

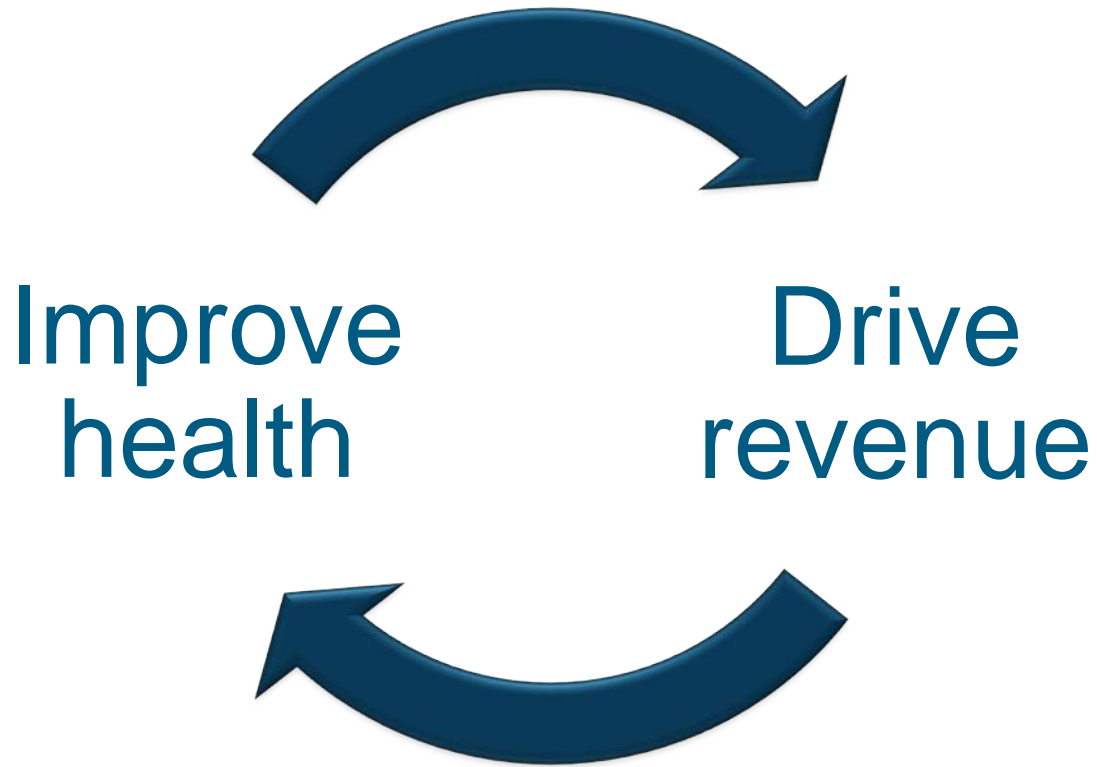


Quality improvement in health systems through effective triage

Dr Charles Young BSc, MBBS, MRCP
Senior Medical Officer
Capita plc.



