often the first point of contact for healthcare in rural India and play an important role in antibiotic prescribing and dispensing. This study assessed the feasibility of implementing simplified antibiotic stewardship guidelines among rural healthcare providers in West Bengal.

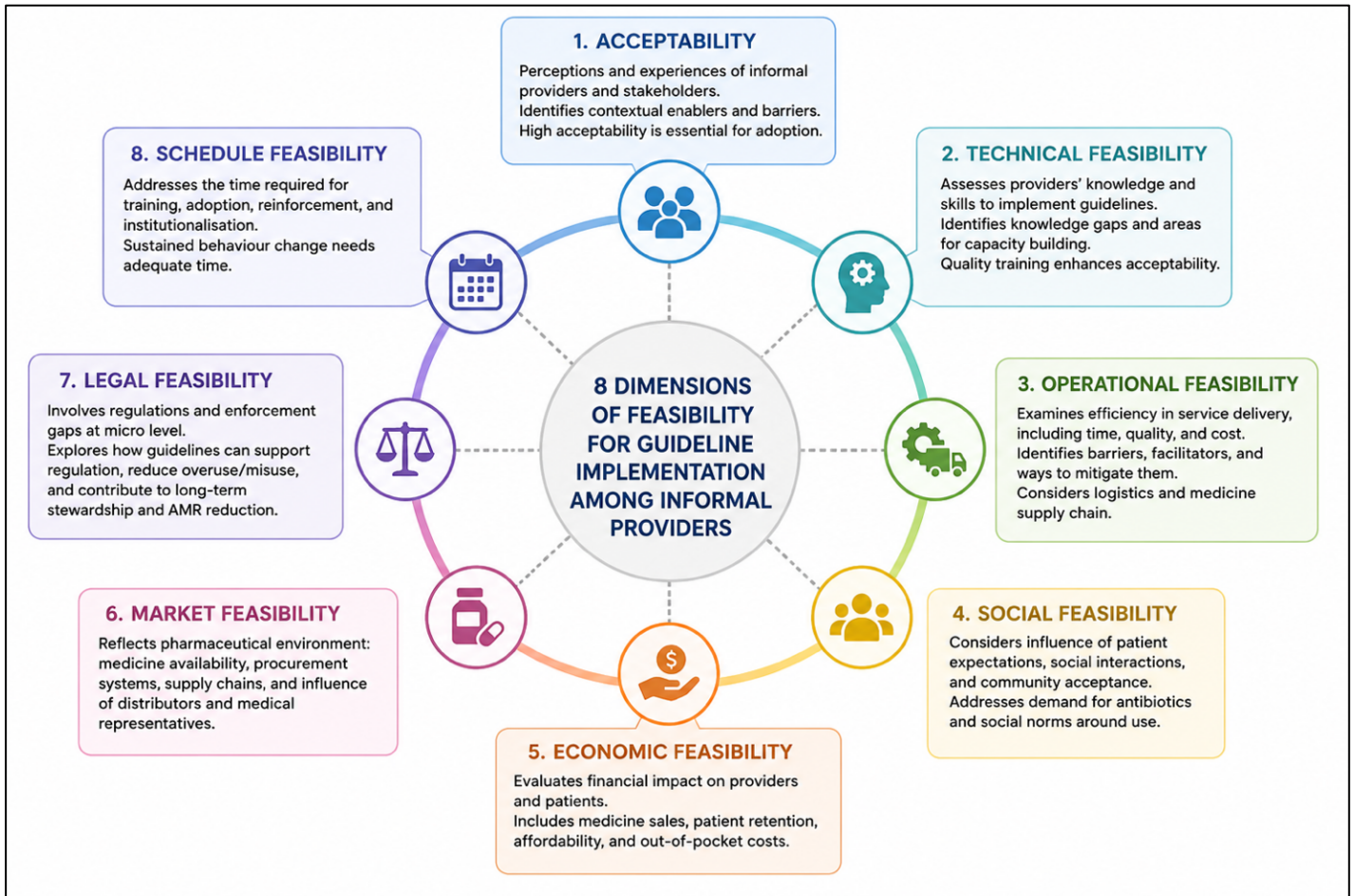
### Study Objective

To assess the feasibility of implementing antibiotic stewardship guidelines among rural healthcare providers in West Bengal.

