STATISTIK DALAM MANAJEMEN INFORMASI KESEHATAN

HOSIZAH

Program Studi Manajemen Informasi Kesehatan
FIKes-Universitas Esa Unggul
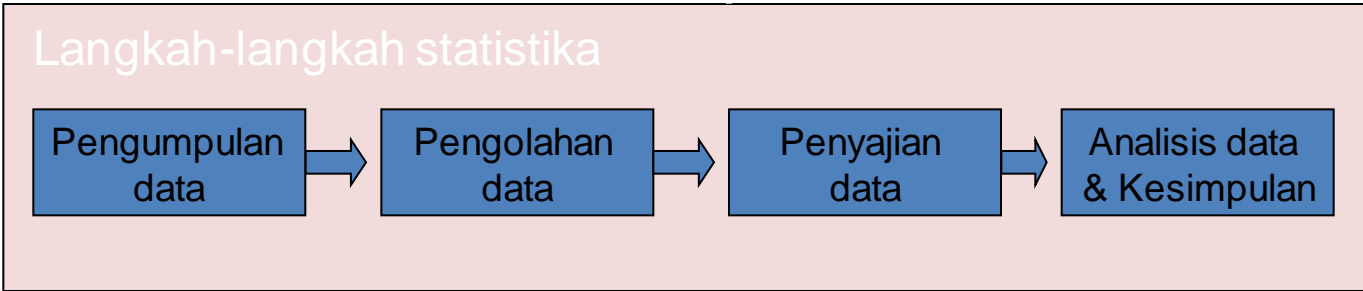
STATISTIK KESEHATAN
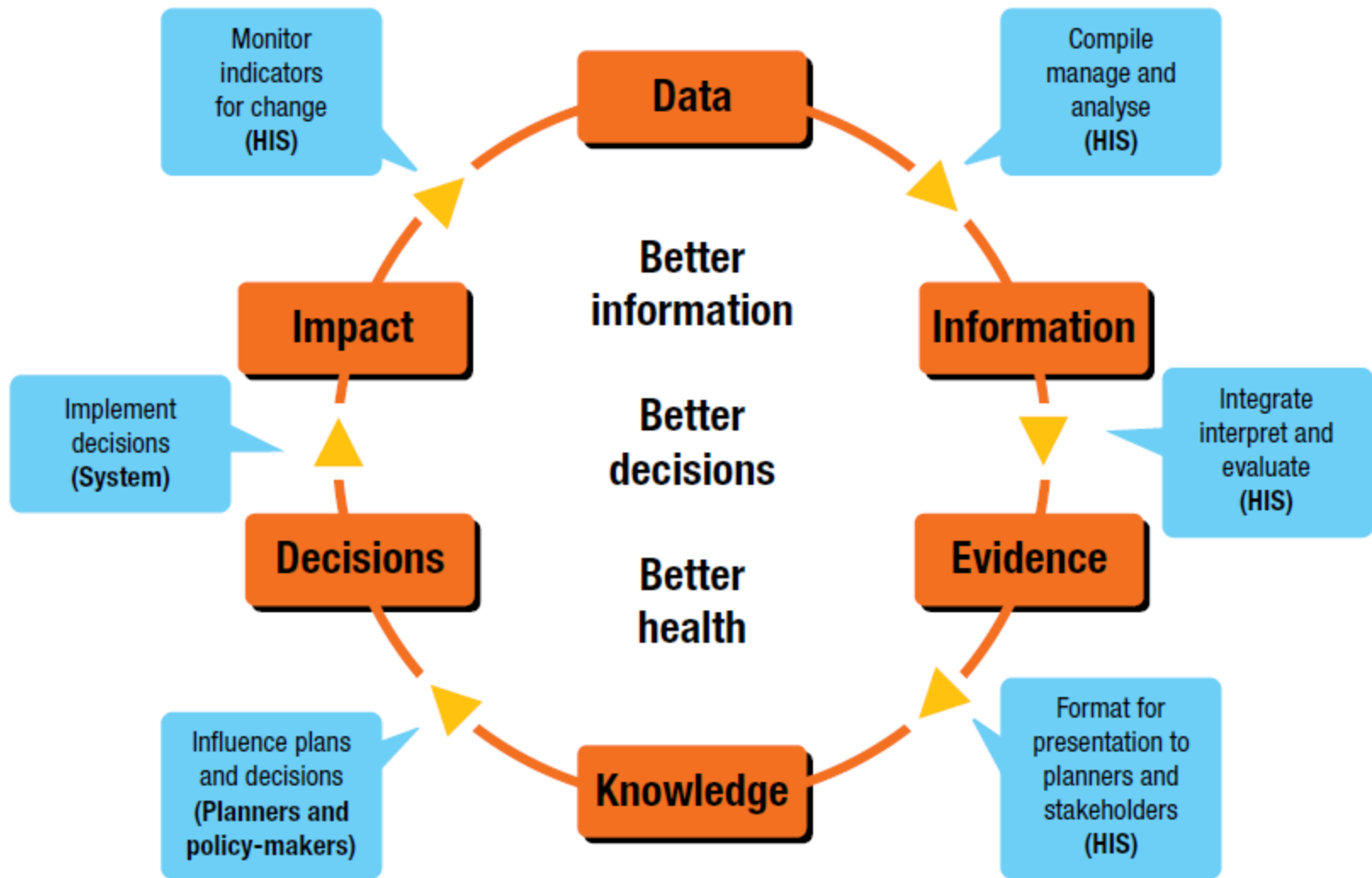
Statistik di Fasyankes

