



INTRODUCTION

In the health development strategy of Indonesia, the National Health Information System (SIKNAS) is one of the main components which supports the development of the National Health System (SKN). By developing an integrated and a reliable National Health Information System (SIKNAS), accurate data and information will be available to support the decision-making process.

The main challenge in developing the health information system is how to integrate the information systems. The implementation of the regional autonomy policy has given rise to constraints related to developing an integrated information systems starting from the government at the central level to the provincial and the district level governments. The disparities in information needs and the standard availability of resources are the two basic aspects in developing an accurate and reliable information system. Therefore, the development of the information system must be based on the assessment of the specific needs on each level of government from the district to the central level.

Pusat Kajian Biostatistika dan Informatika Kesehatan (The Center for Biostatistics and Health Informatics Studies), under the Faculty of Public Health, Universitas Indonesia greatly supports the vision of Universitas Indonesia as the center of excellence for science, technology, arts and culture by conducting researches, community engagement programs, and enhancing competitiveness to produce programs which are effective and efficient for the community. In order to provide contribution to the health development, researches on biostatistics and health informatics in the regional and national level are conducted to support the development in the field of public health.



Our Vision and Missions

Our Vision

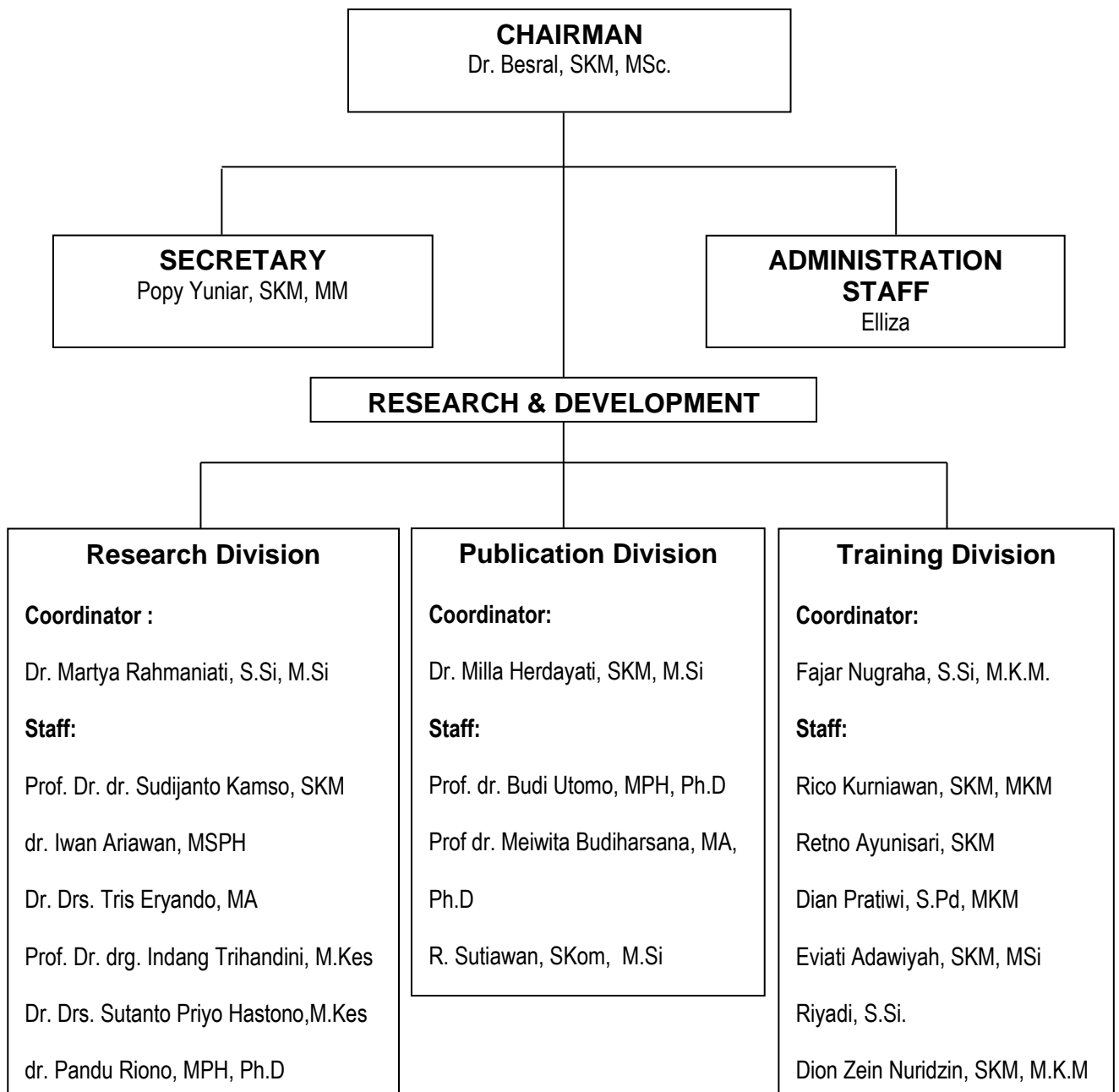
“To be the center for the health information system development and the application of biostatistical methods in Indonesia”

