Penegakan Disiplin Profesi Kedokteran menuju Era Revolusi Industri 4.0 dan Society 5.0

Dody Firmanda
Ketua
Majelis Kehormatan Disiplin Kedokteran Indonesia (MKDKI)
2016 - 2021

Disampaikan pada Pertemuan Evaluasi MKDKI diselenggarakan oleh Sekretariat Konsil Kedokteran Indonesia di Lido Lake Resort, 15-16 Desember 2021.

Kelanjutan dari :

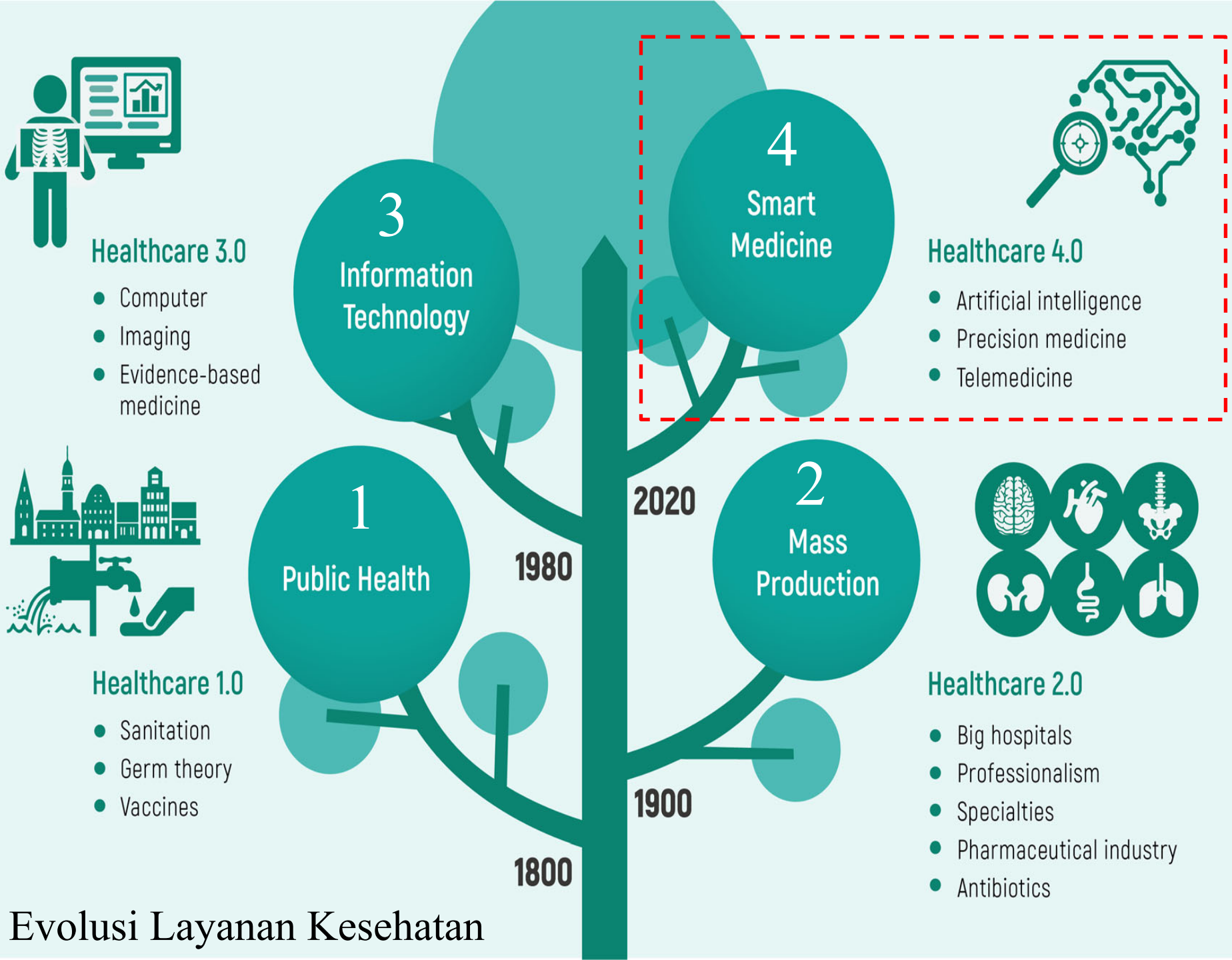
Potensi Pelanggaran Disiplin Profesi Dokter pada Era Disrupsi Revolusi Industri 4.0 Sistem Kesehatan#