Public Health Statistics and Epidemiological Information
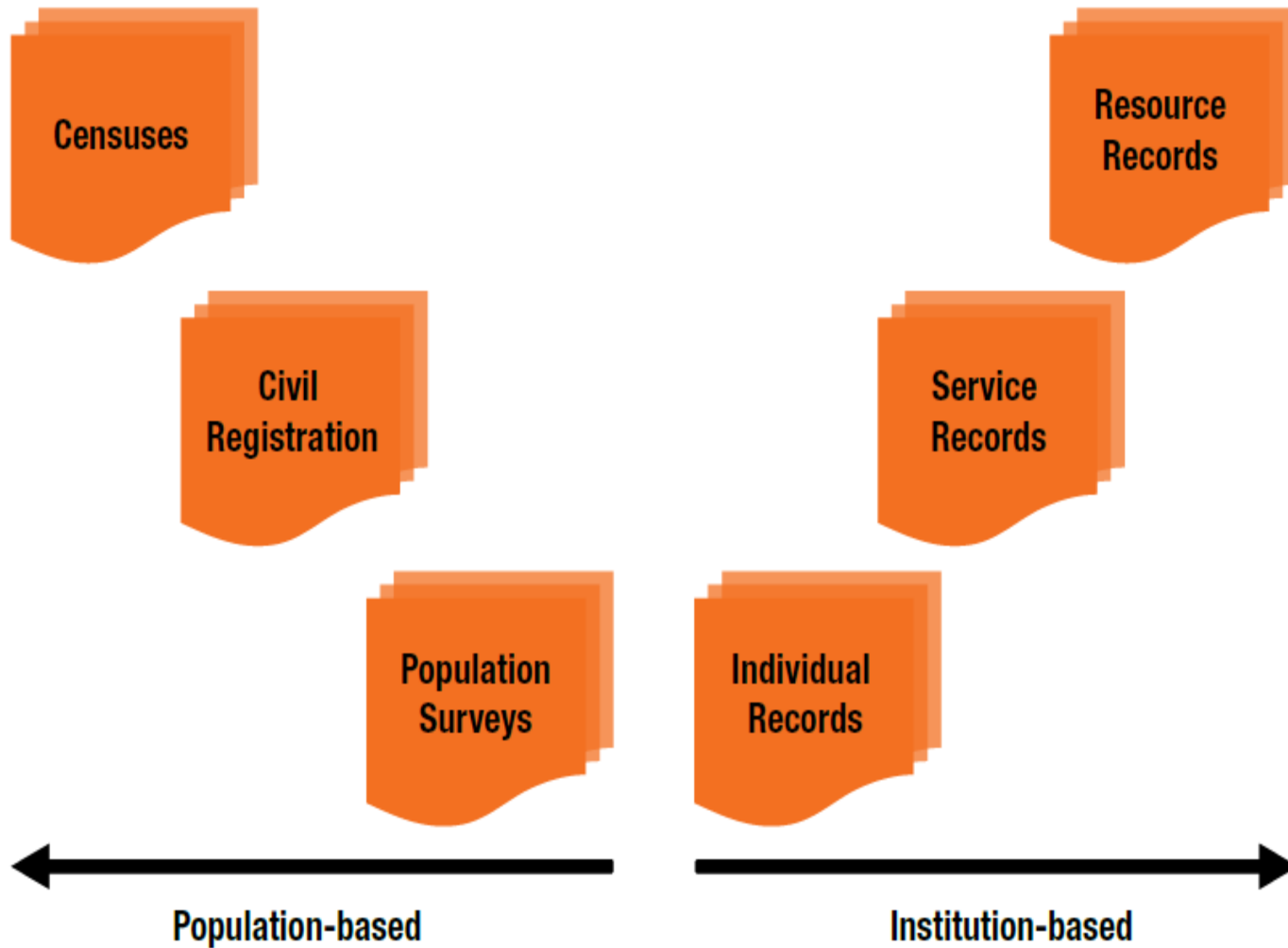
Data

