



University | School of
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THE
AWARDS
2020

UNIVERSITY
OF THE YEAR

Introduction to International Classification of Disease System

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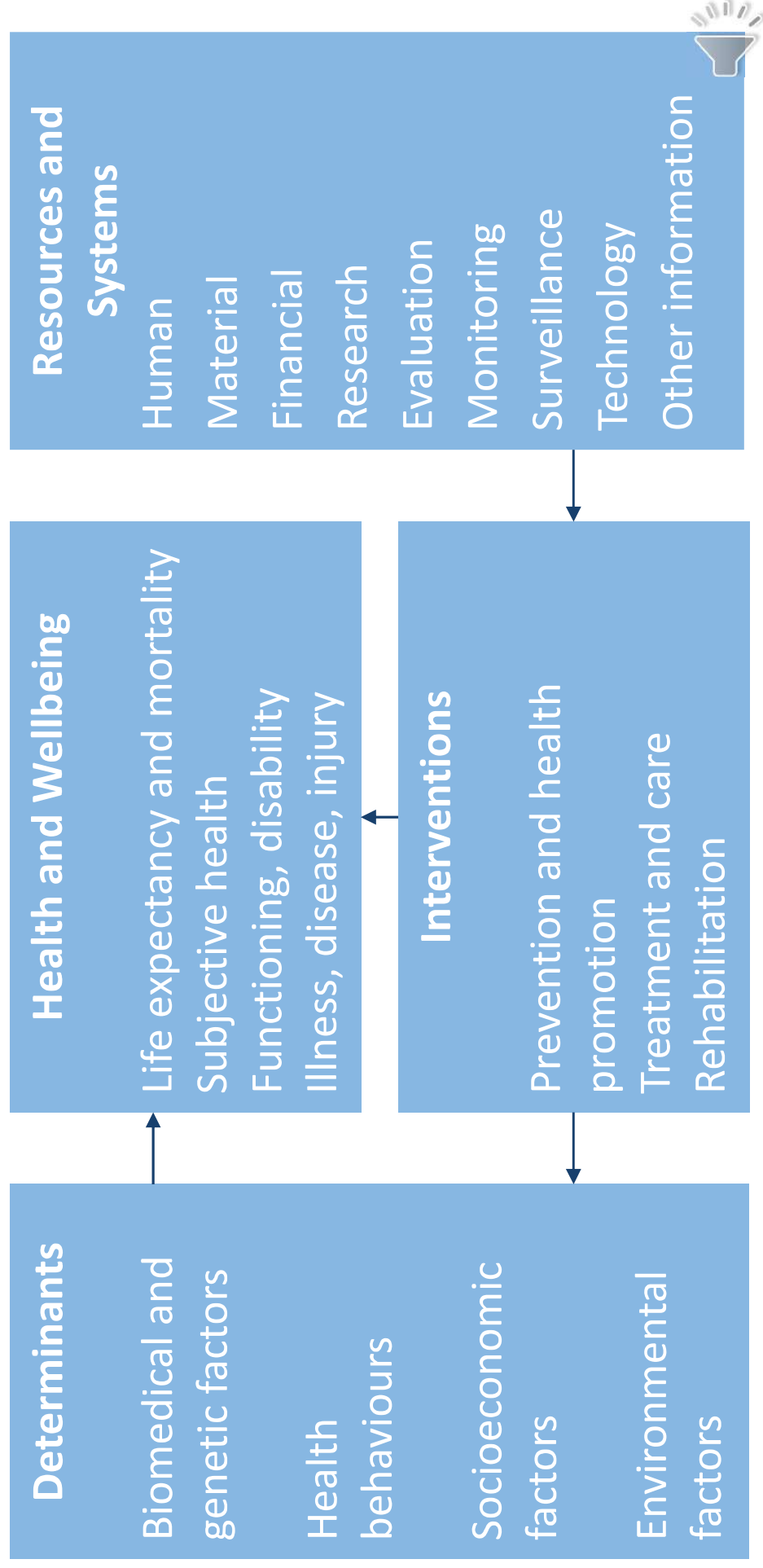
Lead of the Computing Technologies for Healthcare Theme