(Industrial Revolution 4.0 in Healthcare Systems)

Dody Firmanda
Ketua
Majelis Kehormatan Disiplin Kedokteran Indonesia (MKDKI)
2016 - 2021

Disampaikan pada Pertemuan Rapat Koordinasi Nasional Konsil Kedokteran Indonesia Tahun 2021 "Optimalisasi Peran KKI dalam Era Disrupsi Global" di Hotel Santika Premiere ICE BSD City Tangerang Banten, 30 Maret 2021.

https://docs.google.com/viewerng/viewer?url=http://kki.go.id/assets/data/menu/DF_-_Revolusi_Industri_4.0_Kesehatan_.pdf



Evolusi Layanan Kesehatan

The new brain & new hands in Healthcare 4.0

STRUKTUR

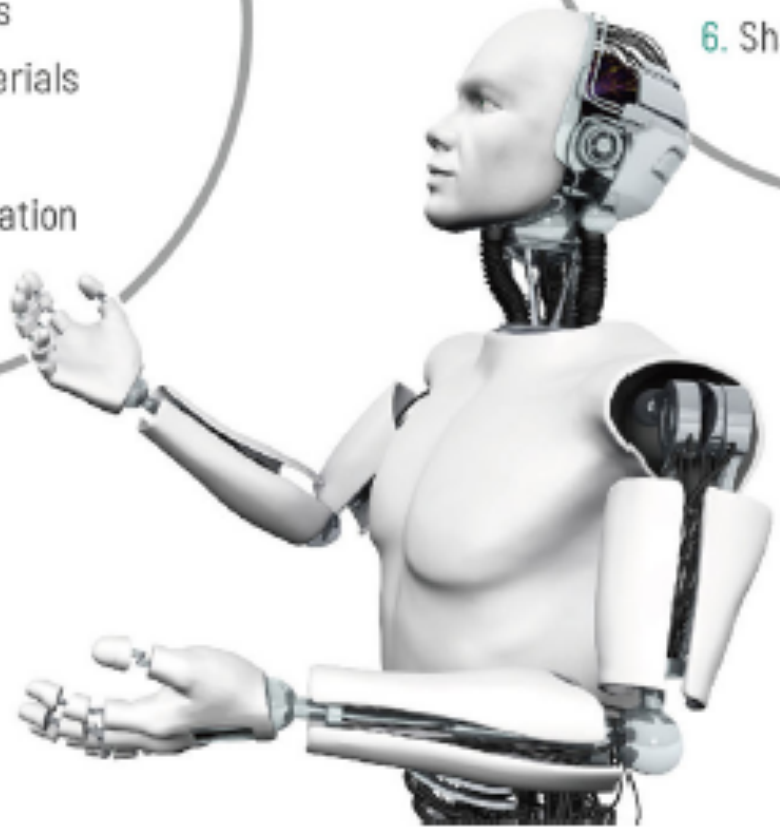
New hands

1. Robot
2. Mini-laboratory
3. Wearable devices
4. Customized materials
5. 3D printing
6. Speed & minimization

PROSES

New brain

1. Precision medicine
2. Artificial intelligence
3. Big data
4. Internet of things
5. Telemedicine
6. Shared decision making



KUNCI:

KONSEP:

INFORMATICS

INTELLIGENCE

COMMUNICATION

STANDARDS

TECHNOLOGY

MANAGEMENT

STRUKTUR:

INFORMATION

RELIABILITY

MODEL:

