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THE REPUBLIC OF INDONESIA
MINISTRY OF HEALTH

A Preliminary Inventory of the
Health Information System as Related
to Immunizable and Diarrheal Diseases

Heini Ahveninen, M.D.
URC/USAID; STC

June 1988

1 INTRODUCTION

The objective of this brief report is to

- provide a general description of the way and types of health data, which was previously and is currently collected within the Republic of Indonesia's Ministry of Health (MOH)
- provide a short summary of the outputs of these health data.

It is hoped that this report will be of assistance to the MOH in preparing for the next five-year health plan (1989-1994). More explicitly, it is anticipated that this report will assist in the MOH planning process by providing background information on data which is currently being provided and which is relevant to the strengthening of the Ministry's Expanded Programme on Immunizations (EPI) and its programme for Controlling Diarrheal Diseases (CDD). Finally, it is hoped that report and its few abbreviated recommendations will stimulate efforts of Ministry of Health's structural units to work together in deriving a better picture of current incidence and prevalence of childhood tuberculosis, poliomyelitis, tetanus, pertussis, diphtheria, measles, and cholera, all of which diseases which represent major foci of the EPI and CDD programs. The following cooperative and competent respondents (see Annex A) generously gave their time so that the consultant could compile a representative picture of the parameters of Indonesia's current health information system.

2 HEALTH INFORMATION SYSTEM DESCRIPTION

In 1987, the Ministry of Health and its Directorates General instituted significant changes in the way in which information was collected, in the types of information collected, and in the way in which information was analyzed. Although the major sources of health data continue to be the nation's hospitals, health centers (Puskesmas) and satellite health posts (Posyandu), this report will make occasional reference to differences in processes prior to and after 1987 both for comparative purposes as well as to indicate possible needs toward modifications in the health information system.

2.1 Routine Data Collection Process and Data Sources

Annex B, Tables 1 and 2 provide a tabular description of the Ministry of Health's 1987 reporting systems (Table 1) as well as systems which are currently under development or are being contemplated (Table 2). The following paragraphs describe some of the key structural elements listed in Tables 1 and 2.

2.1.1 The Directorate General for Medical Services (YANMED)

Yanmed's reporting system - which consists of information emanating from the nation's hospitals - previously focused on information of operational and management interest. Although information relevant to disease monitoring was collected on a sample basis, both for outpatient and inpatient flows, they still give a nice picture of the use of these facilities, when statistically adjusted. As with many of the MOH reporting systems, there is limited integration of the YANMED database with databases from other directorates general.

2.1.2 The Directorate General for Community Health (BINKESMAS)

Information originating with the nation's health centers (Puskesmas) is highly organized through a centralized Binkesmas reporting system (SP2TP). Data was previously sent directly to the central level, but now it is being summarized in the kabupaten without the loss of number of reporting puskesmas. Before integration of EPI diseases monitoring process, this data was only occasionally available at central level for the EPI and CDD projects. However, this data has been used at puskesmas/kapubanten level in cooperation in the Local Area Monitoring and Planning trials.

2.1.3 The National Data Center (Pusat Data)

Originally established in the mid-1980s as a section of the Bureau of Planning, Pusat Data is now a separate bureau whose terms of reference call for it to function as a central resource for collection and analysis of health data. In addition it also has instituted a trial of data collection directly from puskesmas and hospitals. Pusat Data also

collects yearly reports of all the other health information sources. Analyses carried out by Pusat Data are not yet detailed enough to be of immediate use to the CDD and EPI programs.

2.1.4

The Directorate General for the Control of Communicable Diseases and Environmental Health (P2M/PLP)

Although P2M/PLP and its directorates collect and/or processes a great deal of disease-specific information, this report will focus on the three organizational entities whose responsibilities call for them to monitor information on child immunizable and diarrheal diseases.

2.1.5

The Directorate of Epidemiology and Immunization (EPI): Sub-Directorate of Immunization

Responsibility for monitoring and managing USAID's input to EPI Project falls under this subdirectorate. As a complement to the Puskesmas data, the Immunization Subdirectorate also receives annual immunization data from the hospitals.

EPI uses available data to calculate coverage figures for districts and Puskesmas on the basis of the number of immunizations provided in relation to the population. Estimates of population are primarily taken from the census results provided by the Central Bureau of Statistics 1985 - and occasionally 1980 - census. In calculating coverage rates, EPI makes the following assumptions:

- Growth rates are annually adjusted in estimating total population figures with the midyear figure being used to estimate coverage;
- The number of pregnant women is estimated to be 4 % of the current population. Fully 10 % of all pregnancies are expected to be aborted - either spontaneously or otherwise; and
- Newborns are estimated to be 3.5 % of the total population.

