SURVEY ON ESSENTIAL DRUG AVAILABILITY IN PUBLIC HEALTH FACILITIES IN THE PHILIPPINES 2016

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ACRONYMS

BNB - Botica ng Barangay
CHO - City Health Officers
ComPack - Complete Treatment Pack
DOH - Department of Health
EPI - Expanded Program on Immunization
HAI - Health Action for Information
HC - Health Centers
IMCI - Integrated Management of Childhood Illness
MAP - Medicines Access Programs
MCH – Maternal and Child Health
MHO - Municipal Health Officers
MS - Micronutrient Supplementation
NCR – National Capital Region
PD - Pharmaceutical Division
PHO - Provincial Health Officers
PHTL - Public Health Team Leaders
PNF - Philippine National Formulary
PPS - Probabilities Proportionate to Size
PSU - Primary Sampling Unit
RHU - Rural Health Units
SSU - Secondary Sampling Unit
TB - Tuberculosis
WHO - World Health Organization

2016 SURVEY ON DRUG AVAILABILITY IN PUBLIC HEALTH FACILITIES IN THE PHILIPPINES
FINAL REPORT

INTRODUCTION

Drug treatment is a major component of health care provision. Many major diseases are treated effectively with drugs. However in developing countries, drug treatment can be a big burden especially to poor households. The largest portion of health expenses of the poor is spent on medicines. In addition to this, low levels of drug availability in the primary health care setting have been reported.

Equitable access to essential medicines is thus a critical element to achieving universal health care which is the current thrust of the Philippine government. Essential medicines are those that are considered "of utmost importance, and are basic, indispensable and necessary for the health needs of the population". Access to essential medicines is included as one of the United Nations' Millennium Development Goals (MDGs). Improvement of access to quality essential medicines is addressed by the Medicines Access Programs (MAPs) of the Department of Health Pharmaceutical Division (DOH-PD).

Essential drugs availability was identified as one of the performance indicators of health service delivery as a specific condition for the European Union's continued financial support to the country's Health Sector Policy Support Program (HSPSP). Since 2010, the monitoring of this indicator has been implemented through drug availability surveys in public health facilities in the Philippines. Survey methodologies for measuring level of essential drug availability developed by the World Health Organization and Health Action International (WHO/HAI) had been adapted in these surveys. In particular, a basket list of essential drugs was purposely selected and the proportion of these drugs available in health facilities was determined. To obtain a representative sample of health facilities, a stratified multistage sampling design was employed.

Four national surveys on essential drug availability have so far been conducted among rural health units, health centers and government hospitals. The first survey done in 2010 measured drug availability levels that served as baseline levels. Mean percent drug availability then was at 25% for primary level health care facilities (rural health units (RHUs) and Level 1 hospitals) and 26% for higher level health care facilities (Level 2 to 4 hospitals). The second survey measured levels in 2011 wherein drug availability more than doubled for RHUs and Level 1 hospitals (52%) while a lower increase to 38% was seen in higher level facilities. In 2012, a slight increase in mean percent drug availability to 54% was reported for the lower level facilities, whereas in the higher level facilities, the figure rose to 44%. In the last survey done in 2014, the mean percent drug availability in primary level health care facilities reached 66% while a slight decrease to 41% was seen among the higher level facilities in 2013.

The Department of Health provides rural health units and health centers with a list of essential medicines called the Complete Treatment Pack. The ComPack Program was initially intended to provide free medicines for the whole duration of treatment for common illnesses to the poor who were registered in Conditional Cash Transfer Program (CCT) of the Department of Social Welfare and Development (DSWD). Rural health unit and health center recipients of ComPacks have now been allowed to provide these free medicines to other patients who consulted these facilities and who were not registered in the CCT program. In 2013, it was found that the deliveries of

ComPack medicines in the health facilities had been a major factor for the availability of essential drugs.

In this year's survey, the extent of availability of a basket list of essential medicines from the Philippine National Formulary (PNF), Complete Treatment Pack (ComPack) medicines and anti-tuberculosis drugs in primary and higher level public health facilities was evaluated.

SURVEY OBJECTIVES

The general objective of this survey is to determine the extent of essential drug availability in public health facilities in the Philippines in 2016. Specifically, the study aims to determine the following:

1. Mean percentage availability of essential drugs in rural health units (RHUs), health centers (HCs), and Level 1 public hospitals (primary level public health care facilities) in 2016;
2. Percentage avaiability of each essential drug in the basket list in primary level public health facilities
3. Mean percentage availability of essential drugs in Level 2 to 4 public hospitals (higher level health care facilities) in 2016
4. Percentage avaiability of each essential drug in the basket list in higher level public hospitals
5. Trend of drug availability levels in primary and higher level health facilities from 2009 to 2016; and
6. Percentage availability of drugs in the Complete Treatment Pack in rural health units and health centers
7. Percentage availability of drugs in the TB Control Program in rural health units and health centers

METHODOLOGY

Study Population

Public health facilities in this survey were divided into two categories:

Group A – Primary level public health facilities (rural health units, city health centers and Level I public hospitals)

Group B - Level II, III and IV public hospitals

This grouping identified the two different populations of interest in this survey. The first population of interest consisted of the drug facilities in the primary level health facilities (Group A) in the Philippines. For primary level care public health facilities, the percentage of available drugs was obtained using a shorter checklist of essential drugs for this level. The population of Level II to IV public hospitals (Group B) constituted the second population of interest. Similarly, the percentage of available drugs was collected from each of these facilities in the sample, but using a longer checklist of essential drugs than that for primary level public health facilities.