Our Mission

1. To conduct assessments on the health information system through the development of the health indicators.
2. To develop system prototypes which can resolve issues related to health information system in Indonesia.
3. To adapt the latest health information technology in supporting the health information system in Indonesia.
4. To develop statistical methods as the basis for developing health information systems
5. To build and strengthen networking amongst health information system practitioners in the government and non-government institutions.



ORGANIZATIONAL STRUCTURE





NETWORKING

Our partner institutions that we have collaborated with are: Ministry of Health Republic of Indonesia (*Direktorat Binkesmas dan P2MPL, Pusat Kesehatan Haji, BPPSDMK, Pusdatin*), *BKKBN, Badan Pengawasan Obat dan Makanan (BPOM), Badan Perencanaan Pembangunan Daerah (BAPPEDA)* Kab. Cianjur, District Health Office of Tangerang District & Tangerang City, , Provincial Health Office of DKI Jakarta, District Health Office of Kota Depok, District Health Office of Karawang District, Provincial Health Office of Banten, District Health Office of Cirebon City, District Health Office of Sukabumi District, District Health Office of Dinkes Sanggau District, District Health Office of Karo District, District Health Office of Kuningan District, District Health Office of Banggai District, District Health Office of Serang District, District Health Office of Lombok District, District Health Office of Palangkaraya City dan District Health Office of Kutai District, District Health Office of Bogor City, NGOs in the regional and international level, professional organizations, and donor agencies such as WHO, UNFPA, UNICEF, USAID, Child Fund dan Ford Foundation.

CORE ACTIVITIES

1. CONSULTANCY

The main area of consultancy consists of data management and data analysis using statistical software (Epi Info, Epi Data, SPSS, STATA), Statistical Analysis (linier regression analysis, meta-analysis, logistic regression analysis), Concept and Practice of data collection (Rapid Survey, Rapid Evaluation Method, Rapid Assessment Procedure, Lot Quality Assurance Sampling (LQAS), System Development and Analysis, and Database and Information Technology Development. These are the activities conducted:



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No	Name of Activity	Partner	Year
1	Database and MONEV Application Development for HIV/AIDS Prevention in DKI Jakarta Province	DKI Jakarta Provincial Health Office	2004
2	"SP2TP" Development in Tangerang District Health Office	Tangerang District Health Office	2005
3	"Rapid Survey Use on Clean and Healthy Lifestyle Behavior (PHBS)" Indicators Measurement	<i>Ditjen P2M PL</i> , Ministry of Health	2006
4	"MONEV System Development" for Reproductive Health Evaluation in Nanggroe Aceh Darussalam (NAD) Province	UNFPA- NAD Provincial Health Office	2006
5	Family Planning Information System Development in Sub Directorate of Family Planning <i>Binkesmas</i> , Ministry of Health RI	<i>Binkesmas</i> , Ministry of Health RI	2006
6	Master Plan Compilation of <i>PPSDM Kesehatan</i> Information System Development, Ministry of Health RI	<i>BPPSDM Kesehatan</i> , Hangjebat, Ministry of Health	2006
7	Health Information System (SIK) Sukabumi City	Sukabumi City District Health Office	2006
8	Data Management and Analysis Employee Opinion Survey at PERTAMINA	PERTAMINA	2006
9	"Training Needs Assessment" Study in <i>BPOM RI</i>	<i>BPOM RI</i>	2006
10	Regional Health System (SKD) Compilation of Cirebon City	Cirebon District Health Office	2006-2007
11	"Worker Performance Classification Distribution" Modeling Services (SMK), based on Achievement of Selected Performance Measures (UKT) in PERTAMINA	PERTAMINA	2007
12	Master Plan Compilation on Health Information System Development	Banggai District Health Office	2007
13	Regional Health Analysis	Banggai District Health Office	2007
14	Health System Revitalization	Banggai District Health Office	2007
15	Master Plan Document Compilation on Family Planning (KB) Information System in Indonesia	WHO	2007
16	Job Analysis for Long-term Use of HR Development Projections, <i>BPOM RI</i>	<i>BPOM Jakarta</i>	2007
17	"SIM-PPSDMK" Data Parameter Enrichment	<i>BPPSDMKes</i> Secretariat, Ministry of Health RI	2010