The census based denominator and the locally acquired denominators based on birth recording produce sometimes significantly different figures. The coverage figures, acquired from special surveys normally show a slightly higher coverage compared to those of the routine data.

2.1.6
The Directorate of Epidemiology and
Immunization
(EPI): Sub-Directorate of Surveillance

This unit was previously responsible for all routine data gathered by the EPI Program, including coverage data. The unit has four sections: outbreak control, hospital surveillance, data gathering and epidemiological analysis. The location of the epidemiological training unit in this subunit greatly enhanced the capability to produce and analyse epidemiological data. Elements of the previous and present monitoring systems are:

- The Early Warning System (W1) and Disease Outbreak Investigation: Both of these reporting devices serve as sensors for early disease occurrence. As a rule, local authorities are responsible for investigation of outbreaks but, in the case of polio outbreaks or of unusually large outbreaks of other diseases, the central surveillance system is expected to identify, respond and assist in the control of such outbreaks.
- The Weekly Infectious Disease Reporting System (W2): This was somewhat weak backbone of reports and surveillance on disease occurrence. As there later appeared multiple Puskesmas reporting systems, this channel has diminished in importance. Although it still remains up through kabupaten level, the Binkesmas reporting system replaces it at the central level.
- Sentinel Puskesmas Reporting System: In response to an acknowledged need to strengthen the W2 form, selected Puskesmas were identified to serve as key sampling units to provide quality reports. The older and the new systems differ in volume and geographical distribution.
- Sentinel Hospital Reporting: Analogous in nature and purpose to the Sentinel Puskesmas Reporting System, this channel provides inpatient information. The 27 major hospitals previously involved are now augmented by nearly 800 pediatric wards from participating hospitals.
- Hospital Reporting System consisting previously of 436 hospitals is now widened to nearly 800 with hospital outpatient records included.

2.1.7

The Directorate of Direct Transmission
(P2ML): Sub-Directorate for Diarrhea
Control and Helminthiasis (Subdit Diasre):

Subdit Diare collects much of its information via the W1, W2, and sentinel reporting systems outlined above. Although a special system of Puskesmas-Diare had been established, this system has now been abandoned in the interests of cost effectiveness and integration. Under its present workplan for 1988-89, Subdit Diare is expected to redefine its information system through Binkesmas and Sentinel Puskesmas data systems.

3

DISCUSSION

Most elements of Indonesia's health information system have suffered to some extent from reporting inconsistency and lack of completeness. However, all of the organisational entities discussed above have made efforts to improve the quality of their data. In summarising the strengths and limitations of the Ministry of Health's present information system - especially with reference to EPI and diarrheal diseases - the following comments can be made:

- The present effort to move toward a system of integrated recording and reporting is highly commendable and is an excellent illustration of the importance and potential of collaboration amongst MOH directorates general;
- The Ministry of Health's directorates general have amassed a considerable amount of data which remains to be effectively analysed. If analysed, this information - especially from the last several years - could provide planners and managers with a wealth of information with which to strengthen their delivery of health services;
- EPI has itself amassed an impressive amount of information on incidence and case fatality rates through its reports on outbreak investigations. As only occasionally outpatient records (W2 and SP2TP) can give a good picture of mortality rates, KLB outbreak information is of great importance. Hospital reporting has - until just recently - provided a good means of estimating nationwide incidence figures through its inpatient statistics.
- YANMED's reporting system provides good data on inpatient fatality and urban disease profiles as well as hospital outpatient profiles.

- The Hospital and Puskesmas Sentinel Reporting Systems offer real promise of being able to respond to the need for more detailed and reliable data on incidence rates, vaccine efficacy, and rural disease profiles;
- BINKESMAS's data and its reporting completeness has improved year by year and represents one of the main and certainly the most reliable and useful source of data on outpatient services; and
- The two national surveys - SUSENAS 1986 and the Household Survey 1986 - provide health-related data which would not otherwise be available on such issues as:
 - household and village-level disease-specific incidence rates;
 - client preference in the use of facility types;
 - facility utilisation; and - significance and accuracy of existing reports (see Annex C).

4 CONCLUSION

The integration of information systems in central and local levels be pursued and that work towards this end be energetically continued.