Unit of Observation/Category of Health Facility	Variable to be studied
Primary level public health facility	Percentage of available drugs in a primary level public health facility using a shorter list (21 molecules)
Level II to IV public hospital	Percentage of available drugs in a Level II to IV public hospital using a longer list (39 molecules)

Sampling Design: Stratified Two-Stage Cluster Sampling Design

A stratified two-stage cluster sampling design was employed in this survey. The income level classification of the province was used as the stratification variable. The provinces were the primary sampling unit (PSU) while the health care facilities were the secondary sampling units (SSU). For purposes of this survey, health facilities in a city were considered part of the province where the city was found. For instance, public health facilities in Cebu City were included in Cebu province in the selection of PSUs and SSUs. Because of its population size, the National Capital Region was treated as a separate stratum.

Stratification of provinces was based on average annual income level of the province. Provinces were grouped according to the prescribed classification by the Department of Finance (Department Order D.O. No.23-08: Prescribing the New Income Brackets for the Re-classification of Provinces, Cities and Municipalities - Effective July 29, 2008).

Class	Average Annual Income
1st	P 450M or more
2nd	P 360M or more but less than P 450M
3rd	P 270M or more but less than P 360M
4th	P 180M or more but less than P 270M
5th	P 90M or more but less than P 180M
6th	Below P90M

Since there were few provinces that belonged to the 3rd to 6th Classes, these categories were lumped together as one stratum. Furthermore, NCR was considered as separate stratum in the sampling design. Thus the strata were as follows: 1) Income Level 1 provinces; 2) Income Level 2 Provinces; 3) Income Level 3-6 Provinces; and 4) NCR.

Selection of Primary Sampling Units (Provinces)

For all strata except NCR, a total of eighteen (18) provinces were chosen as primary sampling units. The number of provinces in the sample for each stratum was proportionately allocated according to the total number of provinces in a specific stratum.

Primary sampling units were chosen using the tabulated data for estimated number of Group A health facilities. Selection of provinces within stratum was done according to probabilities

proportionate to size (PPS), where size is the estimated number of Group A health facilities in the province. A systematic procedure was employed in selecting provinces using PPS.

Selection of Secondary Sampling Units in Provinces

Random sampling of primary care public health facilities was done within the selected provinces, while all the higher level care public hospitals were automatically included. For example, if the province of Bulacan was selected at the first stage, a random sample of 15 primary level care public health facilities and all Level II to IV public hospitals would be taken from this province. Adjustments for possible non-response was done.

Sampling Design for NCR Facilities

National Capital Region (NCR) was considered separate stratum for this survey. A list of all health centers and Level I public hospitals in NCR was obtained. From this list, 30 health centers and Level 1 public hospitals were selected by simple random sampling for inclusion in the survey. Similarly, a list of all Level II to IV public hospitals in NCR was obtained from which fifteen (15) public hospitals were randomly drawn. Adjustments for possible non-response was done.

Data Collection

Survey Team

The team was composed of the Principal Investigator, Co-investigator and 8 research assistants. This team had undergone training on the survey data collection procedures before being deployed in the field. A pretest of the data collection tools was carried out in Mandaluyong health centers.

Visits to the different provinces randomly selected in the study were coordinated with the Pharmaceutical Division of the Department of Health. Courtesy calls to local government officials (governors and mayors), directors of the DOH Regional Centers for Health Development, provincial health officers (PHOs), city/municipal health officers (CHOs/MHOs), public health team leaders (PHTLs) and Botica ng Barangay (BNB) coordinators were done by the survey team before proceeding with the data collection.

Data Collected

Survey questions such as name of the health facility, location, and the designated pharmacist or person-in-charge of dispensing medicines were indicated in the data collection form. Along with this is a printed copy of a basket list of essential drugs and other medicines prepared by Pharmaceutical Division. Four separate forms were used: 1) list of essential medicines for primary level public health facilities; 2) list of essential medicines for higher level public health facilities; 3) list of Complete Treatment Pack (ComPack) medicines; and 4) list of drugs for TB treatment. The forms are shown in the Appendix.

The data collection process was carried out as follows: The pharmacist or person-in-charge was asked to bring out supplies of medicines listed in the forms. Then, the availability and expiry of the drugs presented was recorded by the data collector.

Data Processing

The data collection forms were checked for completeness and errors upon completion. All forms were encoded and entered into a database. A special program that calculated percent drug availability for each health facility was written after all the forms have been encoded.

Data Analysis

Tabulation and graphical presentation of the percent drug availability of the health facilities was done for each group of health facilities. Descriptive summaries such as mean and standard deviation of the drug availability were generated. Confidence intervals were obtained for the over-all mean percent drug availability across health facilities and provinces. To account for the different sampling probabilities in selection of health facilities, weighted analysis was performed for the calculation of over-all mean percent drug availability. Statistical analyses were generated using the software STATA Ver 10.1.

VII. RESULTS

Coverage of Survey

There were 329 primary level care (Group A) facilities consisting of 201 rural health units, 54 health centers and 74 Level 1 hospitals in the sample. In the higher level care hospitals, 30 were included in this study.

Table 1. Actual sample sizes of primary level and higher level health care facilities by province

Stratum	Province	Primary level care facilities	Level 2 to 4 hospitals
Income Level 1	Albay	16	1
	Bohol	17	1
	Bulacan	15	1
	Cavite	17	1
	Cebu	18	1
	Iloilo	17	1
	Isabela	17	1
	La Union	17	2
	Misamis Oriental	15	1
	Pampanga	15	1
	Quezon	15	1
	Sultan Kudarat	15	0
	Zamboanga del Norte	15	1
Income Level 2	Benguet	16	3
	Sorsogon	17	1
	Zamboanga Sibugay	17	0
Income Level 3 to 6	Abra	17	0
	Southern Leyte	16	1
National Capital Region	National Capital Region	37[1]	12[1]
	Total	329	30