Langkah-langkah statistika

| Pengumpulan data | → | Pengolahan data | → | Penyajian data | → | Analisis data & Kesimpulan |

Informasi

Fig. 13 Transforming data into information and evidence

Monitor indicators for change (HIS)

Compile manage and analyse (HIS)

Data

Better information

Impact

Information

Implement decisions (System)

Integrate interpret and evaluate (HIS)

Better decisions

Decisions

Evidence

Better health

Influence plans and decisions (Planners and policy-makers)

Knowledge

Format for presentation to planners and stakeholders (HIS)

HMN-WHO, 2008

Fig 4. Health information data sources

Censuses

Resource Records

Civil Registration

Service Records

Population Surveys

Individual Records

Population-based

Institution-based

REVIEW → UKURAN STATISTIK

- Rasio → a/b

- Proporsi → a/(a+b)

- Persentase → a/(a+b) X 100%

- Rate → [a/(a+b)] x 100 for spesific period of time, or for a large-based population
  - Contoh: Angka kasus baru Ca.Mamae per 100.000 wanita pada tahun tertentu

NILAI TENGAH – VARIASI

- Mean
- Median
- Modus
- Varians
- Standar deviasi

KEGUNAAN STATISTIK FASYANKES

- Perbandingan penampilan rumah sakit masa lalu dan sekarang .
