

Sanità di Comunità, Fascicolo Sanitario Elettronico e Telemedicina

## **SCUOLA ACHILLE ARDIGO'**

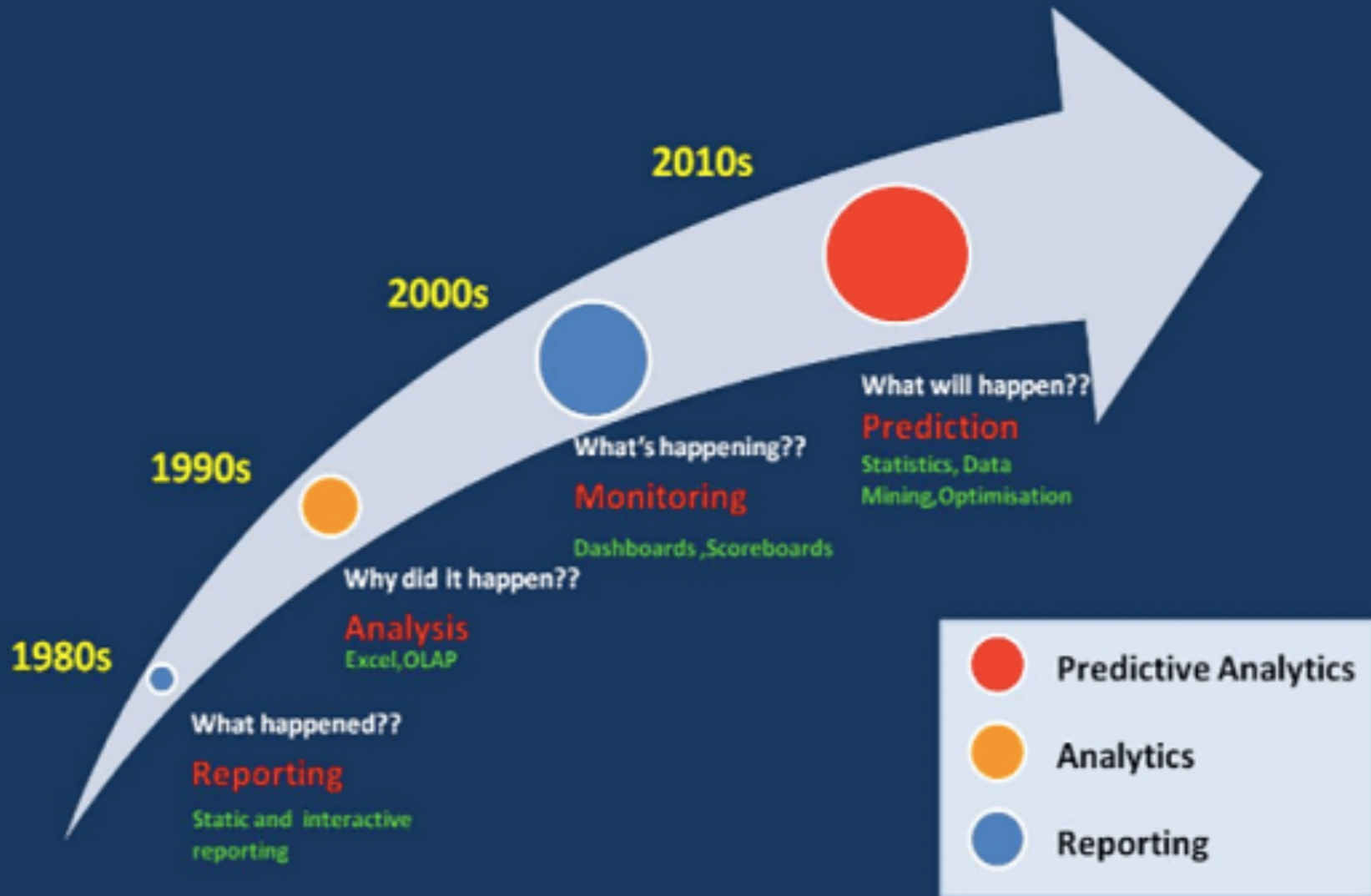
Bologna, 31.05.2022

# ***La quantificazione dei determinanti sociali di salute. Sogno o distopia?***

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# Evolution of Predictive Analytics