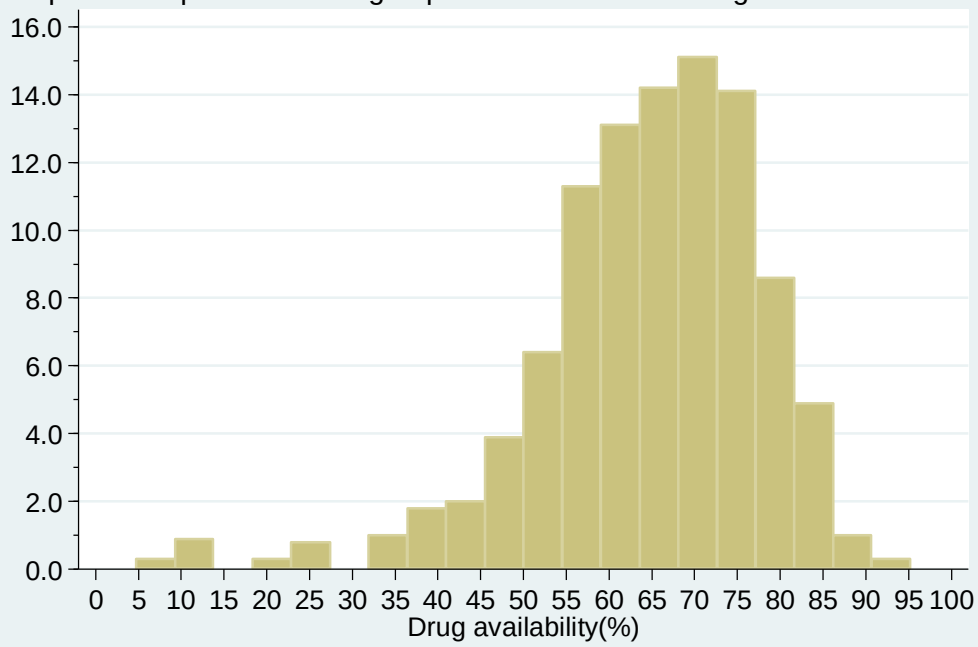
[1] The smaller number of higher level hospitals in NCR was due to the reclassification of Level 2 hospitals to Level 1. This also resulted in the increase in the primary level care facilities.

Essential Drug Availability in Rural Health Units, Health Centers and Level 1 Public Hospitals

Figure 1 shows the distribution of the percent of essential drugs available in RHUs, HCs and Level 1 public hospitals. The highest percent essential drug availability was 95% while the lowest was 5%. Around two-thirds (67.7%) of the primary facilities had percent drug availability between 57% to 76%, which was equivalent to 12 to 16 of the 21 drugs in the basket list. Essential drug availability was more than 50% in 89% of the facilities. At least 17 of the drugs were presented in 14.8%. There were only 1.4% that had less than 20% of the essential drugs available.

The mean of the percent drug availability was 65.4% with standard deviation of 14.0%. Median drug availability was 66.7%.

Figure 1. Distribution of rural health units, health centers and Level 1 public hospitals according to percent of essential drugs available

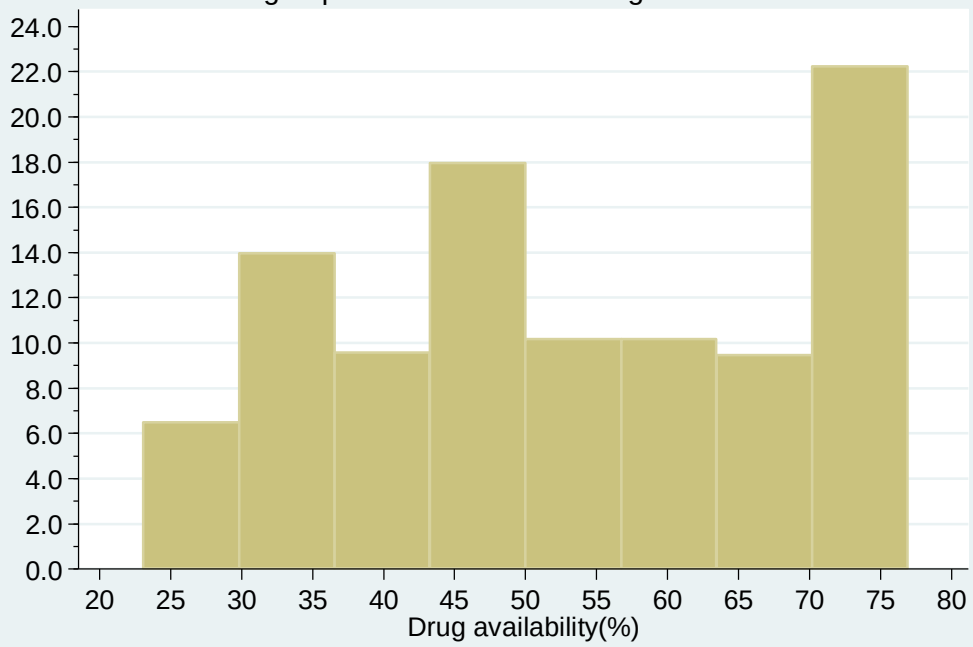


Essential Drug Availability in Level 2 to 4 Public Hospitals

The percent essential drug availability of Level 2 to 4 hospitals varied greatly (Figure 2). The highest level of essential drug availability was 77% while the lowest was 23%. There were 22.2% of the hospitals that had levels between 70% to 77% while 16.3% were between 60% to 70%. The percent of hospitals that had between 50% to 60% essential drug availability was 13.6% while 23.1% had between 40% to 50%. The rest had below 40% essential drug availability.

On the average, the essential drug availability among Level 2 to 4 hospitals was 52.8% (sd=15.9%). Half of the hospitals had drug availability levels of 53.8% or higher. This corresponded to 21 of the 39 drugs in the basket list.