### Study Overview

Component	Description
Study design	Qualitative feasibility assessment
Study area	Chakdah Block, Nadia District, West Bengal
Participants	9 Rural Healthcare Providers
Data collection	In-depth interviews
Data analysis	Reflexive thematic analysis
Framework	Eight dimensions of feasibility

**Figure 1. Framework for Assessing Feasibility of Antibiotic Stewardship Guideline**



## Summary of Feasibility Assessment Across the Eight Dimensions of Implementation

Feasibility Domain	Key Facilitators	Key Barriers	Implications for Scale-up
<b>Acceptability</b>	High provider willingness to adopt guidelines; perceived credibility of the guidelines; improved diagnostic confidence; simple language and symptom-based algorithms	Patient expectations for antibiotics; incomplete understanding of some treatment protocols; reluctance to completely stop antibiotic prescribing	Continue orientation programmes, refresher training, and practical mentoring to improve adherence and reinforce appropriate prescribing.
<b>Technical Feasibility</b>	User-friendly design; Bengali language; colour-coded severity classification; improved symptom recognition and referral decisions	Knowledge gaps regarding antibiotic classes, generic versus brand names, dosage calculations, and disease-specific algorithms	Develop digital decision-support tools and provide continuous technical support through refresher training and supervision.
<b>Operational Feasibility</b>	Easy integration into routine practice; flexible placement of guidelines; medicines generally available; improved workflow and clinical decision-making	Limited consultation time; difficulty consulting printed guidelines during practice; space constraints in clinics; reliance on memorisation	Introduce mobile application/PDF versions, phased introduction of new guidelines, and regular reinforcement through supportive supervision.
<b>Social Feasibility</b>	Strong provider–patient trust; increasing patient acceptance following successful treatment; improved patient counselling; growing awareness of rational antibiotic use	Persistent patient demand for antibiotics and injections; competition among providers; misconceptions regarding rapid recovery	Combine provider training with community awareness campaigns, patient education, and engagement of all rural providers within the locality.
<b>Economic Feasibility</b>	Reduced patient out-of-pocket expenditure; improved provider reputation; anticipated increase in long-term patient load; enhanced trust	Short-term reduction in medicine sales; dependence on dispensing income; existing medicine stock; competition affecting patient retention	Consider incentive mechanisms, strengthen patient awareness regarding economic benefits, and promote service-based rather than medicine-based practice models.
<b>Market Feasibility</b>	Availability of recommended medicines; adaptable pharmaceutical supply chains; distributor	Occasional unavailability of recommended medicines; substitution with alternative	Engage pharmaceutical distributors and pharmacies to ensure uninterrupted availability of guideline-

	support; increased use of supportive medicines	products; commercial preference for higher-margin medicines	recommended medicines and reduce inappropriate antibiotic promotion.
<b>Legal Feasibility</b>	Positive attitude towards rational antibiotic use; willingness to receive training; recognition of the importance of appropriate prescribing	Limited awareness of antibiotic regulations; poor understanding of national AMR policies; widespread over-the-counter antibiotic availability	Integrate regulatory education into stewardship training, strengthen monitoring of irrational drug use, continued advocacy for limited use of ACCESS antibiotics under guidance and engage provider associations to improve compliance.
<b>Schedule Feasibility</b>	Providers willing to invest time in learning; gradual incorporation into routine practice; repeated use improved confidence and recall	Limited time during consultations; difficulty memorising multiple guidelines; need for ongoing reinforcement	Adopt phased implementation with periodic refresher training, mentorship, digital learning tools, and continuous supportive supervision to sustain behaviour change.

## OASIS Study Partners



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