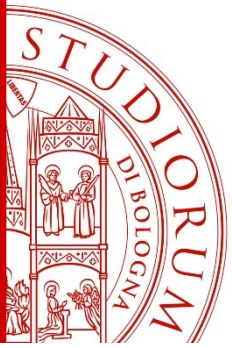


# *SAT 'Adversity Score' Is Abandoned in Wake of Criticism*

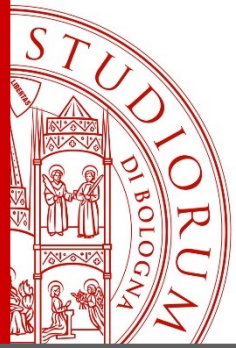
 Give this article







The adversity score was made up of the average of two ratings between 1 and 100 — one for the student's school environment and the other for the student's neighborhood environment — that indicate the obstacles a student might have overcome, like crime and poverty. The school and neighborhood scores will still be provided to admissions officers, along with other socioeconomic information.

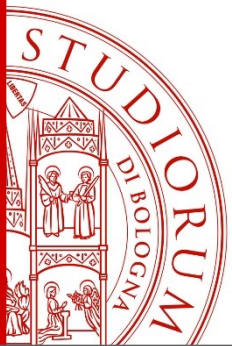


# Datafication of health

- Polysocial risk score
- Behavior-Based Insurance

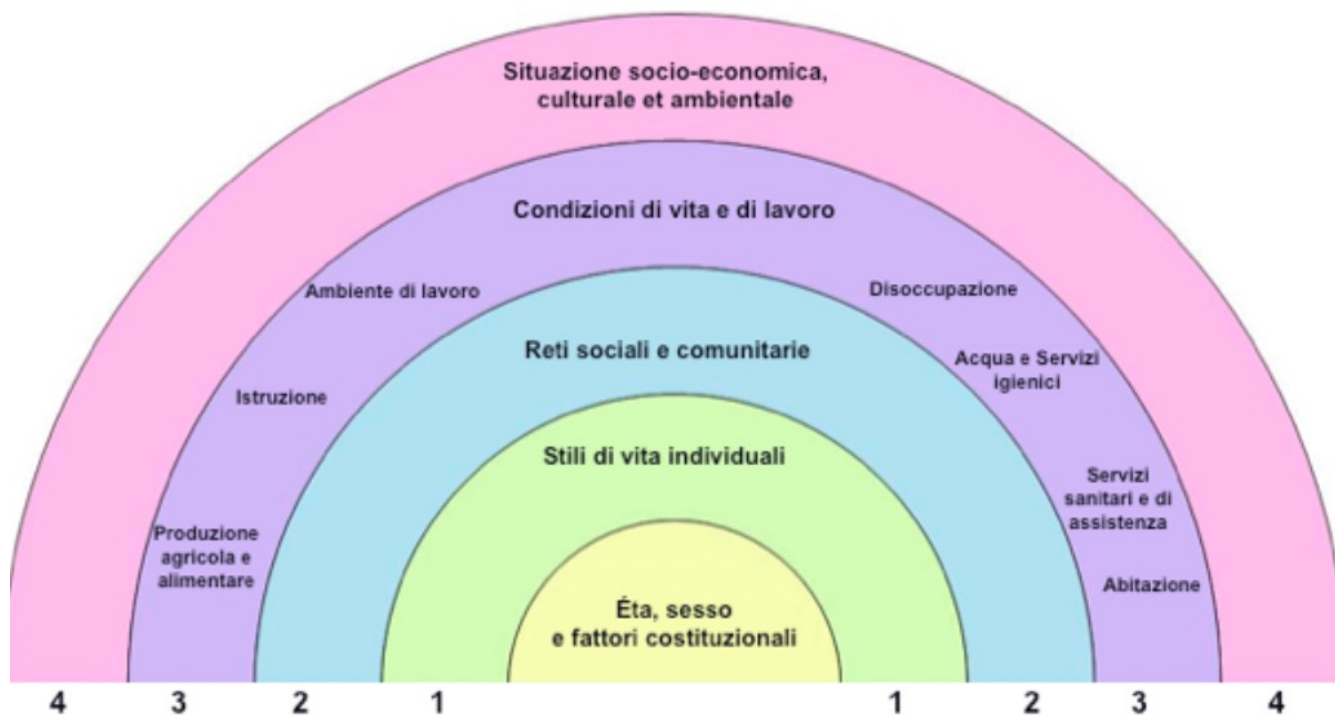
La salute è condizionata da:

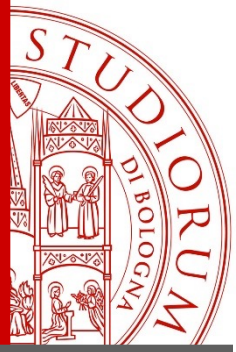
- Genetica
- Stili di vita (diseguaglianza)
- Ambiente (diseguaglianza)
- Servizi sanitari: accesso, qualità (diseguaglianza)



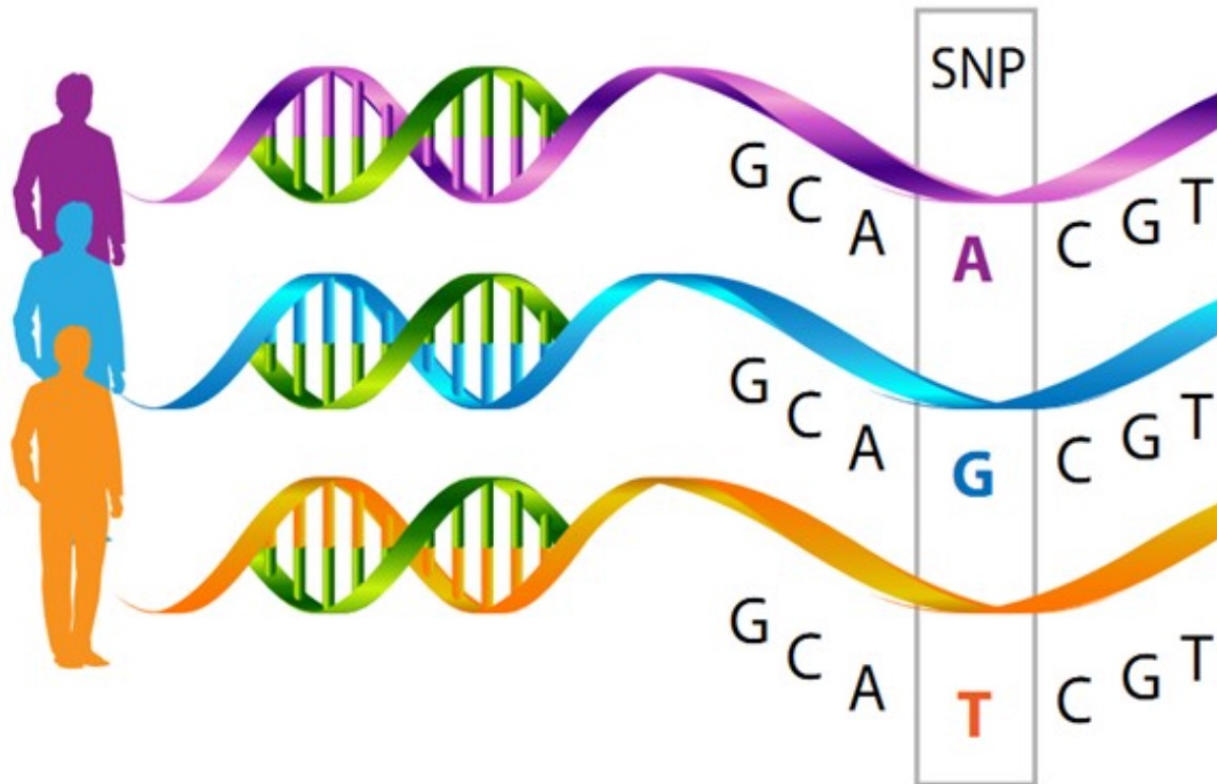
# Polysocial score

## Determinanti sociali della salute





# Polygenic Risk Score

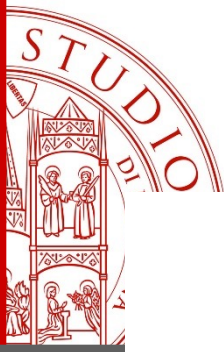




# Polygenetic risk score

- È la misura del rischio genetico di sviluppare una particolare condizione (patologica).
- Un metodo di previsione genomica basata su marcatori genetici e varianti.

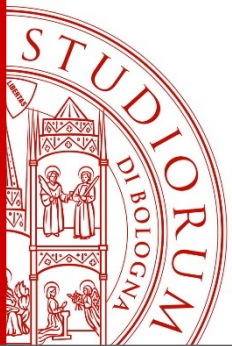




# Health Score

## Determinanti sociali della salute





# Inoltre Health profiling

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- Tracce su social network
- Stili di consumo
- Self tracking
- .....

# INSURANCE PERSONALIZATION STRATEGIES

Personalized insurance bundles



Health



Car



Property

Personalized communications



Tracking data



Providing recommendations

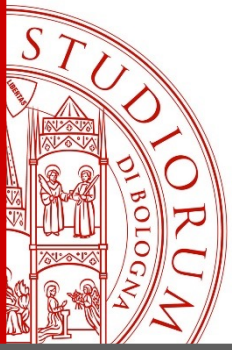
Personalized quotes



Tracking data



Adjusting quotes



# InsurTech

- The big switch that many health insurers have made is to link insurance premiums and access to specific policies to the constant digital monitoring of physical activity.
- In theory, through self-tracking, the premium costs could fluctuate every day, in connection with our physical states, instead of once a year.