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18	"SIM- PPSDMK" App Expansion	BPPSDMKes Secretariat, Ministry of Health RI	2010
19	"Siskohatkes" App Upgrade	Center for Hajj Health (Puskehaj), Ministry of Health RI	2010
20	Improved GIS Capabilities in Saudi Arabia	Center for Hajj Health (Puskehaj), Ministry of Health RI	2010
21	"Siskohatkes" Network Maintenance: Help Desk Siskohatkes	Center for Hajj Health (Puskehaj), Ministry of Health RI	2010
22	"Siskohatkes" Network Maintenance	Center for Hajj Health (Puskehaj), Ministry of Health RI	2011
23	"Siskohatkes" Network Maintenance: Help Desk Siskohatkes	Center for Hajj Health (Puskehaj), Ministry of Health RI	2011
24	"SIMPPSDMK" App Development and Maintenance	BPPSDMKes Secretariat, Ministry of Health RI	2011
25	App Development using Offline System and Data Synchronization	BPPSDMKes Secretariat, Ministry of Health RI	2011
26	"SIMPPSDMK" App Paramater Enrichment	BPPSDMKes Secretariat, Ministry of Health RI	2011
27	Secondary Data Collection, Verification, and Analysis of Slums in DKI Jakarta Province	DITDAMDUK (BKKBN)	2011
28	Mapping/Plotting of Slums in DKI Jakarta Province	DITDAMDUK (BKKBN)	2011
29	Priivate Health Resources (SDK) Mapping, Depok City District Health Office	Depok City District Health Office	2012
30	State Health Resources (SDK) Mapping, Depok City District Health Office	Depok City District Health Office	2012
31	Information Technology and Communication (TIK) Master Plan	Depok City State Hospital (RSUD Depok)	2016

2. TRAINING AND DATA MANAGEMENT

The Center for Biostatistics and Health Informatics, Faculty of Public Health, Universitas Indonesia also provides statistical training and data management, Geographic Information System (GIS) training, seminars and workshops.

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These are the training activities conducted:

- **Statistical Training**

No	Name of Activity	Partner	Year
1	Statistical and Data Management Training for the Health Officers of <i>Puskesmas</i> in Tangerang City	District Health Office of Tangerang City	2006
2	Statistical and Data Management Training for the Health Officers of <i>Puskesmas</i> in Cirebon City	District Health Office of Cirebon City	2006
3	Data Processing and Analysis Training for <i>BPPSDM Kesehatan</i>	<i>BPPSDM Kesehatan</i>	2006
4	Statistical Training for Health Data Managers of Tangerang City District Health Office	District Health Office of Tangerang City	2006
5	Data Analysis of the "Regional Health Survey" (Surkesda) Training for Tangerang District Health Office	Tangerang District Health Office	2006
6	Data Analysis Training for Health Workers of Kuningan District Health Office	Kuningan District Health Office	2006
7	Health Research Methodology Training for <i>Poltekkes Depkes Ternate</i>	<i>Poltekkes Depkes Ternate</i>	2007
8	"Health Information Technology" Training for Health Workers in the District Health Office, State Hospital and <i>Puskesmas</i> of Karo District	Karo District Health Office	2007
9	" <i>Puskesmas</i> Data Management" Training based on SP3 Data of Tangerang District Health Office	Tangerang District Health Office	2007
10	"Data Management and Analysis" Training for Banggai District Health Office	Banggai District Health Office	2007
11	"Data and Information Utilization" Training as the basis for Regional Health Planning in NTB Province	Lombok District Health Office, NTB Province	2009
12	Data Design and Data Entry Training using CS Pro		2010
13	Research Data Management and Analysis using STATA		2010
14	The Training for Data Analysis on Hospital Service Quality	Fatmawati Hospital, 23-24 April 2013	2013
15.	Data Management and Analysis, Basic Level	26 – 28 April 2016	2016
16.	"Data Management and Analysis" Training, Basic Level, using SPSS	Depok, 24 - 26 October 2017	2017
17	"Data Management and Analysis" Training, Basic Level, using STATA	UNFPA dan BAPPENAS Depok, 8 - 10 November 2017	2017
16	"Data Management and Analysis" Training, Intermediate Level, using STATA	UNFPA Depok, 18 - 20 December 2017	2017