The non-integrated health data recording has led to a situation, where a vast amount of data is individually analysed. Now there exists a need to gather and analyse these results so that each of the responsible officials could be the expert of his/her own data. A task force could be used. The framework of the surveys as to the utilisation of different health facilities (see Annex C) when further analysed and combined to these results, will give reliable nationwide estimates of morbidity and mortality to immunisable and diarrheal diseases. The expertise of the Child Survival Research Unit could be utilised. Finally, when successful this working group could be the beginning of a wider and deeper integration of the elements of reporting systems.

ANNEX A

LIST OF RESPONDENTS

Dr. S. Gunawan	Directorate for Epidemiology and Immunization
Dr. Ibu Horry	Directorate for Community Health
Dr. Ibu Madriah	Directorate for Medical Care
Dr. Ibu Sri Dacosta	The Data Centre
Dr. Noto	Subdir. Immunization
Dr. Parkan	"
Dr. Wibowo	"
Dr. Sutoto	Subdir. Diarrhoea
Dr. Widodo	"
Dr. Nyoman	Subdir. Surveillance
Dr. Hariadi	"
Dr. Ibu Gerry	"
Dr. Yuwono	"
Dr. Allen Lewis	Consultant
Dr. B. Bernstein	"
Dr. Z. Rosenberg	"
Dr. B. Hausman	"
Dr. W. Jones	"
Dr. W. Emmet	"
Cr. Ibu Ratna Budiarmo	Litbangkes
Dr. Muljati	"
Dr. Liliana	"
Dr. Gendrowahyuhono	"
Dr. Bambang	"
Dr. Budiastiti	Indonesian Doctors Association
Dr. Budi Utomo	Child Survival Research Unit
Dr. Meivita B. Iskandars	
Dr. Lily Kak	"
Dr. C. Schlegel	UNICEF
Dr. R. Hatfield	"
Dr. Gunaratne	WHO
Dr. Lweng	"