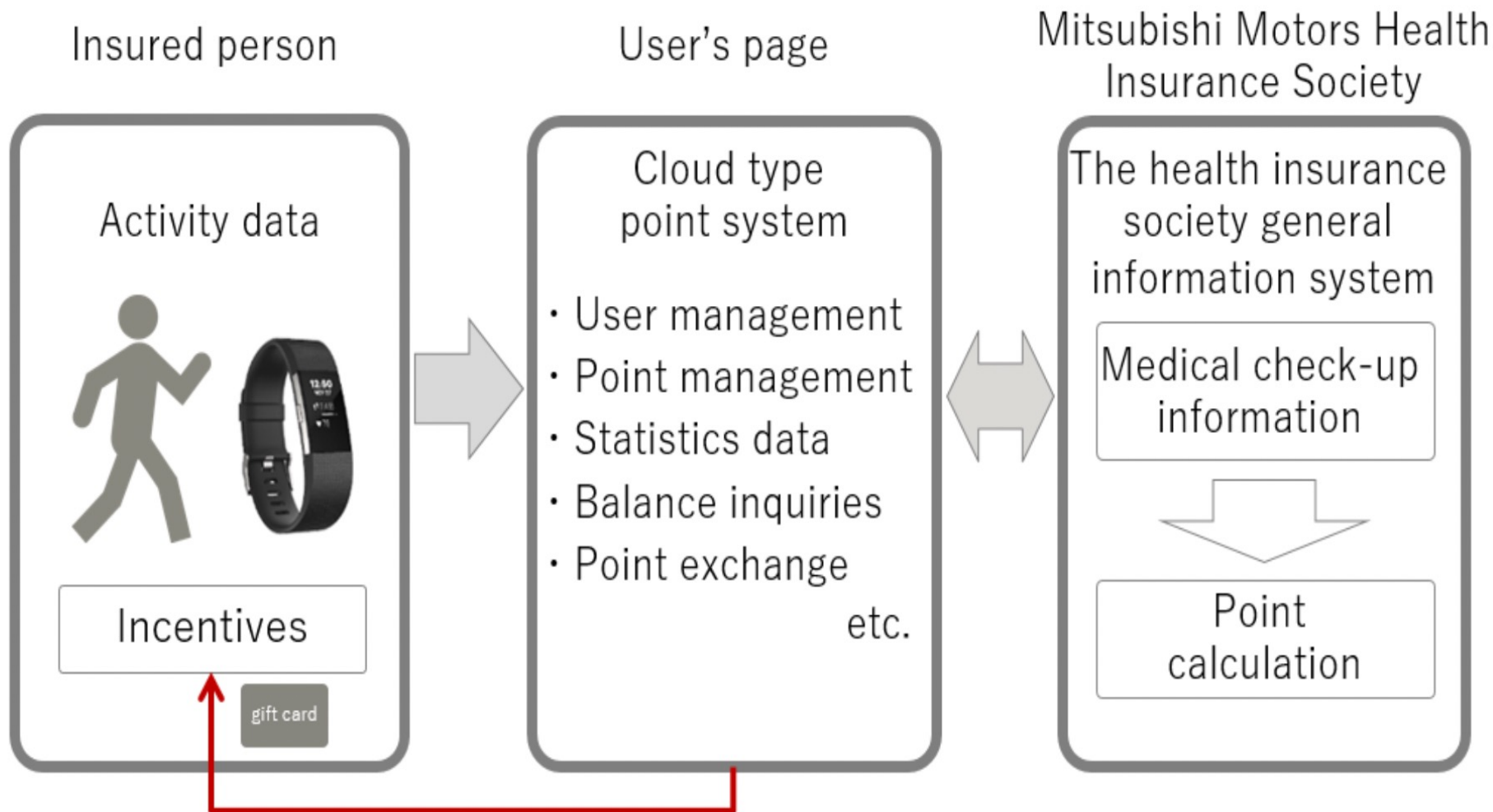