**Center for Biostatistics and Health Informatics Studies (PKBIK)****• Geographic Information System (GIS) Training**

No	Name of Activity	Partner	Year
1	Geographical Information System (GIS) Training, Kuningan District Health Office	Kuningan District Health Office	2006
2	GIS Utilization Training for Data Managers of Central Kalimantan Provincial Health Office	Central Kalimantan Provincial Health Office, Palangkaraya City	2007
3	GIS Training, Tangerang District Health Office	Tangerang District Health Office	2007
4	GIS Training, Banggai District Health Office	Banggai District Health Office, West Sulawesi Province	2007
5	Nutritional-Aspect Mapping using GIS	Sanggau District Health Office, West Kalimantan Province	2009
6	“HealthMapper Utilization” Training for Program Managers and MONEV Managers of the KPAPs in Indonesia	National AIDS Commission (KPAN)	2009
7	GIS Training	Kutai District Health Office, East Kalimantan Province	2009
8	GIS Training for the 11 th Indonesian Association of Public Health Experts (IAKMI) Pre-National Congress	IAKMI Jakarta	2010
9	GIS-Utilization-for-Health Training		2010
10	GIS Training	Directorate Jenderal of P2MPL, Ministry of Health RI, 10-11 July 2014	2014
11	GIS Basics Training	Center for Environmental Health Engineering and Disease Control (BBTKL & PP) Jakarta, 13-15 October 2014	2014
13	GIS Training	IAKMI Padang, 27 October 2014	2014
14	GIS in the Health Sector	Center for Data & Information (Pusdatin), Ministry of Health RI	2015
15	GIS Training, Basic Level	10 – 12 November 2016	2016
16	Health-Situation-Mapping Training	Depok City District Health Office, 28–30 November 2016	2016



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17	GIS Training, Basic Level	Port Health Office (KKP Kelas II Banten), 21-23 August 2017	2017
18	GIS Training	Port Health Office (KKP Kelas I Soekarno-Hatta) Depok 12-14 December 2017	2017
19	GIS Training, Basic Level	Port Health Office (KKP Kelas III Sorong) & Puskesmas of Kebayoran Baru Subdistrict, Jakarta 3 -5 July 2018	2018

3. RESEARCH

Researches that had been conducted by the Center for Biostatistics and Health Informatics, Faculty of Public Health, Universitas Indonesia:

- **Survey based Research**

No	Name of Activity	Partner	Year
1	Health Service Performance Assesment based on Indicators of "Kabupaten Tangerang Sehat" 2010	Tangerang District Health Office	2006
2	Regional Health Survey (Surkesda) Survei Kesehatan Daerah of Serang District, Serang District Health Office	Serang District Health Office	2006-2007
3	Clean and Healthy Life Behavior (PHBS) Survey of Households in Serang District Health Office	Serang District Health Office	2006-2007
4	Verification of Poor People Data in Tangerang City Area	Tangerang City District Health Office	2007
5	Service Availability Mapping (SAM) in TTS District, NTT Province	Childfund Indonesia	2010-2011
6	Community Health Development Index Survey Study of Cianjur District, BAPPEDA of Cianjur District	BAPPEDA of Cianjur District	2012
7	Poisoning Case Survey	Badan POM RI	2016

- **Research and Information System Development**

No	Name of Activity	Partner	Year
1	Financing and Logistics Management Study of Malaria Program in 5 Province	Directorate of P2MPL Ministry of Health RI	2004



