Health Informatics - WTF?!->FTW!!

Health vs. Healthcare

- Saving someone from not feeling well.
- Preventing someone fall sick: Longevity, 4P Medicine

-> Financing: How to finance something that never happened? Preventions means Out-of-Pocket?

Informatics vs. Data Science (and AI)

- Storage and Data Retrieval
- Generating new processes and forms of organizing

-> Context: How to get doctors understand digital and Digitals understand medicine?

TODAY'S
ANSWER IN
HYPERTENSION
MANAGEMENT...

- Medical Data: Everything that is recorded by a HCP (Origin: Hospital, Practice) -> XX Weeks
- Health Data: Every Biomarker (Origin: Home, Work, Gym, Car,...) -> XX Milliseconds

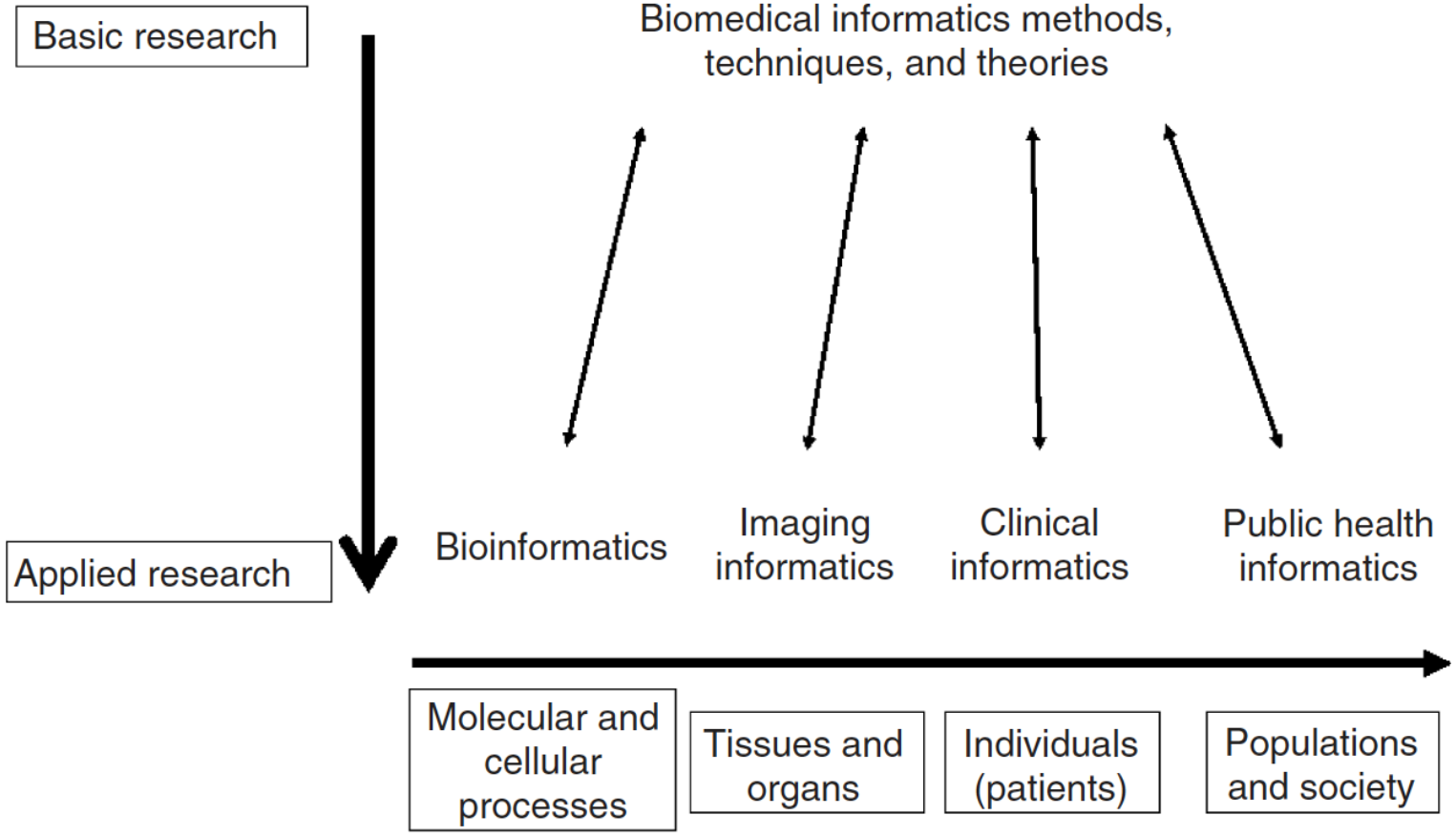
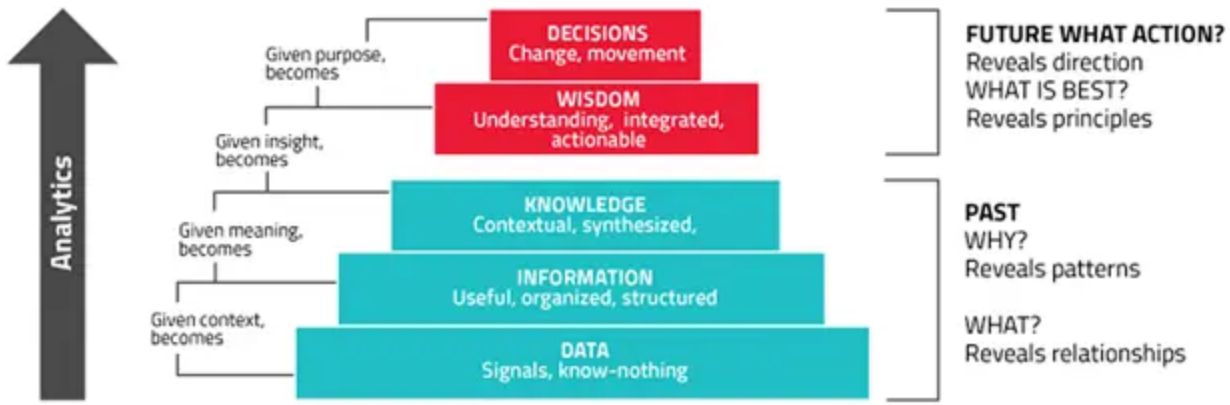


Figure 1.21. Breadth of the biomedical informatics field. The relationship between biomedical informatics as a core scientific discipline and its diverse array of application domains that span biological science, imaging, clinical practice, public health, and others not illustrated (see text).

-> Quality: HCP means trust and context. How to create context in lot and quality data for AI?


Analytics
DECISIONS
Change, movement
Given purpose, becomes
WISDOM
Understanding, integrated, actionable
Given insight, becomes
KNOWLEDGE
Contextual, synthesized,
Given meaning, becomes
INFORMATION
Useful, organized, structured
Given context, becomes
DATA
Signals, know-nothing
FUTURE WHAT ACTION?
Reveals direction
WHAT IS BEST?
Reveals principles
PAST
WHY?
Reveals patterns
WHAT?
Reveals relationships

Data, Information and Knowledge

- Data
- Information
- Knowledge

-> Action: Only when data is turned into actionable insights it is relevant

https://www.i-scoop.eu/big-data-action-value-context/dikw-model/

Interoperability and Data Quality

- How can we generate better understanding about the context of data acquisition entailing a relevant biomarker?
- Metadata to Measurements

-> Trust: Only when we get into a self-enforcing cycle to learning about health in a global distributed and real-time setting we can shape the future of healthcare