Supplementary File 2: Data Extraction Tool

Title of study: Outpatient Antibiotic Utilisation Trends and Prescriber Determinants at a Regional Hospital in Ghana

Study Period: January 2014 – December 2021

Data Source: Hospital Administration Management Software (HAMS)

Section A: Prescription-Level Information

Variable Name	Description	Format	Coding
Prescription_ID	Unique anonymized prescription code	Numeric/Text	System-generated
Year	Year of prescription	Numeric	2014–2021
Month	Month of prescription	Numeric	1–12
Patient_Age_Group	Age category	Categorical	1=<5; 2=5–14; 3=15–49; 4=50+
Patient_Sex	Biological sex	Categorical	1=Male; 2=Female
OPD_Unit	Outpatient department	Text	As recorded

Section B: Antibiotic Details

Variable Name	Description	Format
Antibiotic_Name	Generic name of antibiotic prescribed	Text
ATC_Code	WHO ATC classification code	Text
Strength	Dosage strength (e.g., 500 mg)	Text
Dosage_Form	Tablet, capsule, syrup, injection	Text
Quantity_Prescribed	Total units dispensed	Numeric
Prescribed_Daily_Dose	Dose prescribed per day	Numeric
Duration_of_Therapy	Number of days prescribed	Numeric
Total_Dose_Prescribed	Calculated total mg prescribed	Numeric

Section C: DDD Calculation Variables

Variable Name	Description	Formula
WHO_DDD	WHO standard DDD value (mg)	WHO ATC/DDD index
DDD_Equivalent	DDD consumed per prescription	Total_Dose_Prescribed ÷ WHO_DDD
Total_Annual_DDD	Sum of DDD per antibiotic per year	Aggregated
DDD_per_1000_inhabitants_per_day	Consumption rate	(Total annual DDD ÷ population) ÷ 365 × 1000

Section D: Prescribing Indicators (WHO Core Indicators)

Indicator	Calculation
% Encounters with Antibiotic Prescribed	(Number of prescriptions with ≥1 antibiotic ÷ Total prescriptions) × 100
Average Number of Antibiotics per Encounter	Total antibiotics ÷ Total encounters
% Antibiotics Prescribed by Generic Name	(Generic prescriptions ÷ Total antibiotics) × 100