<https://www.gla.ac.uk/schools/computing/staff/fanideligianni>

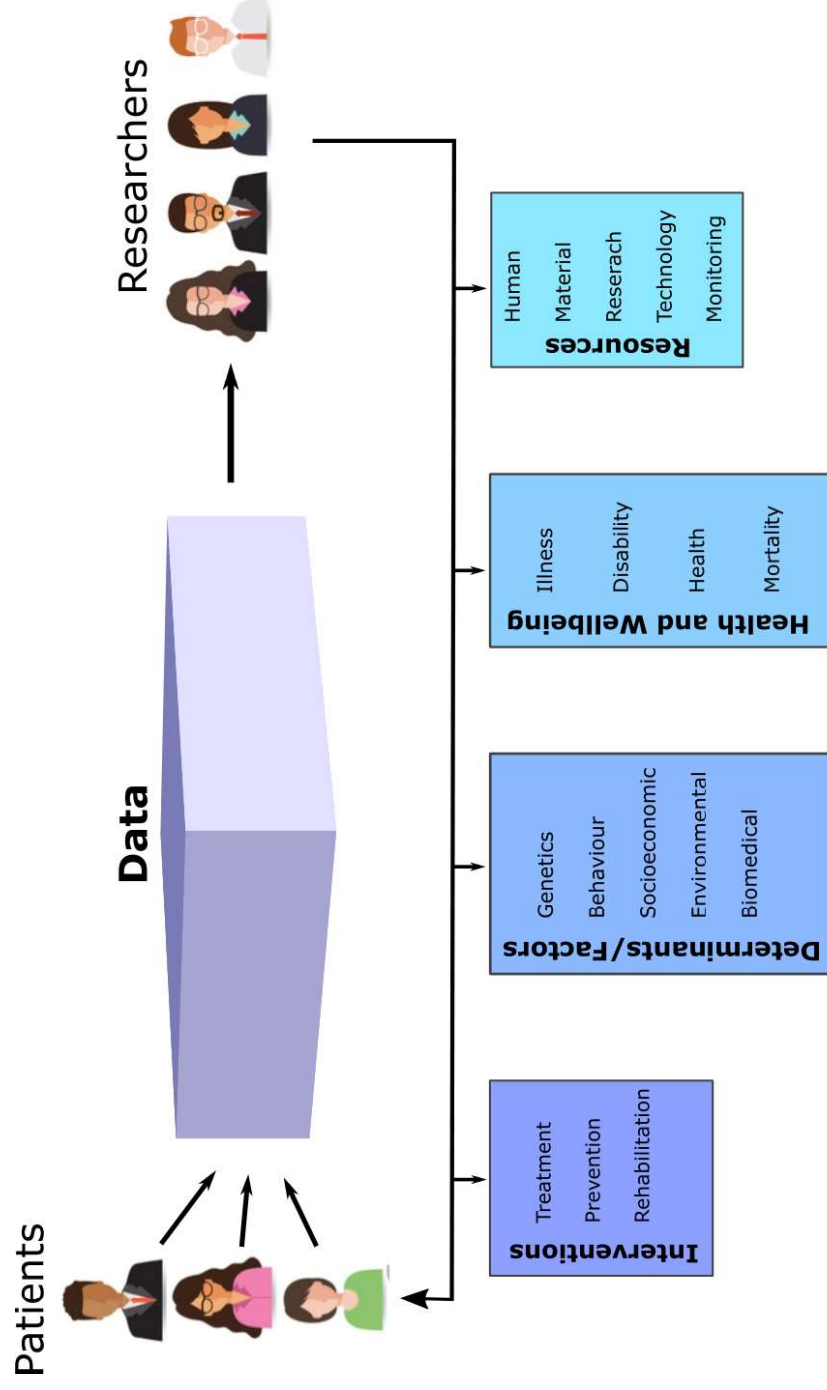
WORLD
CHANGING
GLASGOW



World Health Organisation (WHO)



WHO – Data – Machine Learning



Family of Classifications

- **International Statistical Classification of Diseases and Related Health Problems (ICD)**
- **International Classification of Functioning, Disability and Health (ICF)**
- **International Classification of Health Interventions (ICHI)**



Usage of ICD

- Systematic Storage, retrieval and analysis of the data
- Comparison of morbidity and mortality data between hospitals in a national and international level
- Comparison of morbidity and mortality data across time



Internationally Accepted

Develop reliable statistical systems:

- enable data derived from the classification to be of a standard suitable for international comparisons;
- are acceptable internationally
- are able to be used reliably; i.e. there is inter-rater reliability and test-retest reliability in coding using the classification, and
- are supported by instruction manuals, coding indexes, tabular lists, handbooks and training.