TABLES 1 and 2

Table 1

 MINISTRY OF HEALTH INFORMATION SYSTEMS SUMMARY DESCRIPTION : 1987
 EPI AND DIARRHEAL DISEASES

DESCRIPTION CRITERIA	MINISTRY OF HEALTH DATA SOURCE									
	DIR GEN CDC W1 -KLB	DIR. CDC & KH W2	DIR.CDC (SURVEIL) SENT POSK	DIR.CDC. (SGRV) SENT BS	DIR.CDC (SURV) SRS	DIR. OF COHN. HEALTH SP2TP	DIR OF BS (YANRED)	NATIONAL DATA CENTER	DIRECTORATE OF DIRECT TRANSMISSION, SUB. COD PD4	DIRECTORATE OF DIRECT TRANSMISSION, SUB. COD PD4 SENT
OBJECTIVE	ALERTING SEVERE RNDK/EPIDEMI INVESTIGATION	IMP. DISEASE OCCUREN KWS (RABK, RUDK.)	SO. VILLIANCE AKTIVIT TREND, PROBLEM FIND. VACC. ST. AWARENESS	HOSPITAL INCID. VACC. STATUS TREND	HOSPITAL INCID.	OPERATIONAL DISEASE OCCURENCE	OPERATIONAL DATA	TOP ORGANISATION OPERAT. MANAGERIAL DISEASE OCCUR.	DIARRHEAL DISEASE MONITORING	PROGRAM EVALUATION KAP SURVAYS LAN
INSTIT. COVERAGE COMPLETENESS SENSITIVITY	ALL POSK REASONABLE	5200 POSK + AKY. 60%	57 posk rural 70%	27 HOSPITAL (BIG) 60%	436 (196) HOSPIT. 5%	5200 (85%) - 90 %	700 HOSP. GEN (50%) - 90%	8 prov: 185 BS, 159 PC 40%	3212 POSK GOOD	30 POSK W. JAWA LOW low
DISEASE COVERAGE PRED. POSITIVE VALUE	ALL DISEASES most often: MEASLES DIARRHEA	polio - PERTUSSIS * DIPHTHERIA * MEASLES ** DIARRHEA ** KOLERA *	polio - PERTUSSIS * DIPHTHERIA * MEASLES ** TETANUS * TBC *	POLIO ** pertussis ** DIPHTHERIA ** measles complik. TETANUS ** TBC ** GASTROENTERITIS * KOLERA ** malaria...	POLIO ** pertussis ** DIPHTHERIA ** measles complik. TETANUS ** TBC ** GASTROENTERITIS * KOLERA ** add...	ALL DISEASES PERTUSSIS * DIPHTHERIA * MEASLES ** tetanus * polio - TBC *	ALL DISEASES POLIO ** pertussis ** DIPHTHERIA ** measles complik TETANUS ** TBC ** gastroenteritis * KOLERA **	ALL DISEASES HOSPITAL AS SRS POSK AS ST2TP	CHOLERA * DIARRHEA **	CHOLERA * DIARRHEA **
FORM NO. DATA SET	W1 INFORMATION VARIES cases deaths	F2 case death week address	D3I case death act/pass age vacc. st. week	SRS Sent I (INDIV) case death age sex vacc. st address month	SRS I (INDIVID) case death age sex onset admission	LBI case age month	RL2B DIFFERENT cases month age	BS: B-2 & PBI case, death, from-to vacc. st. POSK: P1, P2, NP1, RP1 case, vacc. st diar/age ther. death W-2 minggu wabah	SD4 case death age date	SD4 SENT case death age treatment date of admission date FECTAL/WATER SWAPS FOOD/DRINK SPECIMEN CASES KNOWN
TIMING PLANNED ACTUAL	DAILY DAILY	WEEKLY 1-3 months	MONTHLY 3-5 months	MONTHLY 3-5 months	MONTHLY 3-5 months	MONTHLY 3 months	10 DAYS /3 MONTH 3-5 months	40/356 DAYS BS 72/356 DAYS POSK	MONTHLY 1-3 MTH ?	MONTHLY ??
ANALYSES (FIGURES THAT ARE PUBLISHED/ not published)	CASES, DEATH/PROV different journals	COHOL. TOTALS / PROV -DIARRHEA -CHOLERA -DENGUE -no EPI dis. -no act/pass cas	CASE, DEATH/ YEAR ST. OF. REP. COMPLKAT	COHULAY. TOTALS/PROV ST. OF. REP. COMPLKAT	CASE, DEATH/ PROV ST. OF. REP. COMPLKAT	NOT PUBLISHED	NOT PUBLISHED	NOT PUBLISHED	OCCASIONALLY case, death/age, akt	NOT PUBLISHED
STRENGTH LIMITATIONS	BEST SURVEILLANCE PREP/RESP TRAINING reporting ununiform	ACT. CASE FINDING no age, sex	GOOD SURVEILLANCE represent. low	YEARLY TREND VACC. EFFICACY deaths no to EPIH	INPAT. OCCURENCE, CFR age not to EPIH	GOOD DIS. OCCURENCE IN POSKSHAS not available to EPI	available to EPIH inpat/outpat not GOOD PPV	INTEGRATED OUT AND INPAT. RECORDING not available	FUNCTIONING not treatment	Not functioning represent. low
ABILITY TO MEET OBJECTIVE	REASONABLE	POOR	REASONABLE/POOR	REASONABLE/POOR	GOOD	GOOD	GOOD	TRIAL	GOOD	POOR
constrains to meet objective	local KLB reporting insufficient quality	incompleteness	incompleteness	incompleteness	rep. sufficient until 1987	seldom available	seldom available			incompleteness
COMMENTS	gives baseline data nicely, when done by central staff (lac, ar, cfr, vac. cov)	almost impossible to extract information	geographical distrip no anal. of vac. st. unoptimal, data only occasionally used	no anal. of vac. st. data.	despite incompl. reflects no of inpat until 1986	main source of dis. occurs, but does not reflect mortality	since 1985 data good as trial and slow to reflect the appr. 10% of popul. using hospitals	data processing difficult	since 1986 functio- ning fairly well but use of posk in D is only 10-40%	fairly difficult to extract any results