RELIABILITY

VALIDITY

EXPLICITNESS

CP

CRAVE

COMPARABILITY

ACCEPTABILITY

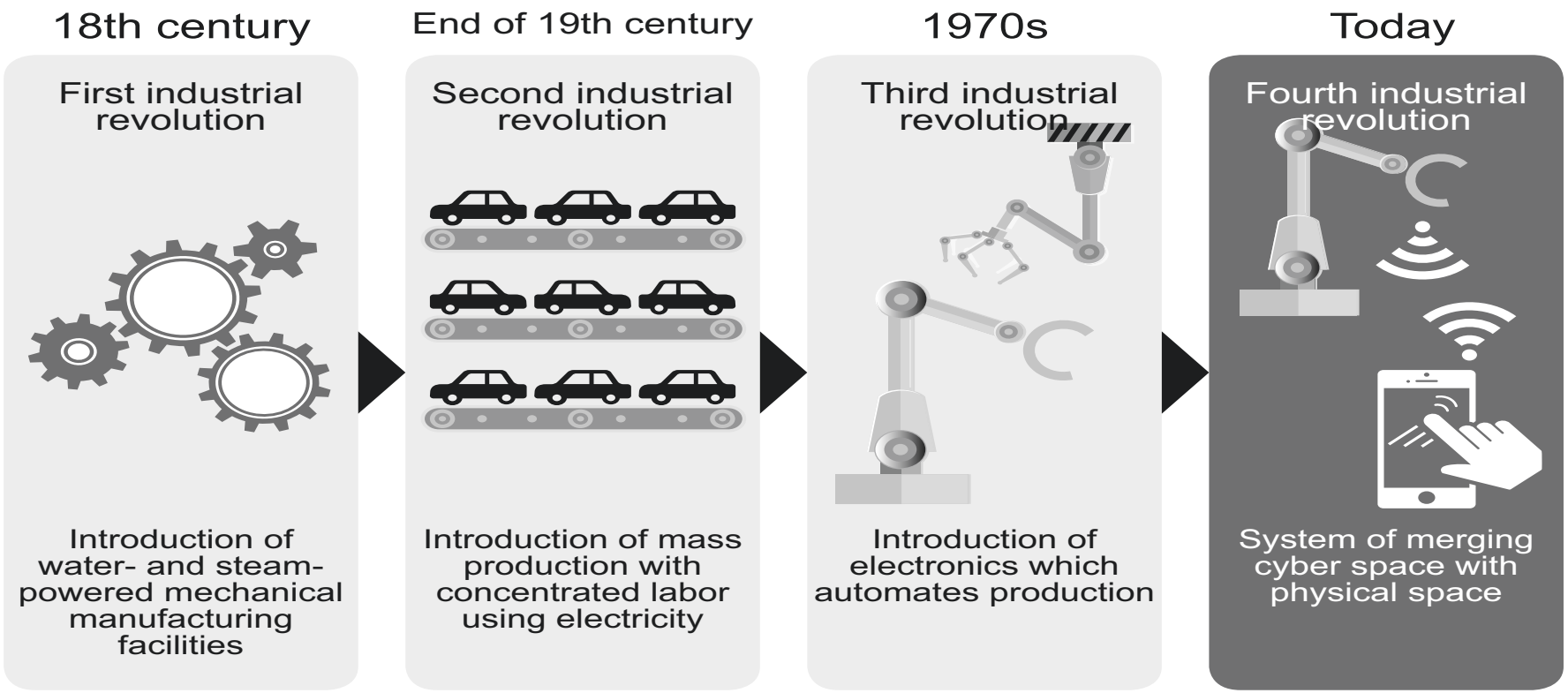
"Comparative Effectiveness dari HTA

"Critical Appraisals" dari EBM/EBHC

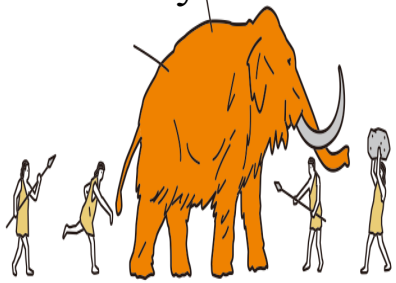
STRATEGI:

CLEVER

1. Collaborative Intelligence
2. Learning Systems
3. Exponential Technology
4. Value Facilitation
5. Ethical & Disciplinary Championship
6. Responsive Decision Making