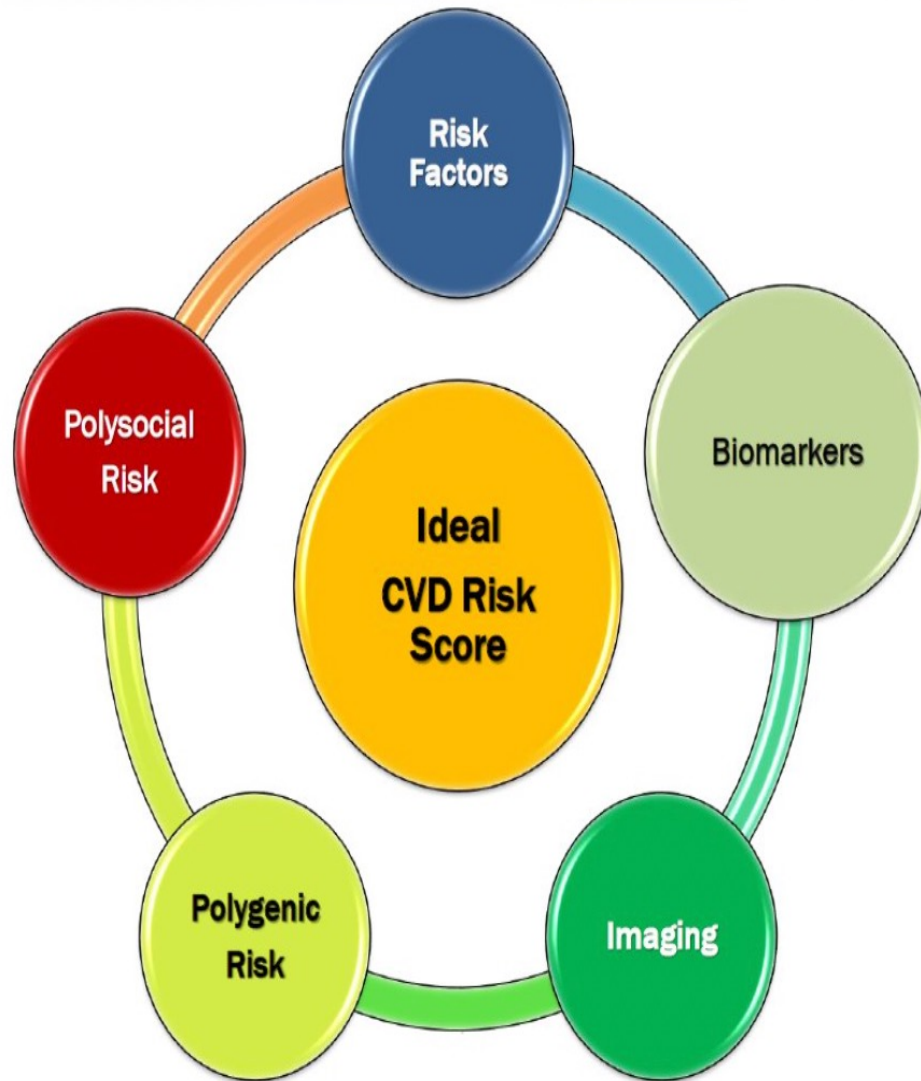