- Sebagai bahan acuan untuk perencanaan pengembangan rumah sakit atau klinik di masa depan.
- Penilaian penampilan kerja tenaga medis, perawat dan staf lain.
- Biaya rumah sakit atau klinik jika disponsori oleh pemerintah.
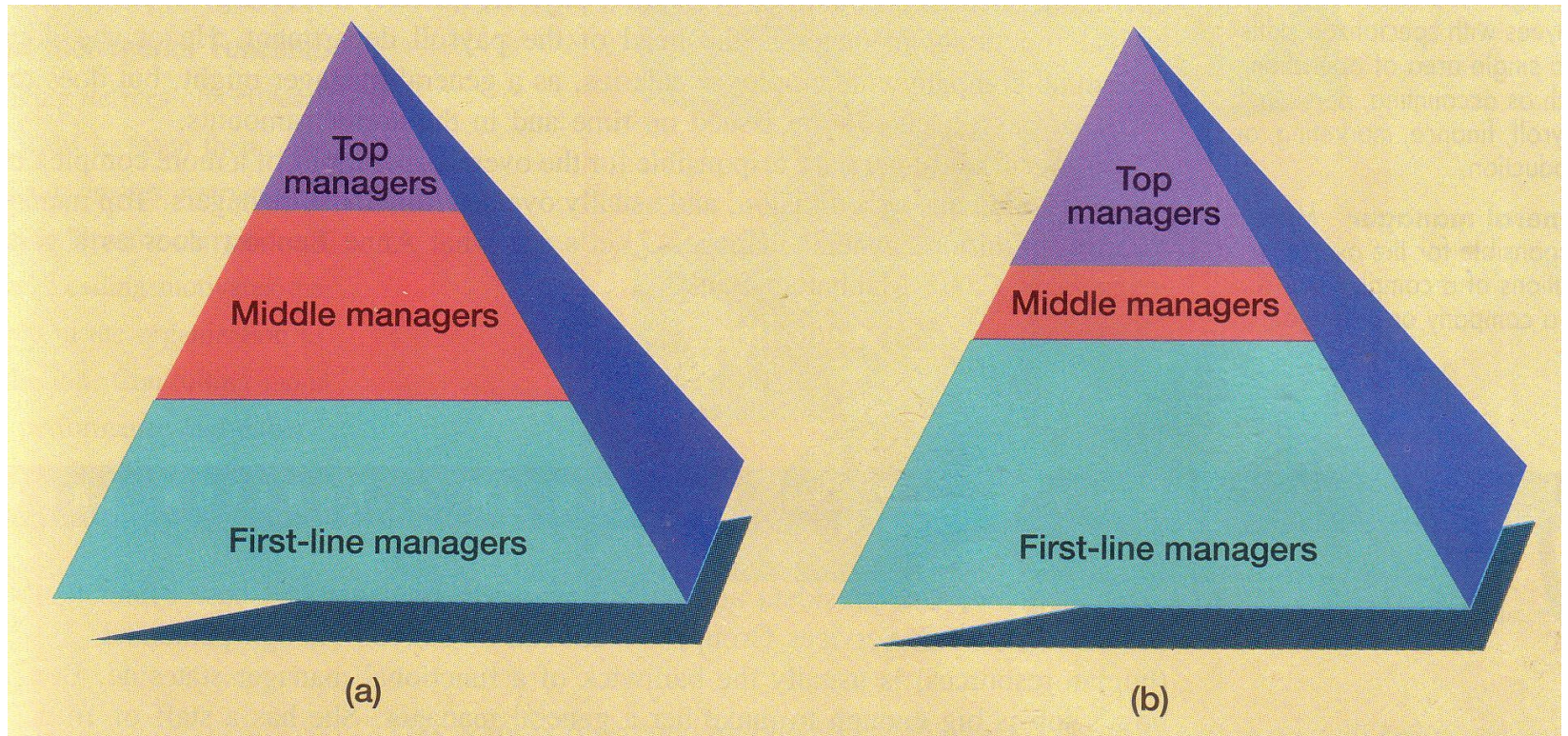- Penelitian.

SUMBER STATISTIK PELAYANAN KESEHATAN

- Primer → Rekam Medis/kesehatan
- Sekunder :
  - Indeks Penyakit dan Tindakan
  - Register
- Sensus → inpatient (RI), outpatient (RJ)

USERS OF HEALTH STATISTICS

- ⦿ Healthcare Administration
- ⦿ **Healthcare Department Managers**
- ⦿ Cancer Registries
- ⦿ Nursing Facilities
- ⦿ Home Health
- ⦿ Hospice
- ⦿ Mental Health Facilities
- ⦿ Drug and Alcohol Facilities
- ⦿ Outpatient Facilities
- ⦿ Managed Care Organizations (MCOs)
- ⦿ Healthcare Researchers
- ⦿ Accreditation Agencies
- ⦿ Federal Government

Levels of Management

(a)

(b)

FIRST-LINE MANAGER

- Manager directly

  responsible for the

  production of goods or

  services

MIDDLE MANAGER

- A manager who receives broad, over all strategies and policies from top managers and translates them into specific objectives and plans for first-line manager to implement

