DIGITAL MCH HANDBOOK SUMMARY & LESSONS LEARNT

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- University Secretary – Universitas Indonesia
- Chairperson – Indonesian Public Health Schools Association
- President Elect – Asia-Pacific Academic Consortium for Public Health
- International Committee Member – Global Partnership on MCH Handbook
- Advisory Board Member – AUN Health Promotion Network
- Advisory Board Member – Indonesian Public Health Association
- Dean – Faculty of Public Health Universitas Indonesia (2013-2017, 2017-2019)

4th Industrial Revolution

What's happening?

Different technologies are coming together
(convergence)
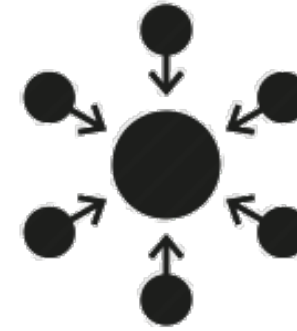
This is bringing different areas together

Physical
Digital
Biological

This affects social and economic sectors

The way we work, buy and sell things

The way we travel

The way we live

How 4.0 IR Affect Health … ?

➢ New technology will bring new medicines to patients much faster, improve monitoring of patients, allow personalized treatment plans, and predictive medicine

➢ New technology (and data) will allow for large leaps forward in medical research and data is the underlying theme behind changes to healthcare

➢ Universal connectivity and greater access to information will empower patients to take a greater role in their healthcare

➢ New technology could disrupt the existing relationship between health care providers and their stakeholders

➢ New technology will decrease the cost of healthcare worldwide and will decrease healthcare inequality

WHO Definition of e-Health

e-Health is the **cost-effective and secure use** of information and communications technologies in support of health and health-related fields, including

- ➢ health-care services
- ➢ **health surveillance**
- ➢ **health literature**
- ➢ **health education, knowledge and research**

[World Health Organization, 9th Plenary Meeting, 25 May 2005 - Committee A, 7th Report]

Covid-19 Transmission Control

RAYAKAN MALAM TAHUN BARU 2021 DIRUMAH SAJA

Hindari Kerumunan Untuk Cegah Covid-19 Ayo di Rumah Saja!

500 NAKES WAFAT, MENKES MINTA MASYARAKAT KURANGI MOBILITAS

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Application of e-Health

- ➢ Electronic Health Record
- ➢ Clinical Decision Support System
- ➢ Telemedicine
- ➢ Health Information System
- ➢ Health Management Information System
- ➢ m-Health
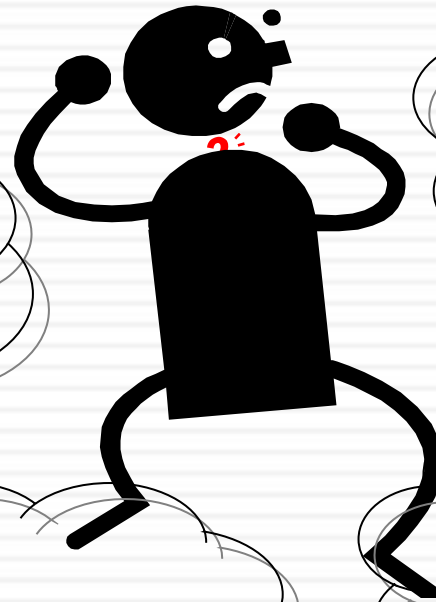
Digital MCH Handbook in Mobile Phones: Application of m-Health

- ✓ Rapid collection and sharing of mother's and children's data
- ✓ Online electronic health records
- ✓ Deliver public health, lifestyle, and MCH messages
- ✓ Patient appointment booking and alerts
- ✓ Transmission of test results
- ✓ e-Prescribing for repeated prescriptions
- ✓ Medication alerts for mothers and children
- ✓ Telemonitoring to transmit patient results to clinicians
- ✓ Provide healthcare information to practitioners, researchers, and patients via Short Message Services (SMS) platforms
- ✓ Real-time monitoring of patient vital signs and direct provision of care

- ✓ Decreased manual reporting from traditional data sources to more **automated data use and analyses** from novel sources
- ✓ **Improved interoperability** among jurisdictions and data systems
- ✓ **More novel partnerships/collaborations** to overcome limited public health informatics resources
- ✓ A **revolution in analytics, visualization and communication** on public health data and information
- ✓ **Timely, high quality, actionable data** is central to quality policy making and program management

The opportunities in using Digital MCH Handbook for MCH Care

- ➢ **Change**
  - ✓ from periodic health measurement to real time, integrated electronic data
  - ✓ from a focus on individual health care to population health management
  - ✓ from professional interpretation to informed consumers
  - ✓ from individual, small data to distributed, big data analytics
- ➢ Improve **health security**
- ➢ **Better prevention** of the leading causes of illness, injury, disability, and death
- ➢ Strengthen **public health – health care collaboration**
- ➢ Putting data and information into the hands of **public health decision makers** at the right time, right place to take action

Strategic Directions of
Digital MCH Handbook

Benefits of Digital MCH Handbook

1. Improve the Efficiency of MCH care
2. Enhance the quality of MCH care
3. Make MCH interventions Evidence-based
4. Empowering consumers and patients (mothers, families)
5. Encouraging new relationships between patients and health professionals
6. Educating physicians and consumers through online sources
7. Enabling the standardized exchange of information and communications between healthcare centers
8. Extending the scope of healthcare beyond its conventional borders
9. Build new forms of patient-physician interactions that put an emphasis on Ethics – informed consent, privacy and equity issues.
10. Reducing the gap between the "haves" and the "have-nots" by promoting Equity in access to healthcare

Limitations and Challenges

- ✓ **Lack of knowledge** by health professionals concerning the possible applications of Digital MCH Handbook
- ✓ **Unknown cost-effectiveness** of Digital MCH Handbook
- ✓ **Cost** of using Digital MCH Handbook is perceived to be high
- ✓ **Availability of ICT infrastructure and devices**, particularly internet access limited by low connectivity and bandwidth
- ✓ **Lack of connectivity** among different health information systems
- ✓ **Absence of legal guidelines** on privacy and confidentiality
- ✓ **Change management** to consider to deal with the new ICT cultural environment
- ✓ **Limited ICT literacy** among mothers and the families
- ✓ **Low utilization** of Digital MCH Handbook by mothers and the families
- ✓ **Utilization of data** by health professionals as well as by health managers and decision makers