Figure 2. Distribution of Level 2 to 4 public hospitals according to percent of essential drugs available



Comparison to Previous Drug Availability Surveys

The mean level of drug availability in public health facilities was compared across the 5 national surveys conducted (Table 2). The mean percent drug availability in RHUs, HCs and Level 1 public hospitals stayed at the same level at 65.3% in 2016 from 65.9% in 2013. In the Level 2 to 4 hospitals, there was an increase from 41.3% in 2013 to 52.8% in 2016. This was a 27.8% in increase in the mean percent drug availability at this facility level. This was also more than twice the baseline level of 25.8% in 2009.

Table 2. Comparison of mean percent drug availability in 2009, 2011, 2012, 2013 and 2016 surveys

	2009		2011		2012		2013		2016	
Facility level	n	Mean (95%CI)	n	Mean (95%CI)	n	Mean (95%CI)	N	Mean (95%CI)	n	Mean (95%CI)
RHUs/HCs and Level 1 public hospitals	234	24.8% (21.0%-28.5%)	288	51.7% (47.9%-55.4%)	292	53.6% (50.0%-57.2%)	323	65.9% (63.8%-69.0%)	329	65.4% (63.4%-67.4%)
Level 2 to 4 public hospitals	65	25.8% (22.3%-29.4%)	89	37.8% (33.6%-41.9%)	80	44.3% (39.7%-49.0%)	88	41.3% (35.9%-46.6%)	30	52.8% (46.0%-59.6%)

Availability of Specific Drugs in the Basket List

The availability of each drug in the basket list was determined for the two levels of public health care facilities. This is shown in Table 3 among RHUs, HCs and Level 1 hospitals. Median drug availability was 69.6%. Nine of the basket list of drugs were available in at least 8 of 10 primary level care facilities during the survey. Four drugs were found in more than 90% while the percent availability of 5 drugs were between 80% and 90%. There were 5 drugs that were present in less than half of the facilities.

Antibiotics, anti-hypertensive and anti-diabetic drugs were highly available in the primary level health care facilities. The antimicrobial drug metronidazole 500 mg tablet had the highest percent availability with 93.9%. Ciprofloxacin 500 mg tablet and amoxicillin 500 mg capsule were found in 90.2% and 89.2%, respectively. The anti-hypertensive drug, metoprolol 50 mg tablet was the second highest in terms of availability with 92.5%. Another anti-hypertensive, amlodipine 10 mg tablet were also commonly available with 87.5%. The third anti-hypertensive drug, enalapril 10 mg tablet was found only in 61.9% of the facilities. The anti-diabetic drug, metformin 500 mg tablet, was the third highest available drug with 92.3% while another anti-diabetic drug, gliclazide 30 mg tablet, was present in 69.6%.

Paracetamol 500 mg tablet, oral rehydration salts and povidone-iodine 10% solution were also easily obtainable in primary public health facilities. These are available in more than 80% of the facilities. Simvastatin 20 mg tablet, for lowering cholesterol lowering was found in 3 of 4 facilities.

The anti-psychotic drug chlorpromazine 50 mg tablet was rarely found. It was available in only 1.4% of the facilities. Four other drugs were found in between 27% to 42% of the facilities. These were metronidazole 125 mg/5ml suspension (41.5%), ferrous sulfate with folic acid (60 mg + 250 mcg tab) (37.4%), ranitidine 150 mg tablet (29.9%) and paracetamol 125 or 120 mg/5 ml suspension (27.8%).

It is worth noting that the 6 most available drugs belonged to the ComPack list of drugs.

Table 3. Percentage of rural health units, health centers and Level 1 public hospitals wherein specific drug was available (n=329)

Key medicines (Generic name)	Drug availability (same dose and form)	
	Weighted percentage	Std error
Albendazole 400 mg tab	68.0	2.6
Amlodipine 10 mg tab	87.5	1.7
Amoxicillin 500 mg cap	89.2	1.9
Cefalexin 500 mg cap	54.3	2.9
Chlorpromazine 50 mg tab	1.4	0.5
Ciprofloxacin 500 mg tab	90.2	1.9
Cotrimoxazole 200 mg + 40 mg susp	56.2	4.1
Cotrimoxazole 800 mg + 160 mg tab	56.9	3.3
Enalapril 10 mg tab	61.9	3.0

Ferrous sulfate with folic acid 60 mg + 250 mcg tab	37.4	5.3
Gliclazide 30 mg tab	69.6	2.8
Metformin 500 mg tab	92.3	1.3
Metoprolol 50 mg tab	92.5	1.5
Metronidazole 500 mg tab	93.9	1.8
Metronidazole 125 mg/5 ml susp	41.5	4.2
Oral rehydration salt ORS 75-replacement	82.1	3.2
Paracetamol 125 or 120 mg/5 ml susp	27.8	3.4
Paracetamol 500 mg tab	83.5	2.4
Povidone-iodine 10% soln	81.3	2.5
Ranitidine 150 mg tab	29.9	3.0
Simvastatin 20 mg tab	75.9	3.0
Median availability	69.6	

Table 4 shows the availability of specific drugs in Level 2 to 4 hospitals. Twenty-three or 59.0% of the 39 listed drugs were found in at least half of the hospitals. There were 8 drugs that were available in more than 80% of the facilities while 9 drugs were present in between 60% to 80%. In less than 30% of the facilities were found 12 of the drugs in the basket list. One drug was not found in any Level 2 to 4 public hospital surveyed. Median availability among the drugs was 58.1%.

Antibiotics were the most common drugs available in the hospital pharmacies. These included co-amoxiclav 625 mg tablet (95.6%), ciprofloxacin 500 mg tablet (90.6%) metronidazole 500 mg tablet (88.8%), ceftriaxone 1 gram vial (83.9%), amoxicillin 500 mg capsule (81.7%) and cefalexin 500 mg capsule (81.7%). Doxycycline 100 mg capsule and co-trimoxazole 800 mg + 160 mg tablet for adults were available in 66.2% and 59.1%, respectively. Other antibiotic drugs were found in the less than half of the facilities.