Table 2

DESCRIPTION CRITERIA	MINISTRY OF HEALTH INFORMATION SYSTEMS SUMMARY DESCRIPTION: 1988 AND PLANNED EPI AND DIARRHEAL DISEASES				MINISTRY OF HEALTH DATA SOURCE INTEGRATED SURVEILLANCE ACTIVITY					YAN / BINK / CDC	DTR. DIRC. TRANS. PAD	NATIONAL DATA CENTER
	DIR. GEN. CDC W1 - KLB	DIR. GEN. CDC W2	DIR. GEN. (SURV) SRVY POSK	BS: EPI DISEASE	BS INPATIENT	BS OUTPATIENT	SP2TP	DTR. DIRC. TRANS. PAD	NATIONAL DATA CENTER			
OBJECTIVE	ALERTING SEVERE ENDS/EPIDEMIC INVESTIGATION	DISEASE OCCURRENCE EARLY WARNING NOT FURTHER THAN KLB;	SURVEY & OPERAT. DATA FOR EPI AND CDD;	PROGRAM EVALUATION incidence data vacc. st. cov/awareness;	DISEASE OCCURRENCE IN HOSPITAL INPAT	DISEASE OCCURRENCE IN HOSPITAL OUTPAT	DISEASE OCCURRENCE & operat. data in pus;	DIARRHEAL DISEASE MONITORING & PROGR. MONIT	TOP ORGANISATION OPERAT., MANAGERIAL DISEASE OCCUR.			
INSTIT. COVERAGE COMPLETENESS SENSITIVITY	ALL POSK REASONABLE/GOOD U: low R: reason.	5200 POSK + AKT. 60% U: 25-30% R: 25-45%	301 POSK PAND HIGH ? AS SAMPLE GOOD	800 pediatric wards ? URB: 30 % RUR: 4%	800 PUB/PRIV BS ? URB: 30 % RUR: 4%	800 PUB/PRIV BS ? URB: 30 % RUR: 4%	5200 recap 310 KLB GOOD ? U: 25-30% R: 25-45%	5200 POSK GOOD U: 25-30% R: 25-45%	SP2TP: 105 BS, 150 POSK 40% ? TRIAL ?			
DISEASE COVERAGE PRD. POSITIVE VALUE	ALL DISEASES most often: MEASLES DIARRHEA	polio - PERTUSSIS * DIPHTERIA * MEASLES ** DIARRHEA ** KOLERA * add...	polio - PERTUSSIS * DIPHTERIA * MEASLES ** TETANUS * TBC *	POLIO ** pertussis ** DIPHTERIA ** measles complik TETANUS ** TBC **	19 OUT OF 100 INFECTIOUS DISEASES diarrhea *CHOLERA** POLIO ** pertussis ** DIPHTERIA ** measles complik TETANUS ** TBC **	19 OUT OF 100 INFECTIOUS DISEASES diarrhea *CHOLERA** POLIO ** pertussis ** DIPHTERIA ** measles complik TETANUS ** TBC **	19/74 INF. DIS. communicable PERTUSSIS * DIPHTERIA * MEASLES ** tetanus * polio - TBC *	CHOLERA - DIARRHEA **	ALL DISEASES HOSPITAL AS SRV POSK AS ST2TP			
FORM NO. DATA SET	W1 INFORMATION VARIES cases deaths	F2 case death week address	LBI S case age vacc. st dehydr. st month VACC. COVERAGE DIAR. CASE MANAGEMENT VNM ACTIVITY COLD CHAIN, LOGISTIC;	RL2c case death age vacc. st month	RL2a case death age month	RL2b case age month	DLB1 case age month Nr. of vacc. given VNM activity Oralit distirp. Nr. of lab test&resul	SD4 case death age date OBS USED AKT/PASS logistics	BS: R-2 & PR1 case, death, from-to vacc. st. POSK: P1, P2, NP1, NP1 case, vacc. st diar/age ther. death W-2 alinguan wabah			
TIMING PLANNED ACTUAL	DAILY DAILY	WEEKLY 1-3 months	MONTHLY MONTHLY	MONTHLY ?	MONTHLY ?	MONTHLY ?	MONTHLY ?	MONTHLY 1-3 months?	40/356 DAYS BS 72/356 DAYS POSK			
ANALYSIS (FIGURES THAT ARE PUBLISHED/ not published)	CASES, DEATH/PROV CFR	INFORMATION FLOW TO KANUPANTEN ONLY	EPI: case/age, vac. st; DIA: case/age, st. deh; medic/OBS used medic/st dehydr;	CASE, DEATH/AGE, VAC. S; CFR anal 3-4/year	CASE, DEATH/AGE CFR anal 3-4/year	CASE/ AGE	CASE/AGE	CASE, DEATH/AGE BY POSK/KADER	CASE/AGE CASE/MEDIC.			
STRENGTH LIMITATIONS	PROGRAM EFFECT (INC, AB, CFR, VR) reporting no uniform	see above	GOOD EPI AND CDD SURVEILLANCE ACT. DO. VR. AV, VC, VNM, CH	AV, VR INPATIENT TRENDS	INPATIENT TRENDS	BROADENS OUTPAT QUALITY&QUANTITY	BROAD BASE morbidity not refl.	FUNCTIONING WELL	POSSESSES ALL DATA FOR ROUTINE ANALYSIS; not integrated			
COMMENTS	good baseline data on outbreaks, but generalisation to urban areas maybe difficult	importance already diminished because of usage of SP2TP	major surveillance tool, with fast and couraging feedback All necessary info for program eval. on SAMPLE base CAN DEVELOPED IN THREE POSKERSHAS	reflects the approp. 8-9% of all pat. bed. occuo. rate(BOB) 50% reflects to some extent the financial; step	reflects the approp. 8-9 % of patients Will increase the amount of previous inpat figures appr. 2-3 fold Under-representation of balita in whole hospit. pat material	increases the output; figures by appr. 30% in urb. area ad 30% and rural area 4 % patients use this facility	The total cumulative; figures will grow 2-4 fold (W2) Reflects more urban incidence If field activity broad will reflect even incidens direct; Balita nicely represented	although disease occurrence should be same as SP2TP, the l; logistic information; needed	as data gathering a publicature, but as top organisation of great need			