Society 1.0

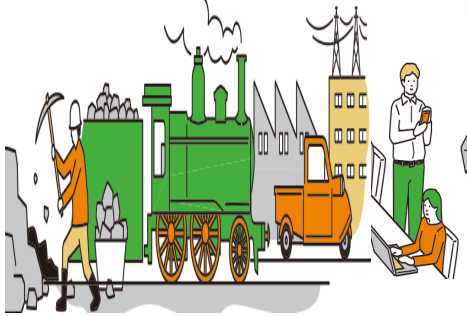


Pemburu

Society 2.0

Agraris

Society 3.0

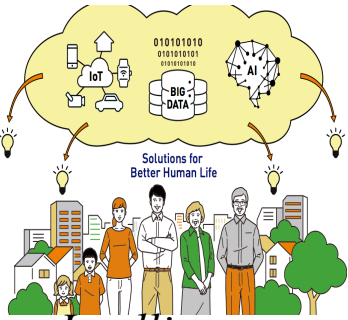


Industrialis

Society 4.0

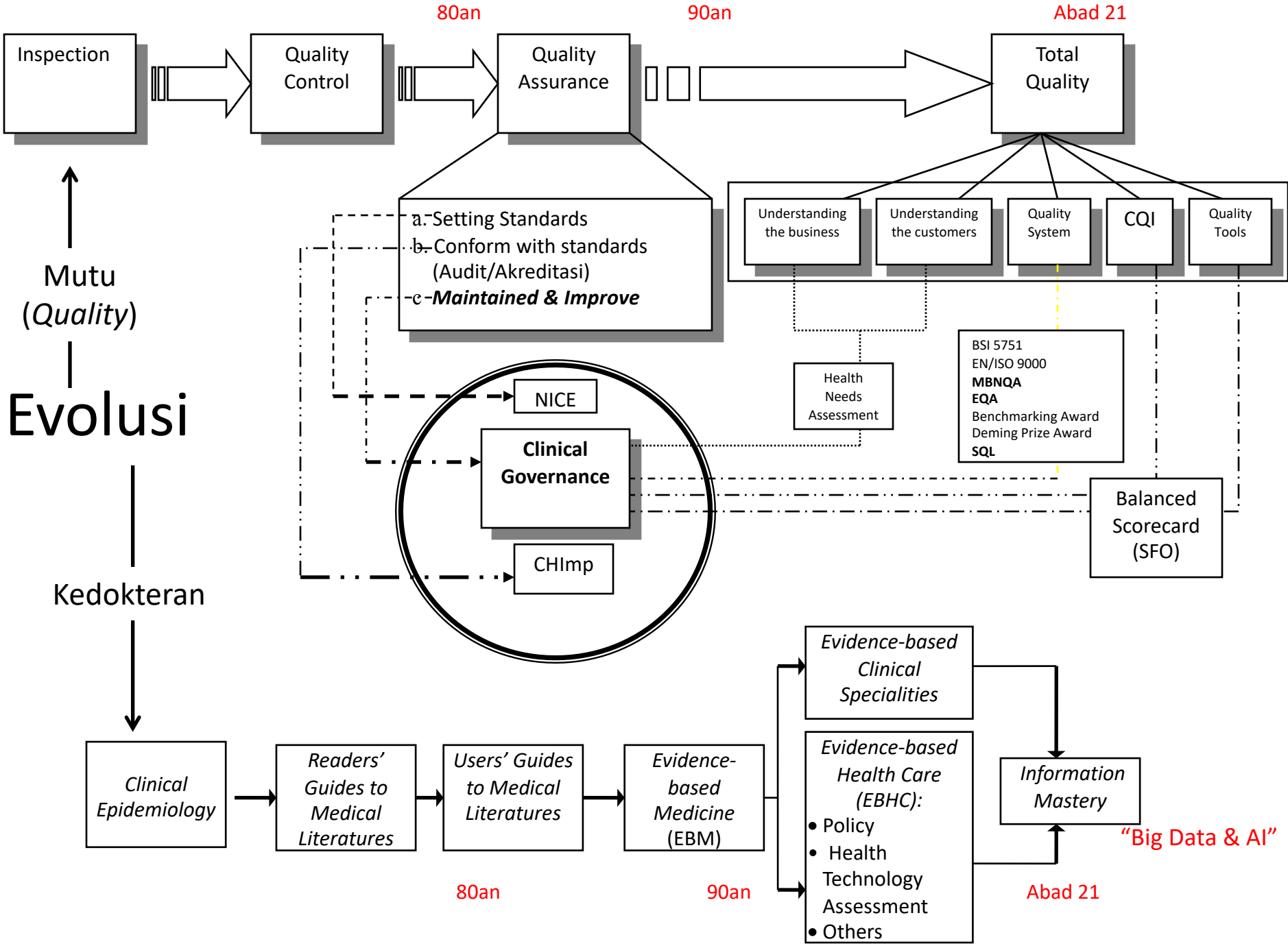
Informasi

Society 5.0



Intelligence

- *Big Data*
- *IoT*
- *AI*


80an
90an
Abad 21
Inspection
Quality Control
Quality Assurance
Total Quality
Mutu (Quality)
Evolusi
Kedokteran
a. Setting Standards
b. Conform with standards (Audit/Akreditasi)
c. Maintained & Improve
Understanding the business
Understanding the customers
Quality System
CQI
Quality Tools
NICE
Clinical Governance
CHImp
Health Needs Assessment
BSI 5751
EN/ISO 9000
MBNQA
EQA
Benchmarking Award
Deming Prize Award
SQL
Balanced Scorecard (SFO)
Clinical Epidemiology
Readers' Guides to Medical Literatures
Users' Guides to Medical Literatures
Evidence-based Medicine (EBM)
Evidence-based Clinical Specialities
Evidence-based Health Care (EBHC):
• Policy