Drugs for prevalent non-communicable diseases such as diabetes, hypertension and hypercholesterolemia were also in stock for most facilities. The anti-diabetes drug metformin 500 mg tablet was also commonly found in 93.0 of % of the hospitals. Regular insulin was available in 74.3% while gliclazide and insulin isophane were present in the same levels in 60.1% and 58.1%, respectively. Two anti-hypertensive drugs, amlodipine 10 mg tablet and metoprolol 50 mg tablet, were equally available in 76.8% and 75.2%, respectively.

Majority of the hospitals had in stock paracetamol 500 mg tablet (84.6%), bisacodyl 5 mg tablet (74.1%), phenobarbital 120 or 130 mg/ml ampule injectable (63.4%), omeprazole 20 mg capsule/tablet (58.5%), and povidone-iodine 10% solution (57.1%).

Drugs in the basket list that were not frequently found (<30%) included chloramphenicol 125 mg/5 ml suspension and 500 mg capsule, carbamazepine 200 mg tablet, co-trimoxazole 200 mg + 40 mg syrup, enalapril 10 mg tablet, chlorpromazine 100 mg tablet, ibuprofen 400 mg tablet, paracetamol 125 or 120 mg/5 ml suspension, ferrous sulfate with folic acid 60 mg + 250 mcg tablet, acyclovir 200 mg tablet and dexamethasone 0.5 mg tablet. Beclomethasone 0.05 mg/dose inhaler for asthma treatment was not available in all facilities surveyed.

Table 4. Percentage of Level 2 to 4 public hospitals wherein specific drug was available (n=30)

Key medicines (Generic name)	Drug availability (same dose and form)	
	Weighted percentage	Std error
Aciclovir 200 mg tab	9.7	5.3
Amlodipine 10 mg tab	76.8	7.8
Amoxicillin 500 mg cap	81.7	7.5
Beclomethasone 0.05 mg/dose inhaler	0.0	0.0
Bisacodyl 5 mg tab	74.1	7.9
Biphasic isophane insulin	56.0	9.0
Carbamazepine 200 mg tab	27.4	8.6
Cefalexin 500 mg cap	81.7	7.5
Ceftriaxone 1 gram vial	83.9	6.6
Chloramphenicol 125 mg/5 mL susp	27.4	9.0
Chloramphenicol 500 mg cap	23.6	8.8
Chlorpromazine 100 mg tab	25.8	7.5
Ciprofloxacin 500 mg tab	90.6	5.0
Co-amoxiclav 625 mg tab	95.6	2.3
Co-trimoxazole 200 mg + 40 mg susp	26.8	6.8
Co-trimoxazole 800 mg + 160 mg tab	59.1	9.2
Dexamethasone 0.5 mg tab	8.8	4.0
Dicloflenac 50 mg cap/tab	37.4	8.6
Doxycycline 100 mg cap	66.2	8.8
Enalapril 10 mg tab	26.2	8.4
Ferrous sulfate with folic acid 60 mg + 250 mcg tab	16.9	7.3
Gliclazide 80 mg tab	60.1	8.8
Ibuprofen 400 mg tab	22.6	8.5
Insulin Isophane	58.1	8.6
Insulin Regular	74.3	8.4
Isosorbide dinitrate 10 mg tablet	30.3	8.4
Metformin 500 mg tab	93.0	2.8
Metoprolol 50 mg tab	75.2	8.1
Metronidazole 500 mg tablet	88.8	5.5
Metronidazole 125 mg/5 mL susp	46.7	10.0
Omeprazole 20 mg cap/tab	58.5	9.5
Oral rehydration salt ORS 75-replacement	61.2	8.9
Paracetamol 125 or 120 mg/5 ml susp	22.2	7.3
Paracetamol 500 mg tab	84.6	7.0
Phenobarbital 120or 130 mg/ml ampule inj	63.4	8.7
Povidone-Iodine 10% soln	57.1	9.0
Ranitidine 150 mg tab	51.0	9.1
Salbutamol 0.1 mg dose inhaler	43.6	9.2
Simvastatin 20 mg tab	71.9	7.9
Median drug availability	58.1	

Availability of Medicines in the Complete Treatment Pack Program

Rural health units and health centers were provided by ComPack medicines by the Department of Health. ComPack medicines were widely available in the RHUs and HCs (Table 5). All 19 drugs in the ComPack list were found in at least 70% of these facilities with the highest availability at 98.9%. Six drugs were available in 90% or more facilities. Metformin 500 mg tablet (98.9%), metoprolol 50 mg tablet (97.7%) and metronidazole 500 mg tablet (96.3%) were the most available drugs found in nearly all facilities. These were followed by doxycycline 100 mg capsule (94.0%), erythromycin 500 mg tablet (92.7%) and ciprofloxacin 500 mg tablet (90.0%). Eight drugs were in stock in between 80% to 90%. These included amlodipine 10 mg tablet (87.6%), sambong 250 mg tablet (86.6%), gliclazide 30 mg tablet (84.7%), fluticasone + salmeterol 125 mcg/25 mcg inhaler (83.6%), amoxicillin 250 mg/5 ml powder (82.9%), simvastatin 20 mg tablet (81.2%) and losartan 50 mg tablet (81.1%).