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2	Management Information System Management in <i>Badan PPSDMKES</i> Ministry of Health RI	<i>BPPSDM Kesehatan</i>	2006
3	Information System Development of <i>Pusdiklat</i> Ministry of Health RI	Center for Education and Training (<i>Pusdiklat</i>) Ministry of Health RI	2006
4	Family Planning Information System Development in Sub Directorate of Family Planning (KB) <i>Binkesmas</i> , Ministry of Health RI	<i>Binkesmas</i> Ministry of Health RI	2006
5	<i>Puskemas</i> -Management-Information-System (SIMPUS) Guidebook Development, <i>Binkesmas</i> Ministry of Health	<i>Binkesmas</i> Ministry of Health	2006
6	Regional Health Information System Development (SIKDA) of Sukabumi City	Sukabumi City District Health Office	2006
7	Job Analysis for Long-term Use of HR Development Projections of <i>BPOM</i>	<i>BPOM</i> Jakarta	2007
8	Software Development on Maternal and Child Health (KIA) Program of Tangerang District Health Office	Tangerang District Health Office	2007
9	Software Development on Private Health Service Facilities using GIS, Tangerang City District Health Office	Tangerang City District Health Office	2007
10	"Management Information System" Software Development for <i>PPSDM Kesehatan</i>	<i>BPPSDM Kesehatan</i> Ministry of Health	2007
11	The Dissemination of the "PPSDM Kesehatan Management Information System" App	<i>BPPSDM Kesehatan</i> Ministry of Health	2007
12	"The Integrated Health Information System" Master Plan Compilation	PUSDATIN, Ministry of Health	2008
13	GIS App Model Development for Flood Disaster Mitigation in DKI Jakarta Province Area	DKI Jakarta Provincial Health Office	2008
14	"PPSDM Kesehatan Information System" Protocol Development	<i>BPPSDM Kesehatan</i> , Ministry of Health RI	2008
15	The Improved Implementation of the "BPPSDM Kesehatan Health Management Information System" other than "HWS" Province	<i>BPPSDM Kesehatan</i> , Ministry of Health RI	2008
16	"A Community-based Information System Prototype Development" using OS App for <i>Puskemas</i> Service Quality Assessment in Depok City	Depok District Health Office	2009
17	"Dengue Endemic Area Mapping" using GIS, as part of Surveillance Information System in Karawang District, West Java Province Year 2009	Karawang District Health Office	2009
18	Improved Web Site Development and Management Capability using OS and Content Management System approach for Data and Health Information Managers of Banten	Banten Provincial Health Office	2009



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	Provincial Health Office		
19	"BPPSDMK Standard Performance Measurement" Development	BPPSDM Kesehatan Ministry of Health RI	2009
20	Internet Network Development in Saudi Arabia	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
21	Community-based Epidemiology Surveillance System App	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
22	GIS System Procurement: Mapping of Indonesia and Saudi Arabia	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
23	GIS System Procurement: GIS and Equipment Rental	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
24	"Siskohatkes" Network Maintenance: Server Purchase and Colocation Rental	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
25	"Integrated Hajj Information System" Evaluation	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
26	Hardware Inventory: Evaluation Indicator Development for "Integrated Hajj System"	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
27	"Maintenance and Improvement of Network, Data Communication, and Hardware" SOP Design Development of Sub Directorate of Hajj, Ministry of Health RI	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
28	The Help Desk SOP Design Development of "Hajj Pilgrims' Health Information System"	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
29	SOP Design Development for PC Security System (anti-virus) Maintenance/Updating	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Dep.Kes RI	2009
30	"Siskohat" Network Maintenance: Help Desk System, Technical Support, Supervisor System	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009
31	GIS Procurement: (Vehicle Tracker, Vehicle Tracker Hardware Installation, Real Time Tracker Pengembangan App System)	<i>SUBDIT Kesehatan Haji</i> (DITJEN PP & PL) Ministry of Health RI	2009