• Health Technology Assessment
• Others
Information Mastery
"Big Data & AI"
80an
90an
Abad 21

TOTAL QUALITY (TQ)

1. Understanding the business
2. Understanding the customers
3. Continuous Quality Improvement
4. Quality (Management/Service) Systems
5. Quality Tools

4

QUALITY ASSURANCE (QA)

1. Setting the standards
2. Conform those standards
3. Continuous Quality Improvement

3

The most crucial

1. Donabedian
2. Maxwell
3. Don-Max
4. PNPK & PPK

1. Assessment& Audit Medis/Klinis
2. Akreditasi
   a. Internal
   b. Eksternal

QUALITY CONTROL (QC)

- Seven Quality Tools

2

1. PDC(S)A
2. RCA/FHME
3. SPC
4. SIP

INSPECTION

1

Sistem Kesehatan Nasional

1. Kebijakan*(Policy)*

2. Pembiayaan *(Finance/Budget)*

Regulasi
- Kemenkes
- BPOM

Reimburse
(Klaim)
- JKN/BPJS
- INA CBGs/DRGs
- CCM

Layanan
- (Tempat)
- (Profesi)
- (Waktu)
- (Cara)

NATIONAL HEALTH ACCOUNTS (NHA)

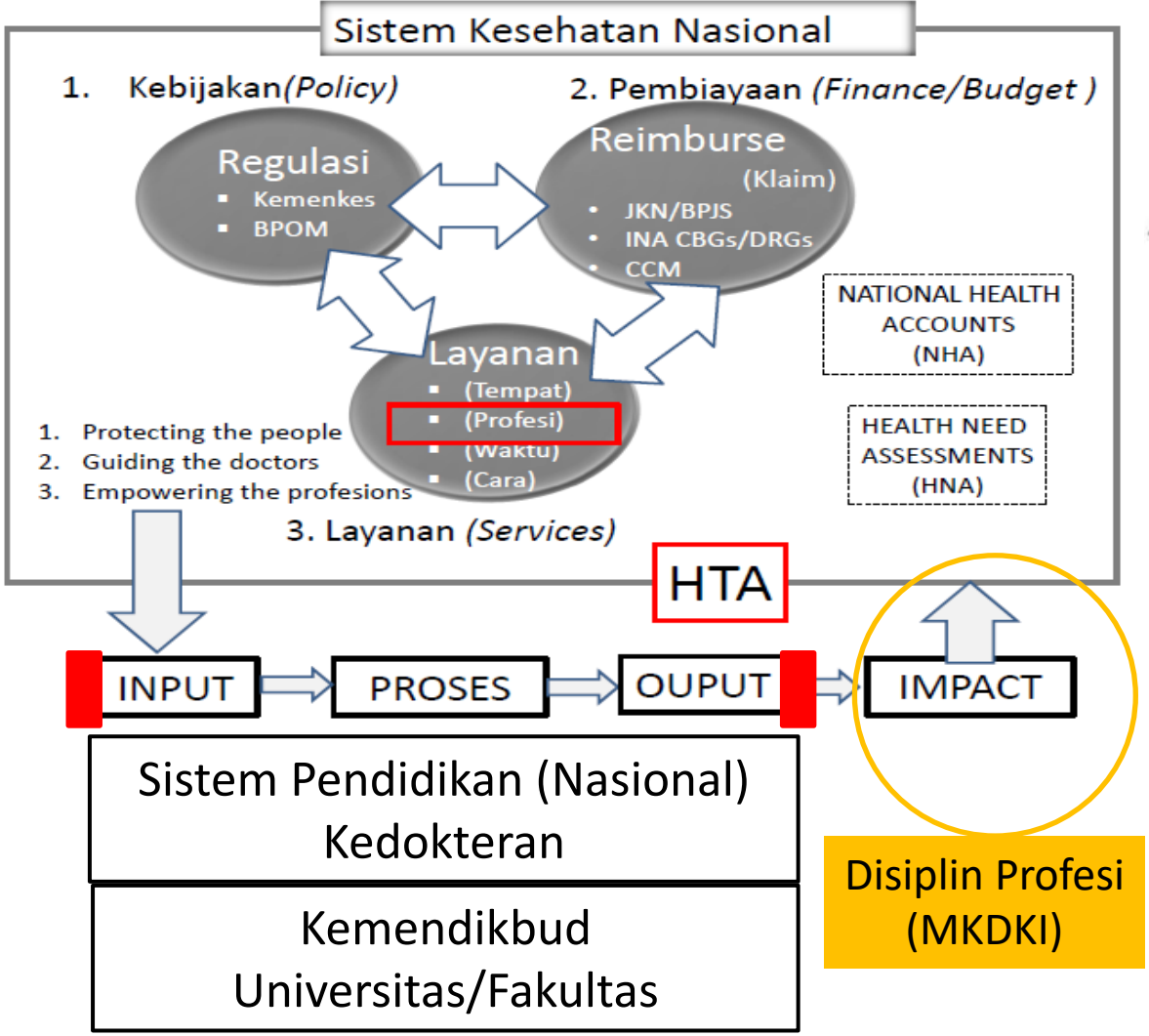
HEALTH NEED ASSESSMENTS (HNA)