Table 5. Availability of ComPack medicines in rural health units and health centers ComPack medicines (n=255)

	Available	
Key Medicine	Weighted Percent	Standard error
Amlodipine 10 mg tab	87.6	2.2
Amoxicillin 250 mg/5mL powder	82.9	2.7
Amoxicillin 500 mg cap	71.6	5.7
Aspirin 80 mg tab	79.1	3.5
Ciprofloxacin 500 mg tab	90.0	2.3
Doxycycline 100 mg cap	94.0	1.6
Enalapril 10 mg tab	76.7	3.0
Erythromycin 500 mg tab	92.7	1.9
Fluticasone + Salmeterol 125 mcg/25 mcg inhaler	83.6	2.5
Fluticasone + Salmeterol 50 mcg/25 mcg inhaler	79.3	3.5
Gliclazide 30 mg tab	84.7	2.7
Lagundi 300 mg tab	77.9	4.6
Losartan 50 mg tab	81.1	2.5
Metformin 500 mg tab	98.9	0.7
Metoprolol 50 mg tab	97.7	1.1
Metronidazole 500 mg tab	96.3	1.2
Salbutamol 0.1 mg dose inhaler	82.9	3.9
Sambong 250 mg tab	86.6	2.6
Simvastatin 20 mg tab	81.2	4.0

Availability of Medicines in the Tuberculosis Control Program

Medicines for TB treatment were provided to the rural health units and health centers. Treatment for Category 1 tuberculosis was available in 98.6%. However, TB drugs for children were not as available. Tuberculosis kit for children was found in 66.1% while isoniazid preventive therapy was in 55.6% of the facilities. There were low supplies for treatment for Category 2 tuberculosis as it was present in only 12.0% of the facilities.

Table 6. Availability of drugs for tuberculosis treatment (n=255)

	Available	
Key Medicine	Weighted Percent	Standard error
CAT 1 TB Kit	98.6	0.8
TB kit for children	66.1	4.9
Isoniazid Preventive Therapy for Children	55.6	4.2
CAT 2 TB Kit	12.0	2.7

APPENDIX

Drug Availability Survey Among Rural Health Units, Health Centers and Level 1 Public Hospitals
(SURVEY FORM 1)

Introductory Statement

Good <morning/afternoon>, I am <*name of surveyor*>, a data collector for the Drug Availability Survey being conducted by the Department of Health. I would like to ask your help in checking whether a set of key medicines is available in your drug dispensary. I will show you a list of medicines and if you could please provide me a sample of each of the medicines specified in the list. This survey will take only 30 minutes to 1 hour of your time. Thank you very much for your cooperation.

Health Facility Information

Province: _____
Name of Health Facility: _____
Level of Health Facility (check one): ☐ Rural Health Unit ☐ Health Center ☐ Level I Hospital
Name of Surveyor: _____
Person Responsible at Health Facility Drug Dispensary:
Name: _____
Position: _____

***Instructions for the Surveyor*:**

1. *This form (SURVEY FORM 1) is used if the health facility is a Rural Health Unit (RHU), Health Center (HC) or a Level I public hospital. If the facility has two pharmacies, fill-up separate survey forms for each pharmacy. Provide information in REMARKS ON DATA COLLECTION ACTIVITY the nature of pharmacy operations.*
2. *Request from the pharmacist or person-in-charge samples of the most recent stock of each drug in the list. These stocks must be handed to you for inspection.*
3. *Separate stocks from ComPack deliveries from the rest of the stocks.*
4. *If there are drugs that are missing or expired, ask pharmacist or person-in-charge to check if there are unexpired stocks for these drugs which he/she might have missed in the initial search.*
5. *After the status of availability and expiry of all drugs is finalized, inform the pharmacist or person-in-charge of the result of the survey by giving the number of drugs found available and which drugs are available and expired.*

Result of Visit

Date of Scheduled Visit: _____ (mm/dd/yyyy)
Result (check one) of survey: ☐ Completed; ☐ Partly completed; ☐ Not done
If partly or not completed, why? _____
_____
Date of Scheduled Callback: _____ (mm/dd/yyyy)
Result (check one) of survey: ☐ Completed; ☐ Partly completed; ☐ Not done
If partly or not completed, why? _____
_____

SURVEY FORM 1
Public Health Facility Pharmacy/Drug Dispensary
List A (For RHUs, HCs and Level I Public Hospitals)

No	Key Medicines (Generic Name)	DRUG PRESENTED (encircle)	EXPIRY DATE* (MM/YYYY) (NA - if none)	IF SPECIFIED DRUG IS MISSING OR EXPIRED, IS THERE ANOTHER FORMULATION OF DRUG AVAILABLE? IF YES, PLEASE INDICATE THIS AND THEIR EXPIRY DATE.	IS STOCK ONLY FROM COMPACK DELIVERY? (NA - if none)	REMARKS
1	Albendazole 400 mg tablet	YES NO	_____ NA	_____ NA	YES NO NA	
2	Amlodipine 10 mg (as besylate or camsylate) tablet	YES NO	_____ NA	_____ NA	YES NO NA	
3	Amoxicillin 500 mg capsule	YES NO	_____ NA	_____ NA	YES NO NA	
4	Cefalexin 500 mg capsule	YES NO	_____ NA	_____ NA		
5	Chlorpromazine 50 mg tablet	YES NO	_____ NA	_____ NA		
6	Ciprofloxacin 500 mg tablet	YES NO	_____ NA	_____ NA	YES NO NA	
7	Co-trimoxazole 200 mg + 40 mg suspension, 60 mL	YES NO	_____ NA	_____ NA	YES NO NA	
8	Co-trimoxazole 800 mg + 160 mg tablet	YES NO	_____ NA	_____ NA	YES NO NA	
9	Enalapril 10 mg tablet	YES NO	_____ NA	_____ NA	YES NO NA	
10	Ferrous sulfate tablet with folic acid (60 mg elemental iron + 250 mcg folic acid/tablet or capsule)	YES NO	_____ NA	_____ NA		
11	Gliclazide 80 mg tablet	YES NO	_____ NA	_____ NA	YES NO NA	
12	Metformin 500 mg tablet	YES NO	_____ NA	_____ NA	YES NO NA	