TOP MANAGER

- A manager who responsible for the overall direction and operations of an organization

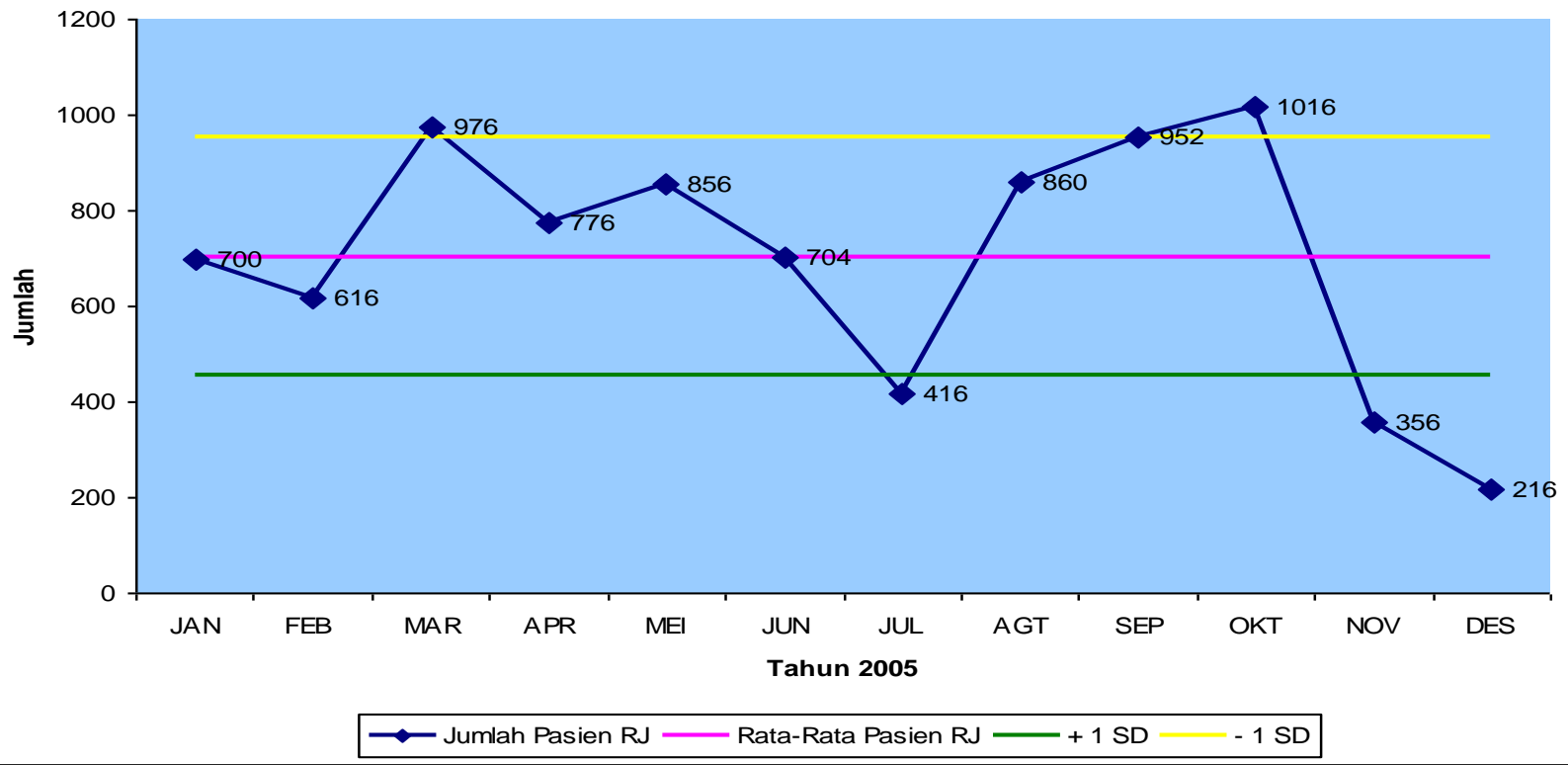