UUPK 29/2004
Medical Act 1858, 1983
GMC UK
1. Protecting the people
2. Guiding the doctors
3. Empowering the professions

3. Layanan *(Services)*

HTA

INPUT → PROSES → OUPUT → IMPACT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1. Kebijakan(Policy)
2. Pembiayaan (Finance/Budget)
Regulasi
Kemenkes
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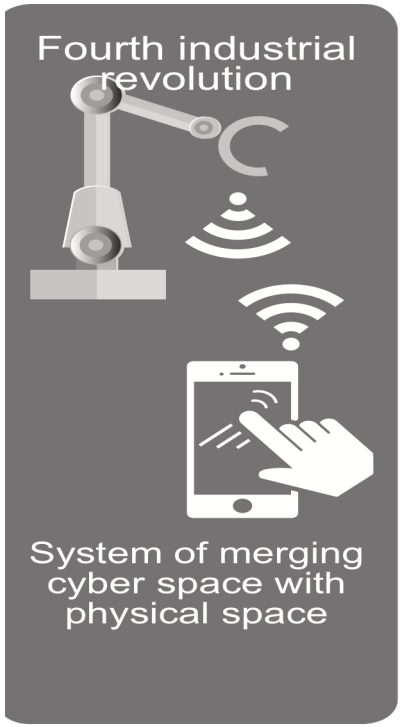
Layanan
(Tempat)
(Profesi)
(Waktu)
(Cara)
HEALTH NEED ASSESSMENTS (HNA)
1. Protecting the people
2. Guiding the doctors
3. Empowering the profesions
3. Layanan (Services)
HTA
INPUT
PROSES
OUPUT
IMPACT
Sistem Pendidikan (Nasional) Kedokteran
Kemendikbud Universitas/Fakultas
Disiplin Profesi (MKDKI)

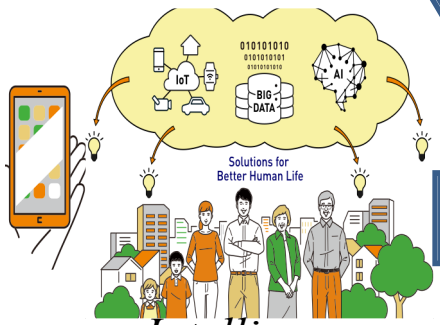
JAMINAN KESEHATAN
MUTU PELAYANAN
Keamanan Pasien
Efektifitas Tindakan
Sesuai Kebutuhan Pasien
Efisiensi Biaya
INA CBG
Penugasan Klinis
Kewenangan Klinis
Daftar Kewenangan Klinis di Rumah Sakit
PPK Tata Laksana Kasus
PPK Prosedur Tindakan
Clinical Pathways
TATA KELOLA RUMAH SAKIT
TATA KELOLA KLINIS
(CLINICAL GOVERNANCE)