13	Metoprolol 50 mg tablet	YES NO	_____ NA	_____ NA	YES NO NA	
14	Metronidazole 500 mg tablet	YES NO	_____ NA	_____ NA	YES NO NA	
15	Metronidazole 125 mg/5mL (as benzoate) suspension, 60 mL	YES NO	_____ NA	_____ NA		
16	Oral rehydration salt (ORS 75-replacement)	YES NO	_____ NA	_____ NA		
17	Paracetamol 125 mg/5 mL or 120 mg/5 mL syrup/suspension, 60 mL	YES NO	_____ NA	_____ NA		
18	Paracetamol 500 mg tablet	YES NO	_____ NA	_____ NA		
19	Povidone-Iodine 10% solution, any size minimum 15 ml	YES NO	_____ NA	_____ NA		
20	Ranitidine 150 mg tablet	YES NO	_____ NA	_____ NA		
21	Simvastatin 20 mg tablet	YES NO	_____ NA	_____ NA	YES NO NA	
REMARKS ON DATA COLLECTION ACTIVITY:						

*NK – Not known, NA – Not Applicable

Drug Availability Survey Among Level 2 to 4 Public Hospitals
(SURVEY FORM 2)

Introductory Statement

Good <morning/afternoon>, I am <*name of surveyor*>, a data collector for the Drug Availability Survey being conducted by the Department of Health. I would like to ask your help in checking whether a set of key medicines is available in your drug dispensary. I will show you a list of medicines and if you could please provide me a sample of each of the medicines specified in the list. This survey will take only 30 minutes to 1 hour of your time. Thank you very much for your cooperation.

Health Facility Information

Province: _____
Name of Health Facility: _____
Level of Health Facility (check one): ☐ Level II ☐ Level III ☐ Level IV
Name of Surveyor: _____
Person Responsible at Health Facility Drug Dispensary:
Name: _____
Position: _____

Instructions for Surveyor:

1. *This form (SURVEY FORM 2) is used if the health facility is a Level 2 to 4 public hospital. If the hospital has two pharmacies, fill-up separate survey forms for each pharmacy. Provide information in REMARKS the nature of pharmacy operations.*
2. *Request from the pharmacist or person-in-charge samples of the most recent stock of each drug in the list. These stocks must be handed to you for inspection.*
3. *If there are drugs that are missing or expired, ask pharmacist or person-in-charge to check if there are unexpired stocks for these drugs which he/she might have missed in the initial search.*
4. *After the status of availability and expiry of all drugs is finalized, inform the pharmacist or person-in-charge of the result of the survey by giving the number of drugs found available and which drugs are available and expired.*

Result of Visit

Date of Scheduled Visit: _____ (mm/dd/yyyy)
Result (check one) of survey: ☐ Completed; ☐ Partly completed; ☐ Not done
If partly or not completed, why? _____
_____
Date of Scheduled Callback: _____ (mm/dd/yyyy)
Result (check one) of survey: ☐ Completed; ☐ Partly completed; ☐ Not done
If partly or not completed, why? _____
_____

SURVEY FORM 2
Public Health Facility Pharmacy/Drug Dispensary
List B (For Level II, III and IV Public Hospitals)

Is your selection and procurement of medicines based on the Philippine National Formulary? ☐ Yes ☐ No

No	Key Medicines (Generic Name)	DRUG PRESENTED (encircle)	EXPIRY DATE (MM/YYYY) (NA - if none)	IF SPECIFIED DRUG IS MISSING OR EXPIRED, IS THERE ANOTHER FORMULATION OF DRUG AVAILABLE? IF YES, PLEASE INDICATE THIS AND THEIR EXPIRY DATE. (NA - if specified drug is presented)	REMARKS
1	Aciclovir 200 mg tablet	YES NO	_____ NA	_____ NA	
2	Amlodipine 10 mg (as besylate or camsylate) tablet	YES NO	_____ NA	_____ NA	
3	Amoxicillin 500 mg capsule	YES NO	_____ NA	_____ NA	
4	Beclomethasone 0.05 mg/dose (as dipropionate) inhaler	YES NO	_____ NA	_____ NA	
5	Bisacodyl 5 mg tablet	YES NO	_____ NA	_____ NA	
6	Carbamazepine 200 mg tablet	YES NO	_____ NA	_____ NA	
7	Cefalexin 500 mg capsule	YES NO	_____ NA	_____ NA	
8	Ceftriaxone 1 gram vial	YES NO	_____ NA	_____ NA	
9	Chloramphenicol 125 mg/5 mL suspension	YES NO	_____ NA	_____ NA	
10	Chloramphenicol 500 mg capsule	YES NO	_____ NA	_____ NA	

11	Chlorpromazine 100 mg tablet	YES NO	_____ NA	_____ NA	
12	Ciprofloxacin 500 mg tablet	YES NO	_____ NA	_____ NA	
13	Co-amoxiclav 625 mg tablet	YES NO	_____ NA	_____ NA	
14	Co-trimoxazole 200 mg + 40 mg suspension, 60 mL	YES NO	_____ NA	_____ NA	
15	Co-trimoxazole 800 mg + 160 mg tablet	YES NO	_____ NA	_____ NA	
16	Dexamethasone 0.5 mg tablet	YES NO	_____ NA	_____ NA	
17	Dicloflenac 50 mg capsule/tablet (as sodium or potassium)	YES NO	_____ NA	_____ NA	
18	Doxycycline 100 mg capsule	YES NO	_____ NA	_____ NA	
19	Enalapril 10 mg tablet	YES NO	_____ NA	_____ NA	
20	Ferrous sulfate tablet + folic acid (equiv to 60 mg elemental iron + 250 mcg folic acid)	YES NO	_____ NA	_____ NA	
21	Gliclazide 80 mg tablet	YES NO	_____ NA	_____ NA	
22	Ibuprofen 400 mg tablet	YES NO	_____ NA	_____ NA	
23	Insulin Isophane	YES NO	_____ NA	_____ NA	
24	Insulin Regular	YES NO	_____ NA	_____ NA	
25	Isosorbide dinitrate 10 mg tablet	YES NO	_____ NA	_____ NA	
26	Metformin 500 mg tablet	YES NO	_____ NA	_____ NA	