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32	"Siskohat" Network Maintenance (Hardware maintenance and improvement, network and data communication maintenance and improvement, PC security system (anti-virus) maintenance/updating, "PC security system" Training for users, office app updating (MS. Office)	SUBDIT Kesehatan Haji (DITJEN PP & PL) Ministry of Health RI	2009
33	"PPSDMK Information System" Protocols Trials/Implementation	BPPSDM Kesehatan	2009
34	Development of Help Desk for Management Information System for HRH (MIS-HRH)	WHO	2010-2011
35	Information Technology Utilization for Outbreak Monitoring to Improve the Health Worker Response Time of Bogor City District Health Office	Directorate of Research and Community Service Universitas Indonesia	2010-2011
36	"Regulation Information System" App Procurement	Hukor Kepeg Litbangkes Ministry of Health RI	2013
37	"Drug Management Information System (SIPO)" Development	Depok City District Health Office	2014
38	"Drug Management Information System" Maintenance	Depok City District Health Office	2015
39	Mapping Service: (Environmental Quality and Public Health Mapping)	Directorate Jenderal P2PL, Ministry of Health RI	2015
40	"The IAKMI Online Regulation Information System" Development	IAKMI Jakarta	2015
41	Software Procurement	Bogor City District Health Office	2015
42	"Drug Management Information System" App Development	Karawang District Health Office	2016
43	"Drug Management Information System" Database Maintenance and Development	Depok District Health Office	2016
44	SIRS App Development: Pharmaceutical Supply Management Information System Modul	Depok State Hospital (RSUD Depok)	2016
45	"BMN Administration Software App" Development	Financial Bureau and BMN, The Secretariat of Ministry of Health RI	2016
46	"Utilization BMN" Software App Development	Financial Bureau and BMN, The Secretariat of Ministry of Health RI	2016
47	"BMN Removal" Software App Development	Financial Bureau and BMN, The Secretariat of Ministry of Health RI	2016
48	"BMN Report Drafting Tools" Software App	Financial Bureau and	2016



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	Development	BMN, The Secretariat of Ministry of Health RI	
49	SIPO App Development of Depok City State Hospital (RSUD Depok)	Depok City State Hospital (RSUD Depok)	2017

4. Source Person, Workshop, and Seminar

No	Name of Activity	Partner	Year
1	Source Person of the Regional Health Information System (SIKDA) Development Wrokshop for Tangerang City District Health Office	Tangerang City District Health Office	2004
2	Source Person of the Morbidity Data Recording Review	PUSDATIN, Ministry of Health RI	2006
3	Source Person of "the Data Management and Analysis" Workshop (Intermediate Level)	POLTEKES, Ministry of Health RI, Manado City	2016
4	Source Person of the Capacity Building of Surveillance Program Managers using GIS App, Tangerang Selatan City	Tangerang Selatan City District Health Office	2017
5	Online Seminar: "SDKI" Secondary Data Analysis using SPSS: Contraception utilization in Indonesia	Faculty of Public Health, Universitas Indonesia	2022
6	Online Seminar: Spatial Statistics Analysis on "Riskeudas Data" using Geoda: Case Studi Tuberculosis	Faculty of Public Health, Universitas Indonesia	2022
7	Online Seminar: Longitudinal Data Analysis using Excel: Climatic Lag Effect to Dengue Case	Faculty of Public Health, Universitas Indonesia	2022

EXPERTS

The Center for Biostatistics and Health Informatics Studies (PKBIK) is supported by experts in the field of information system development and statistical methods application:

No	Researcher	Area of Expertise
1	Dr. Sudianto Kamso	Biostatistics & Elderly Health



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2	Prof. Dr. Kemal N. Siregar	Reproductive & Maternal Health
3	Dr. Tris Eryando, MA	Health Informatics & GIS
4	Prof. Dr. Dewi Susanna, M.Kes	Spatial Analysis of Malaria
5	dr. Iwan Ariawan, MS	Biostatistics
6	dr. Toha Muhaimin, MSc	Population Analysis
7	Prof. drg. Indang Trihandini, MKes	Biostatistics & Health Informatics
8	Drs. Sutanto Priyohastono, MKes	Biostatistics
9	R. Sutiawan, SKom, MSi	Health Informatics
10	Dr. Mila Herdayati, SKM, MSi	Population Analysis
11	Dr. Martya Rahmaniati, SSi, MSi	GIS
12	Ir. Yusran Nasution, MKM	Biostatistics
13	Dr. Artha Prabawa, SKom, MSi	Information Technology
14	Dr. Besral, SKM, MSc	Biostatistics
15	Eviati Adawiyah, SKM, M.Si	Biostatistics
16	Popy Yuniar, SKM, MM	Health Informatics
17	Dian Pratiwi, SPd, MKM	Health Informatics
18	Fajar Nugraha, S.Si., M.K.M.	GIS, Climatic Longitudinal Data Analysis
19	Riyadi, SSi	GIS
20	Rico Kurniawan, SKM, MM	Health Informatics
21.	M. Kenji Fadlin Azimi, S.Kom	Health Informatics
22	Dion Zein Nuridzin, SKM	Health Informatics
23	Elliza	Administration

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