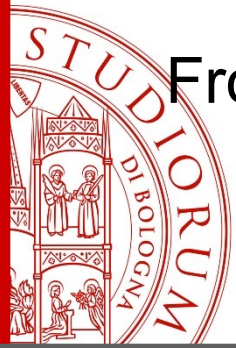
Image of service to manage health points



# Reimagining The Future Comprehensive CVD Risk Assessment



1.607 x 903

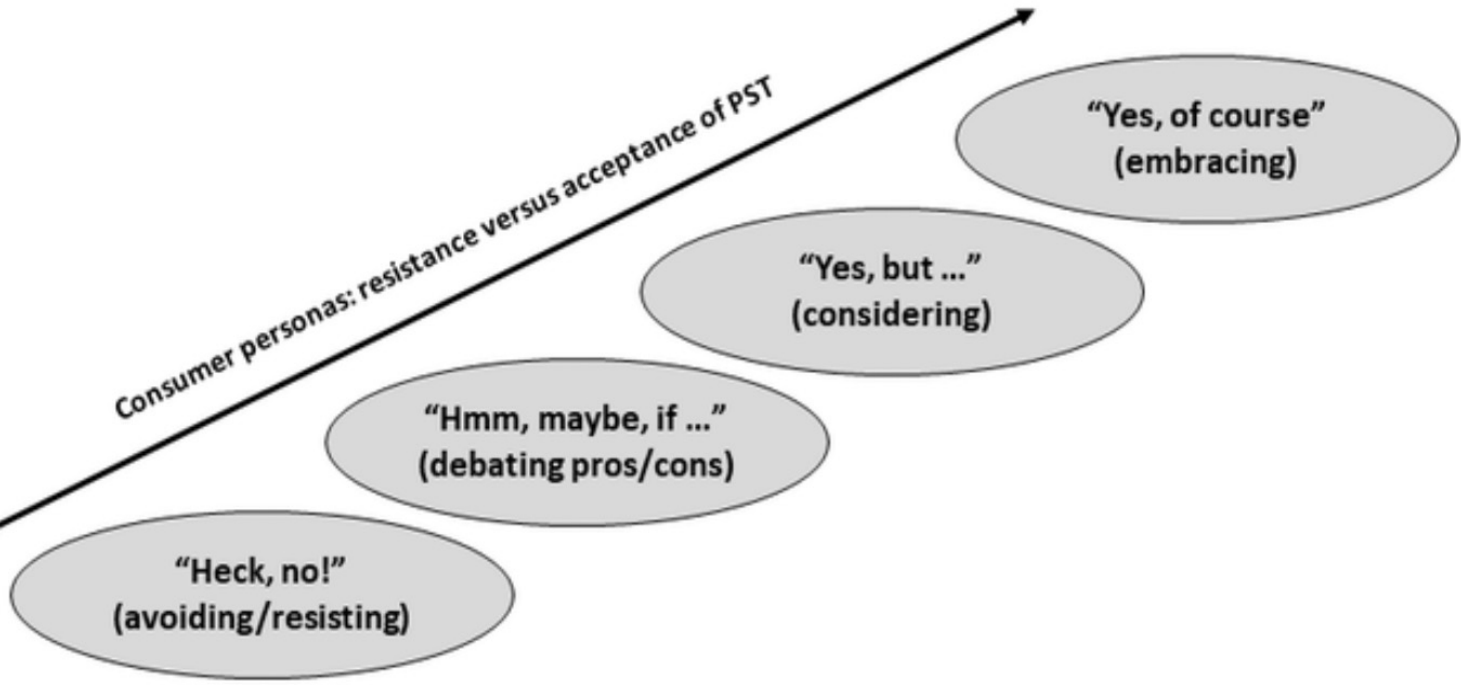


# From socialized actuarialism to privatized actuarialism

- Until now, insurance has been based on the concept of **socialized actuarialism**.
- **privatized actuarialism**: a more refined approach based on "a technology of governance that removes the key concept of regulating individuals through collectivistic risk management, and places the responsibility for risk management back on the individual" (O'Malley, 1996: 197).
- Thus, whereas traditional insurance was based on prediction (i.e., aggregate predictions at the macro level), the new behavior-based insurance is based on forecasting (i.e., attention to the individual's future at the micro-level).

Persuaded self-tracking

Consumer personas: resistance versus acceptance of PST



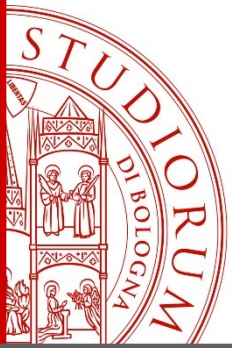
**Individual level**

|                     |                      |                      |                               |
|---------------------|----------------------|----------------------|-------------------------------|
| Technology adoption | Non-user             |                      | User                          |
| Personal motivation | Amotivation          | Extrinsic motivation | Intrinsic motivation          |
| Perceived value     | Value destruction    | Financial (self)     | Functional (self and society) |
| Perceived fairness  | Unfairness to system | Unfairness to self   | Indifferent                   |
| Privacy concerns    | Strong fears         | Some concerns        | Conscious of risks            |

**Firm level**

|                     |                        |  |                    |
|---------------------|------------------------|--|--------------------|
| PST purpose         | Distrust               | ← Communication and information →          | Trust              |
| PST structure       | Compulsory             | ← Rules and regulations of participation → | Voluntary          |
| PST data management | Not secure/transparent | ← Assurance and transparency →             | Secure/transparent |





# Social justice

- The encouragement of certain behaviors opens an extended reflection on the chances of empowerment of the individual.
- In the sociological field of health, it is well known how social context affects a person's health and that certain social factors such as income make adherence to healthy lifestyles relatively easy for some people, while for others practically impossible.



# 1848, Rudolf Virchow

La Medicina è una scienza sociale e la  
Politica altro non è che la Medicina su  
larga scala.

Rudolf Virchow