DF2013

Today



Society 5.0



Intelligence

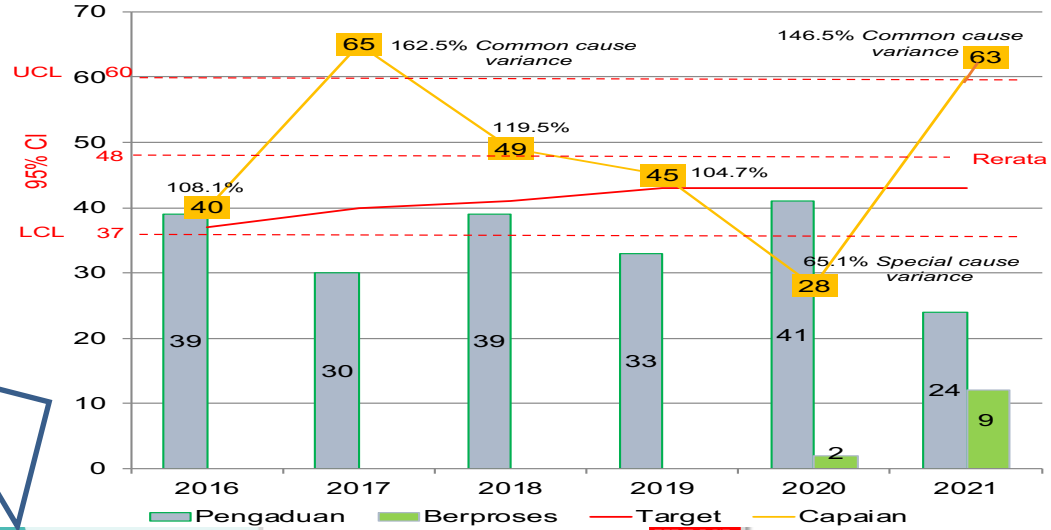
- *Big Data*
- *IoT*
- *AI*

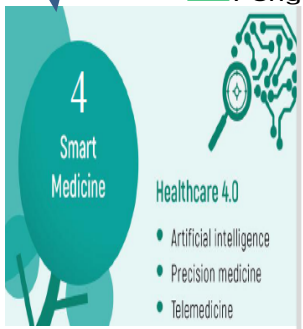
MONITORING KINERJA MKDKI 2016 s/d 17 NOVEMBER 2021

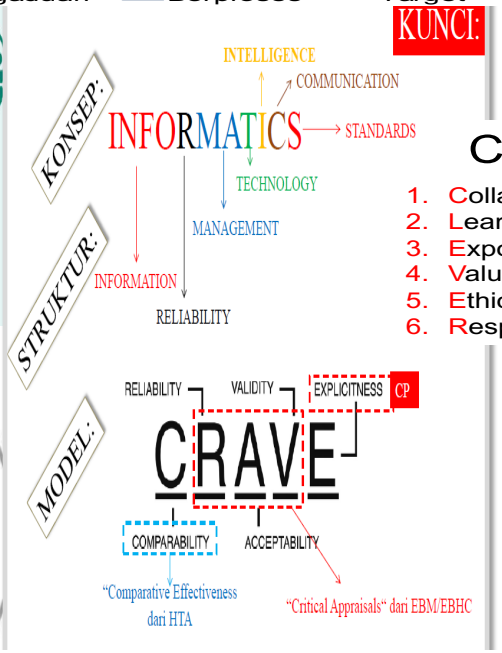
Statistics Process Control (SPC)

95% CI = Mean ± 2 SE

	2016	2017	2018	2019	2020	2021	Jumlah	%	Rerata
Target	37	40	41	43	43	43			
Capaian	40	65	49	45	28	63	290	96.35	48
%	108.1	162.5	119.5	104.7	65.1	146.5			117
Pengaduan	39	30	39	33	41	24	206		34
Berproses	0	0	0	0	2	9	11	3.65	







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