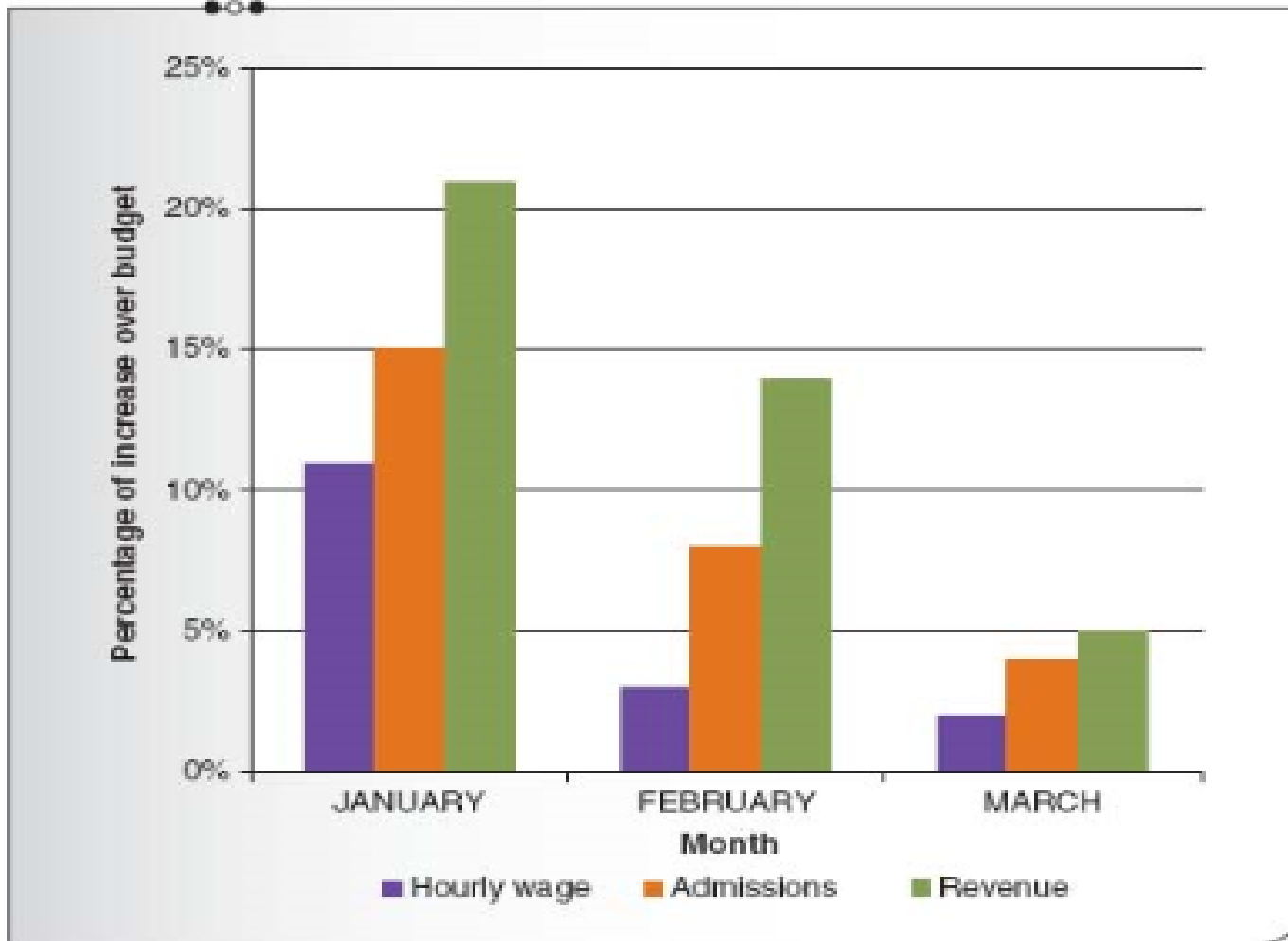**GRAFIK RATA-RATA KUNJUNGAN PASIEN RJ RS "A" JAKARTA TAHUN 2005**