Capita Health



4109

**Capita team
working in health**

1260

**Capita employed
clinicians**

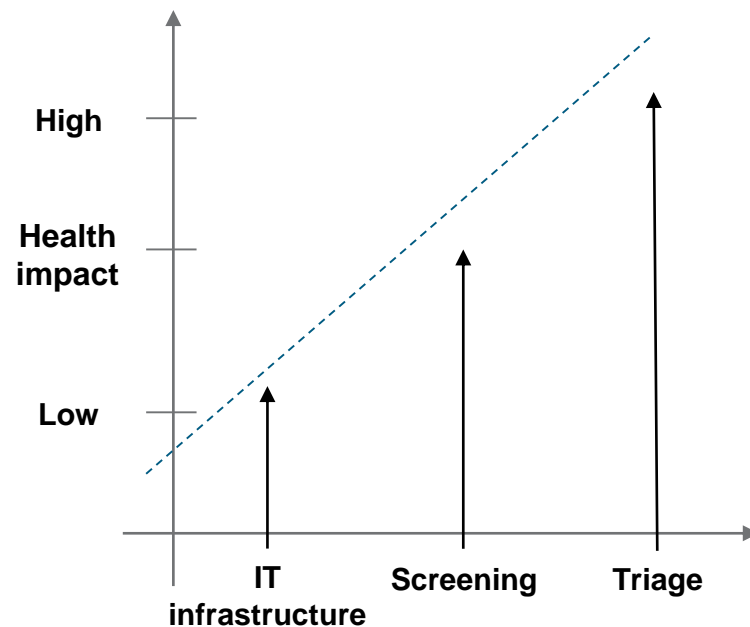
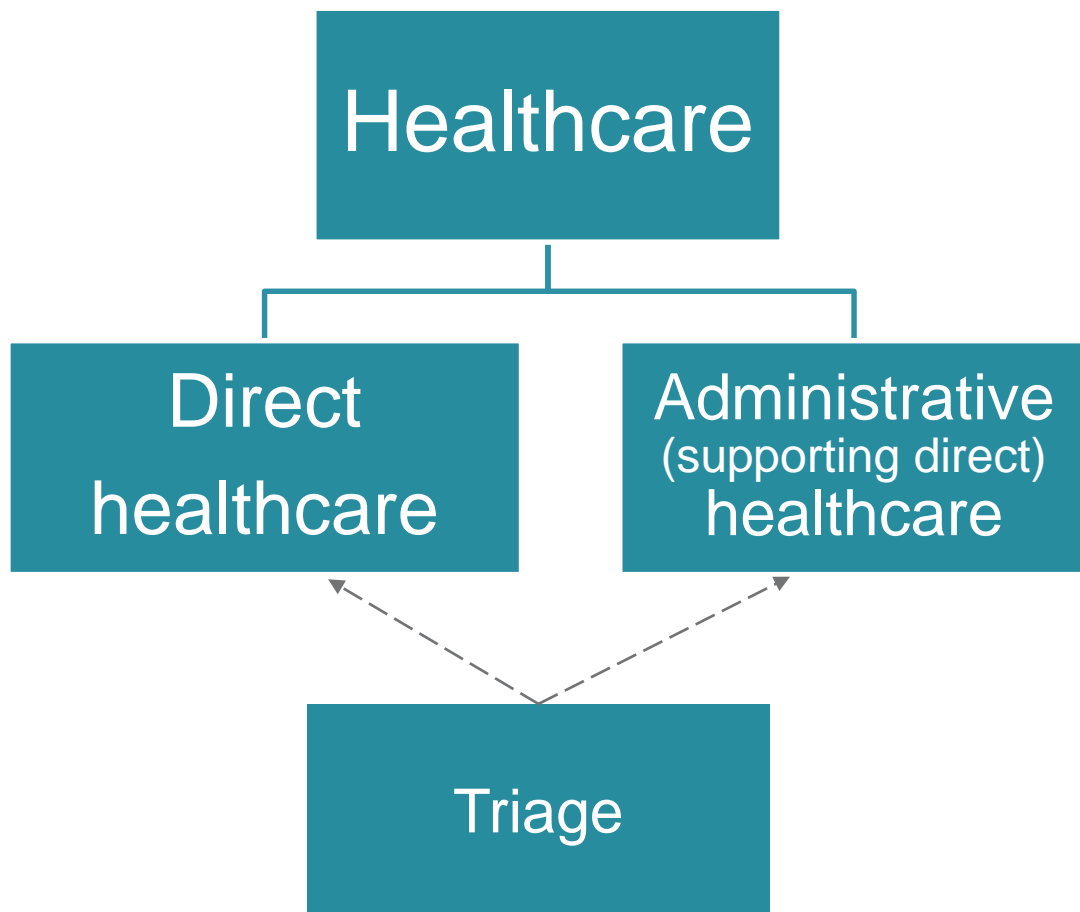