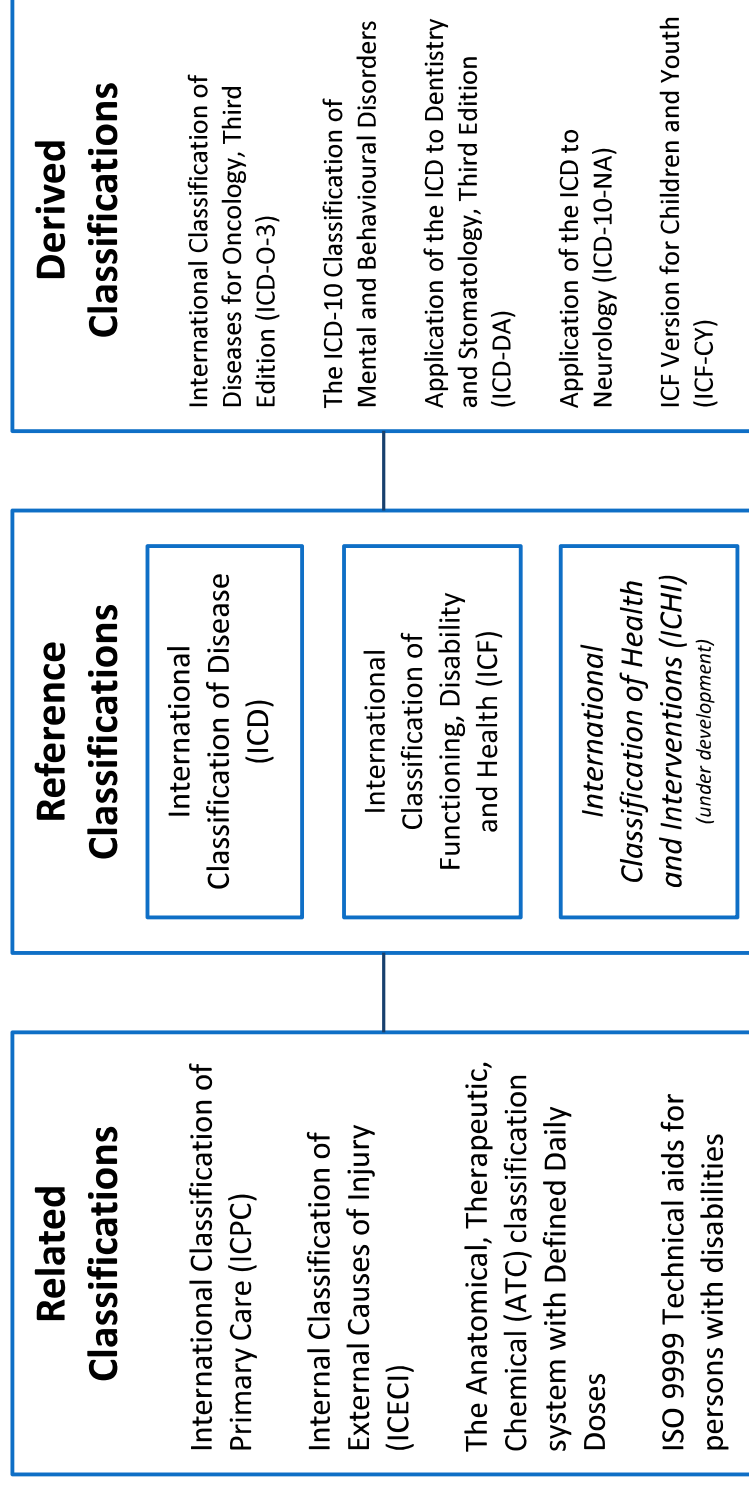


Applications of Classifications

Population Health/ Epidemiology	Clinical	Administration	Research
<ul style="list-style-type: none">• Births• Disability• Diseases• Risk factors	<ul style="list-style-type: none">• Decision Support• Integration of care	<ul style="list-style-type: none">• Scheduling• Resources• Billing• Policy Making	<ul style="list-style-type: none">• Clinical Research• Decision Support Systems• Disease Pathways



WHO-FIC Schematic



Summary

- ICD is one of the oldest and most important classification in medicine
- ICD enables the optimal application of computer technology in the processing and retrieval of clinical information
- It is recognized internationally, which enables sound statistical comparison of data from different regions and different times.



References

- World Health Organisation - Classifications: <https://www.who.int/standards/classifications>
- National Center for Health Statistics – Classification of Diseases, Functioning, and Disability <http://www.cdc.gov/nchs/icd.htm>
- Britanica – International Classification of Diseases <https://www.britannica.com/topic/International-Classification-of-Diseases>