HEALTH SYSTEM INFORMATION

MINISTRY OF HEALTH
INDONESIA
Health Care Facilities

PHC Support (23.059)
PHC Treatment (3.067)
PHC non Treatment (6.075)
Health Center (5.241)
Mobile Hospital (24)
HOSPITAL (2.195)**

** RS Online 17 November 2013
Fragmentation Health Information System

- Weak Management
- Koordinasi Weak Coordination
- Load (re-recording)

Goal

INTEGRATION DAN SYNCHRONIZATION

Local Health Information System

Hospital
Disain System Health Information

Key:
- Reporting & Sharing Data

Structuring the Transaction data

Structuring data flow and data banks

Collaboration & Cooperation
Development of National Health Data Repository
Strengthening focus in Health Information System

- Improve the quality and speed of healthcare work processes
- Improve the availability and quality of data and information
- Data Structuring Transactions in Health Facilities
- Optimization of Data Flow and Data Development Bank

Basic aspects:
Policy / Regulation, Resources, etc.
Example e/m health System in Indonesia

- SIKDA (District Health System Information)
- SIRS (Integrated Hospital Information System)
- SIMRS Generik Open Source (Hospital System Information Management)
- SPGDT (Integrated Emergency response System)
- Aids Digital
Development Telemedicine

RS CIPTO MANGUNKUSUMO

RS JP HARAPAN KITA

19 Facilities
(Hospital, PHC, Ambulans SPGDT)

Tele-radiologi
10 Hospital
Tele-ECG
Hospital Registration in Indonesia

Hospital Online – 17 November 2013


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<th>Kategori</th>
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SIM RS Generik Open Source
Overview SPGDT

• SPGDT a system that ensures kegawat-service medical emergencies throughout the community
• Health services, especially kegawat-handling emergencies should be increased to reduce the death rate and prevent disability.
• The absence of kegawat-handling system is standard and integrated daruratan between RS.

Component SPGDT

• Pre-hospital care
• Data center / surveillance
• ongoing training
• clinical protocol
• Networking and supporting medical communication system
SPGDT (Sistem Penanggulangan Gawat Darurat Terpadu Nasional): “Emergency Medical Service (EMS)/ 911” version Indonesia

Single Access and Contact Center

Systems Network Architecture inter hospital

HIE (future)
Regional Call Center Design 119

Media Communication:
- Telephony
- Radio communication
- Internet
- Faximile
- e.t.c.
Connectedness with the National Referral Hospital

Desain Integrated Call Center 119 Nasional

CONTACT CENTER
021 119

CONTACT CENTER
031 119

CONTACT CENTER
0411 119

CONTACT CENTER
061 119
## Stake Holder is involved in SPGDT

<table>
<thead>
<tr>
<th>Call Center Needs</th>
<th>End User</th>
<th>Goal</th>
<th>Operator System</th>
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</table>
| Networking SPGDT  | Medical Officer (point of service beginning) | • Obtain medical information early action procedures kegawat-patient emergencies  
• Hospital up to date information that can perform further actions kegawat-patient emergencies  
• Make reservation facilities and ensure the referral is received RS destination | • Call Center Officer  
• Emergency officials Hospital |
| Hotline SPGDT     | Community | • Obtain medical information health  
• Obtain health care information where  
• Report and ask for help kegawat-daruratan conditions | • Call Center Officer |
| Hotline Hospital  | • Community  
• Call Center SPGDT * | • Obtain information Hospital services  
• Coordination SPGDT * | • Call Center Officer  
• Emergency officials Hospital |
Resource Call Center 119 SPGDT

**Call Center Technology & Infrastructure**
- access Number
- Network (data & voice)
- Devices
- PABX, the ACD function
- Interactive Voice Response (IVR)
- Computer Telephony Integration (CTI)

**Call Center Info-structure**
- Front-end application/ application agen
- Application Knowledge Management

**human resources**
- Agent + management

**Operational Contact Center**
- Business process
- Roster / scheduling
- Quality Control
- Call Management System (CMS), Call Reporting, etc.
HEALTH INFORMATION SYSTEM
HARMONIZATION BETWEEN CENTRAL AND LOCAL GOVERNMENT
Problem overview of health information systems

System Information
- Governance Weak
- Fragmentation
- Weak Management Data & Decision Support System

Data, Information, Skill
- Availability & Quality Data
- Weak Decision Makers

Decision Makers

better information – better decision – better health
Issues of Health Information Systems in Healthcare Facilities & Obstacle Data Flow

- Any confusion recording and reporting system
- Some areas trying to simplify the report, there is added reports
- Some areas are trying to develop an integrated system in health centers with computerized
- Raised the question of aggregation of data at the district, provincial, and national integration issues
- Some health programs develop their own reporting record
- Submission of reports to the county / city, provincial, and central crisis is not going well information
Data Structuring Transactions in Healthcare Facilities

- Should accommodate the needs of data at all levels of health administration so data duplication can be avoided.
- Expected, ICT applied at all stages of the process of working in healthcare facilities so that work processes become more efficient and transparent.
- Efforts are being made:
  - Revamping the system for recording and reporting on Health Facilities: including SP2TP, SIRS, surveillance / PWS.
  - Revamping the recording system and electronic reporting in accordance with the standards (HMIS generic, SIMRS Generik Open Source).
  - Standardization SIK daerah: information systems in DHO / City / Prov / Fasyankes data standards (dataset), a standard system (HDD, data exchange protocols, etc.)
  - Alignment of health data between the central and regional reporting arrangement (simple template) and refinement Komdat Applications
Optimization of Data Flow and Data Development Bank

(1)

- Optimization of data flow to improve access to and sharing of data between the nodes healthcare institutions, sharing of data for the referral system and JKN ICT platform is expected to be in the process of information so that the information can be accessed anywhere quickly and accurately.

- Built networks of information systems that connect between information systems in Fasyankes or other UPT, DHO / City / Prov, and bank data.

- In the transaction data between information systems, standardization is the key success of data exchange: data standards (dataset), a standard system (metadata, data exchange protocol).
Optimization of Data Flow and Data Development Bank

(2)

- Efforts are being made:
- SIK RPP preparation harmonization in Kemenkumham
- Optimizing the utilization of data communication networks (Network SIKNAS) in all offices provincial health office, District Health Office / City, RS, and other UPT consolidation of data into the data bank becomes easier and faster.
- Standardization of information systems development: data standards (dataset), a standard system (metadata, data exchange protocol).
- Development service bus (hub) as a bridge linking between information systems. One example: the integration of data between applications Pusdatin Data Communications, HR, GIKIA.
What To do Local Government

- Provide specialized HR data management / health information in all health institutions especially in Health Care Facilities
- HR is not often seek rotated
- Strive to increase the capacity of human resources in the field of Health Information System
- Seek reward and punishment
- Foster a culture of information
- Providing health data is complete, timely, and accurate, particularly data readiness JKN (National Health Assurance)
- Provide operational support facilities Health Information System especially in Health Care Facilities
- Allocate funds for the development and implementation of HIS in the region
THANK YOU