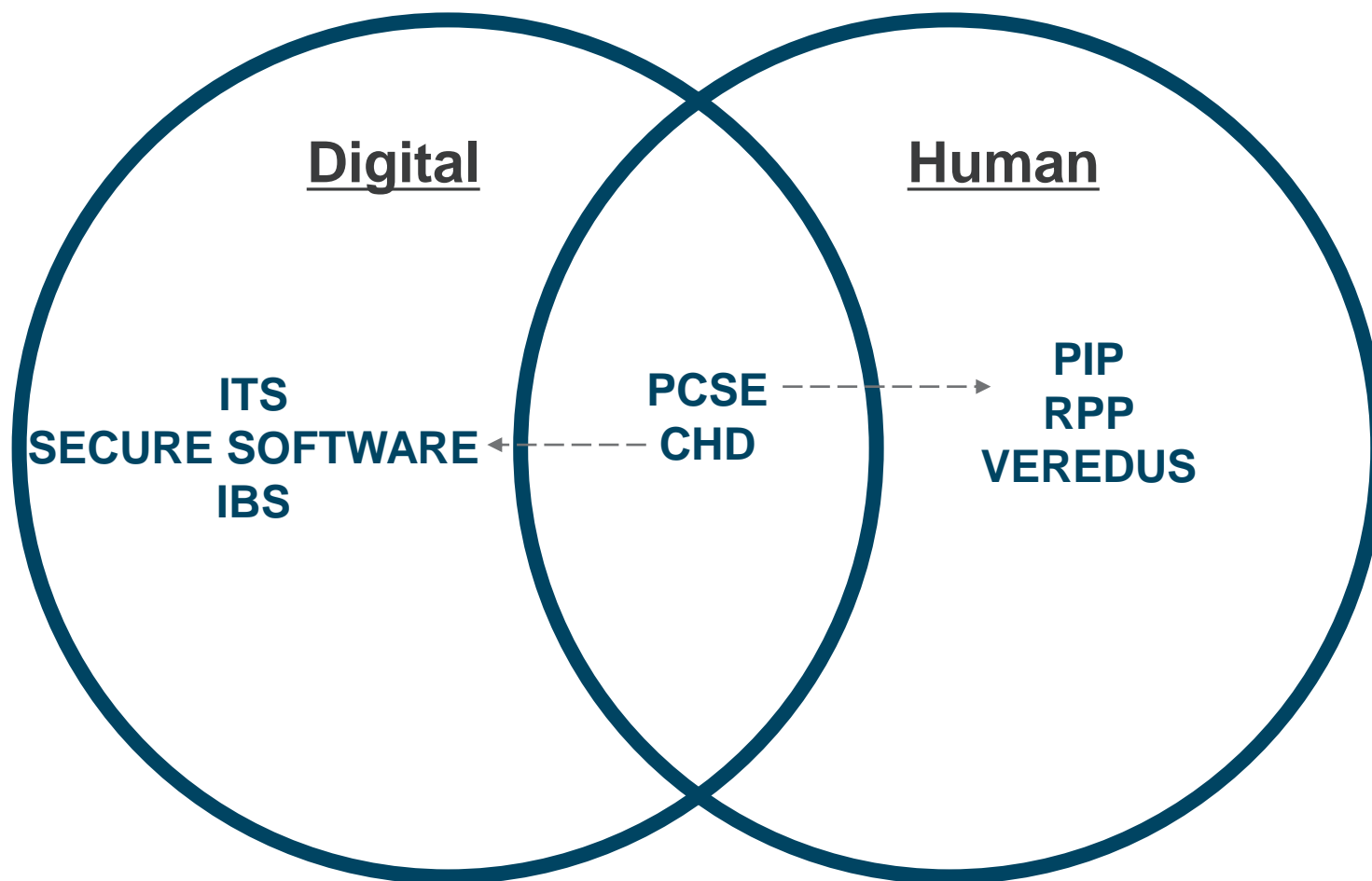
***‘Administrative
healthcare’***



CAPITA

Healthcare Decisions





Healthcare quality improvement:

TEN KEY FACTORS



**Improving quality is about
making health care safe,
effective, patient-centred,
timely, efficient and equitable.**





Why is triage important in quality?

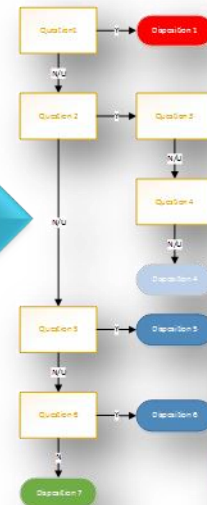
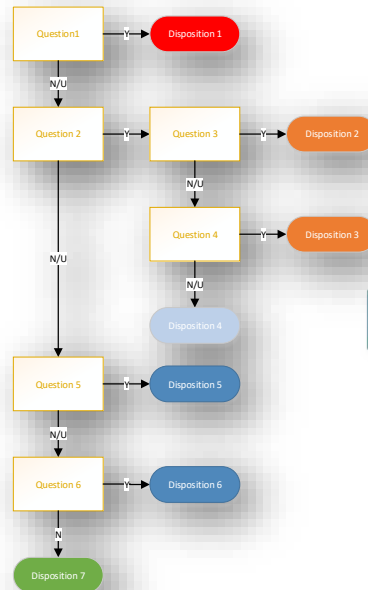
Triage is a driver for clinical governance ~ **safe**