JAN	700
FEB	616
MAR	976
APR	776
MEI	856
JUN	704
JUL	416
AGT	860
SEP	952
OKT	1016
NOV	356
DES	216

Tahun 2005

Jumlah

◆ Jumlah Pasien RJ —— Rata-Rata Pasien RJ —— + 1 SD —— - 1 SD

Figure 16.1. Analysis of hourly wages in relation to admissions and revenue

Sumber: Edgerton CG. , 2016. Healthcare Statistics, p.483

HIM professionals to perform analysis-based jobs in healthcare = CHDA

1. An entry-level health data analyst position
2. A mid-level health data analyst position
3. A senior-level health data analyst position

CHDA = Certified Healthcare Data Analyst

- http://www.ahima.org/certification/chda

- Individuals who earn the CHDA designation will achieve recognition of their expertise in **health data analysis and validation of their mastery of this domain**.

- This prestigious certification provides practitioners with the knowledge to acquire, manage, analyze, interpret, and transform data into accurate, consistent, and timely information, while balancing the "big picture" strategic vision with day-to-day details.

- CHDA-credentialed professionals exhibit broad organizational knowledge and the ability to communicate with individuals and groups at multiple levels, both internal and external

An entry-level health data analyst position

1. Identify, analyze, and interpret trends or patterns in complex data sets
2. In collaboration with others, interpret data and develop recommendations on the basis of findings
3. Develop graphs, reports, and presentations of project results, trends, data mining
4. Perform basic statistical analyses for projects and reports
5. Create and present quality dashboards
6. Generate routine and/or ad hoc reports

A mid-level health data analyst position

1. Work collaboratively with data, reporting, and the database administrator to help produce effective production management and utilization management reports in support of performance management related to utilization, cost, and risk with the various health plan data; monitor data integrity and quality of reports on a monthly basis

2. Work collaboratively with data and reporting in monitoring financial performance in each health plan

3. Develop and maintain claims audit reporting and processes

4. Develop and maintain contract models in support of contract negotiations with health plans

A mid-level health data analyst position

5. Develop, implement, and enhance evaluation and measurement models for the quality, data and reporting, and data warehouse department programs, projects, and initiatives for maximum effectiveness

6. Recommend improvements to processes, programs, and initiatives by using analytical skills and a variety of reporting tools

7. Determine the most appropriate approach for internal and external report design, production, and distribution, specific to the relevant audience

A senior-level health data analyst position

1. Understand and address the information needs of governance, leadership, and staff to support continuous improvement of patient care processes and outcomes

2. Lead and manage efforts to enhance the strategic use of data and analytic tools to improve clinical care processes and outcomes continuously

3. Work to ensure the dissemination of accurate, reliable, timely, accessible, actionable information (data analysis) to help leaders and staff actively identify and address opportunities to improve patient care and related processes

4. Work actively with information technology to select and develop tools to enable facility governance and leadership to monitor the progress of quality, patient safety, service, and related metrics continuously throughout the system

A senior-level health data analyst position

5. Engage and collaborate with information technology and senior leadership to create and maintain a succinct report (for example, dashboard), as well as a balanced set of system assessment measures, that convey status and direction of key systemwide quality and patient safety initiatives for the trustee quality and safety committee and senior management; present this information regularly to the quality and safety committee of the board to ensure understanding of information contained therein

6. Actively support the efforts of divisions, departments, programs, and clinical units to identify, obtain, and actively use quantitative information needed to support clinical quality monitoring and improvement activities

A senior-level health data analyst position

7. Function as an advisor and technical resource regarding the use of data in clinical quality improvement activities

8. Lead analysis of outcomes and resource utilization for specific patient populations as necessary

9. Lead efforts to implement state-of-the-art quality improvement analytical tools (that is, statistical process control)

10. Play an active role, including leadership, where appropriate, on teams addressing systemwide clinical quality improvement opportunities