EXPLANATORY NOTES

Tables 1 and 2 provide a tabular description of the Ministry of Health's reporting system through 1987 (Table 1) and of the reporting system as it presently exists or as it is being developed (Table 2).

Each of the two tables focuses on the information system related to EPI and Diarrheal Diseases. In addition, across each table is listed the various data sources (i.e. Directorate General for CDC, Directorate General for Community Health, etc.) for information feeding into the Ministry of Health's information system.

Beneath the first column of each table are listed descriptive criteria for each of the data sources. The descriptive criteria provide the following data:

- ITEM 1: OBJECTIVE - What is the form's purpose?
- ITEM 2: INSTITUTIONAL COVERAGE - What is the origin of the data?
- ITEM 3: COMPLETENESS - How many reports of those expected were actually received?
- ITEM 4: SENSITIVITY - A rough figure to reflect the inclination of patients to use the facility in urban and rural areas.
- ITEM 5: DISEASE COVERAGE/PREDICTIVE POSITIVE VALUE - Which of the immunizable diseases does the form provide information about and what is the estimate of confidence on diagnosis:
- = poor confidence
 - * = reasonable confidence
 - ** = high confidence
 - DISEASE = many cases
 - disease = few cases
- ITEM 6: FORM NO. - What is the number of the reporting form?
- ITEM 7: DATA SET - What data is provided?
- ITEM 8A: TIMING: PLANNED - How often should the report be received?
- ITEM8B: TIMING: ACTUAL - How often is the report actually received?

- ITEM9: ANALYSES - What analyses have been done on the data?
- ITEM 10A: STRENGTHS - How important is the data and what is its major use?
- ITEM 10B: LIMITATIONS - What are the major limitations associated with the data as it is presented?
- ITEM 11: ABILITY TO MEET OBJECTIVE - Can the form meet its objective?
- ITEM 12: CONSTRAINTS TO MEETING OBJECTIVE - What prevents the form from meeting its objective?
- ITEM 13: COMMENTS - Additional comments on form and data.

ANNEX C

The utilisation of different health facilities according to the Household and SUSENAS 1986 surveys.

Facility (all diseases)	HHS	SUPAS 1W	SUPAS 3M	%
Private practitioner ¹⁾	Urban		22.8	25.6
	Rural		5.5	5.8
	Total	8.3	9.4	10.4
Hospitals: outpatient	Urban		13.4	14.0
	Rural		3.5	4.1
	Total	4.3	5.8	6.2
inpatient	Urban		4.0	5.5
	Rural		1.8	2.3
	Total	1.7	2.3	3.0
Health Center	Urban		25.6	26.7
	Rural		31.2	33.4
	Total	24.2	29.9	32.0
Self medication	Urban		21.9	18.6
	Rural		26.5	24.9
	Total	13.9	25.4	23.5
No treatment	Urban		4.4	2.8
	Rural		8.1	5.4
	Total	36.8	7.2	4.9

(SUSENAS 1W = 1 week, SUSENAS 3M = 3 months recall).

Figures, that most accurately fit to the routine data records when extrapolated to the whole population are most reliable.

1) The IDI (Ikatan Dokter Indonesia) has made a survey which reflects the actual number of patients of private practitioners.