27	Metoprolol 50 mg tablet	YES NO	_____ NA	_____ NA	
28	Metronidazole 500 mg tablet	YES NO	_____ NA	_____ NA	
29	Metronidazole 125 mg/5 mL (as benzoate) suspension, 60 mL	YES NO	_____ NA	_____ NA	
30	Omeprazole 20 mg capsule/tablet	YES NO	_____ NA	_____ NA	
31	Oral rehydration salt (ORS 75-replacement)	YES NO	_____ NA	_____ NA	
32	Paracetamol 125 mg/5 mL or 120 mg/5 mL syrup/suspension,	YES NO	_____ NA	_____ NA	
33	Paracetamol 500 mg tablet	YES NO	_____ NA	_____ NA	
34	Phenobarbital 120 mg/mL (130 mg/mL), 1mL ampule inj	YES NO	_____ NA	_____ NA	
35	Povidone-Iodine 10% solution, any size minimum 15 ml	YES NO	_____ NA	_____ NA	
36	Ranitidine 150 mg tablet	YES NO	_____ NA	_____ NA	
37	Salbutamol 0.1 mg dose, 200 doses (as sulfate) inhaler	YES NO	_____ NA	_____ NA	
38	Simvastatin 20 mg tablet	YES NO	_____ NA	_____ NA	
REMARKS ON DATA COLLECTION ACTIVITY:					

Characteristics of the Public Health Facility and Availability of ComPack Medicines
(SURVEY FORM 3 - For RHUs and HCs)

***Instructions for the Surveyor*:**

1. *This form (SURVEY FORM 3) is used if the health facility is a Rural Health Unit (RHU) or a Health Center (HC). If the facility has two pharmacies, determine which pharmacy is dispensing ComPack drugs.*
2. *Request from the pharmacist or person-in-charge samples of the most recent stock of each drug in the list of ComPack drug. These stocks must be handed to you for inspection.*
3. *If there are drugs that are missing, ask pharmacist or person-in-charge to check if there are stocks for these drugs which he/she might have missed in the initial search.*
4. *After the status of availability of all ComPack drugs is finalized, inform the pharmacist or person-in-charge of the result of the survey by giving the number of drugs found available and which drugs are available and expired.*

Information about the health facility

1. Is your selection and procurement of medicines based on the Philippine National Formulary?
   □ Yes □ No
2. Is the RHU/Health Center Physician trained on Philippine Package of Essential Non-Communicable Disease Interventions (Phil–PEN)? □ Yes □ No □ No Physician
3. Do you have a registry of Hypertensive Patients? □ Yes □ No
   Diabetic patients? □ Yes □ No
4. Has this RHU or HC received deliveries of ComPack medicines? □ Yes □ No
   (If NO, then End of Interview)
5. When was the last delivery made? _____ (indicate month and year)
6. Are ComPack medicines exclusively given to patients registered in CCT program only?
   □ Yes □ No
7. If not, to whom are ComPack medicines also given?
   - □ All patients
   - □ Only for selected or qualified patients
   - □ PhilHealth-sponsored patients
   - □ Senior Citizens
   - □ Other indigents not in CCT and PhilHealth lists
   - □ Others, specify _____

Information on Availability of ComPack Medicines

No	Drug	Available ?	Expiry date (MM/YYYY) NA – if drug not available)	If not, why? 1 –drug no longer requested 2 – limited stocks of drug delivered 3 – out of stock due to fast-moving 4 – transferred to other units 5 – returned to PHO, CHD or DOH 6 – cannot be found 7 – others, specify NA –if drug is available
1	Amlodipine 10mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
2	Amoxicillin 250mg/5mL powder/ granules for suspension, 60mL	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
3	Amoxicillin 500mg capsule	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
4	Aspirin 80mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
5	Ciprofloxacin 500mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
6	Cloxacillin 125mg/5mL, powder for suspension/syrup, 60mL	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
7	Cloxacillin 500mg capsule	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
8	Cotrimoxazole 200mg+40mg/5mL, 60mL suspension	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
9	Cotrimoxazole 400mg+80mg/5mL, 60mL suspension	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____

10	Cotrimoxazole 800mg+160mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
11	Doxycycline 100mg capsule	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
12	Enalapril 10mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
13	Erythromycin 500mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
14	Fluticasone + Salmeterol (50 mcg/25 mcg) Inhaler	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
15	Fluticasone + Salmeterol (125 mcg/25 mcg) Inhaler	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
16	Glibenclamide 5mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
17	Gliclazide 80mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
18	Hydrochlorothiazide 25mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
19	Lagundi 300mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
20	Losartan 50mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
21	Mebendazole 100mg/5mL suspension	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
22	Metformin 500mg tablet/film coated	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____
23	Metoprolol 50mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA _____

24	Metronidazole 500mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA	_____
25	Salbutamol (100 mcg/inhalation)	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA	_____
26	Sambong 250mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA	_____
27	Simvastatin 20mg tablet	Yes No	_____ NA	1 2 3 4 5 6 7 DK NA	_____
Remarks on data collection activity:					

* Note: DK - Don't know, NA - Not applicable

Availability of Drugs for TB Treatment

(SURVEY FORM 4 - For RHUs and HCs)

No	Drug	Available?	Expiry date (MM/YYYY) NA – if drug not available)	If yes, when was the last requisition of these medicines?	If not, what are the reasons these medicines are not available?	Remarks
1	CAT 1 TB Kit for Adults	Yes No	_____ NA			
2	TB Kit for Children	Yes No	_____ NA			
3	Isoniazid Preventive Therapy for Children	Yes No	_____ NA			
4	CAT 2 TB Kit	Yes No	_____ NA			