Triage has a large-scale impact on patient health ~ **effective**

Triage ensures right patient, right place, right time ~ **patient-centred / timely**

Triage manages services ~ **efficient / equitable**

Improving quality is about making health care
safe, effective, patient-centred, timely, efficient
and equitable.





CAPITA

- **Active**
- **Focused on the person**
- **Dynamic**






~ 1790

- **Active**
- **Focused on the person**
- **Dynamic**

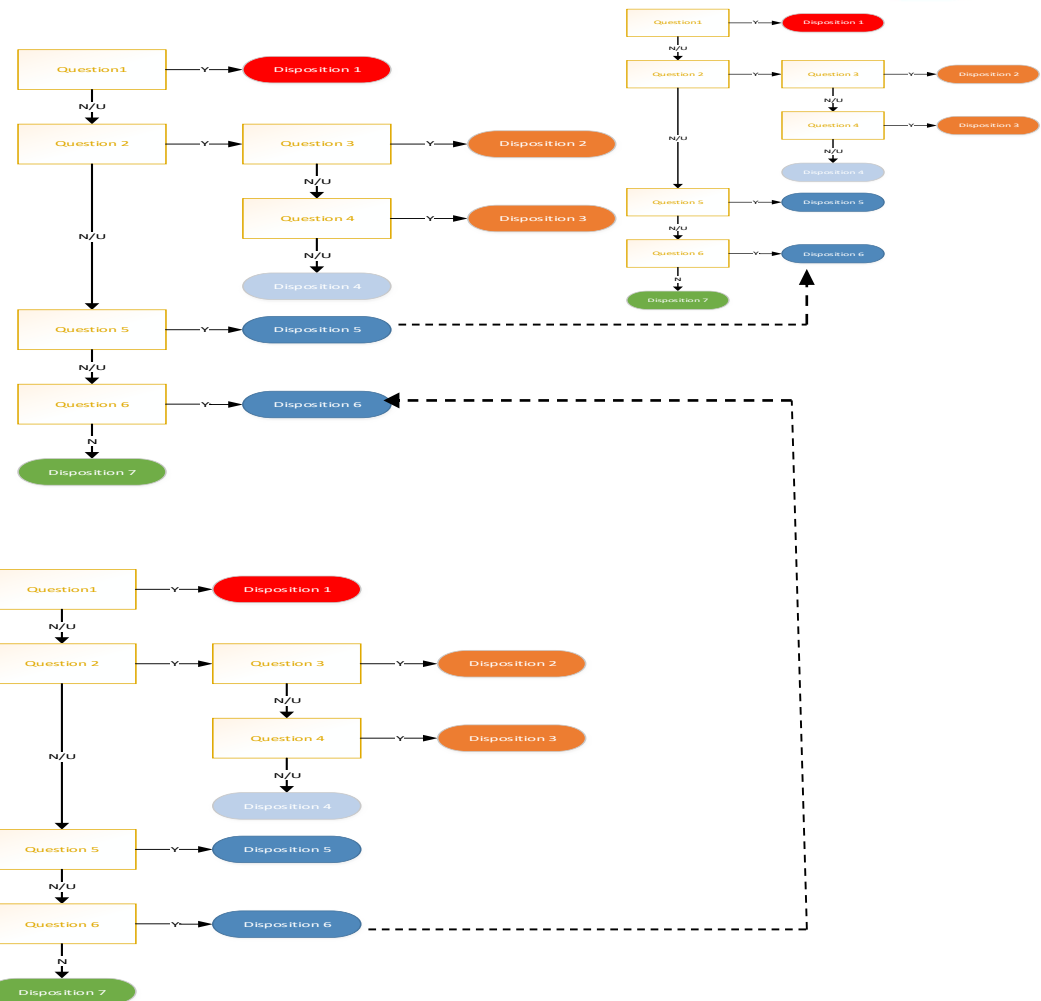
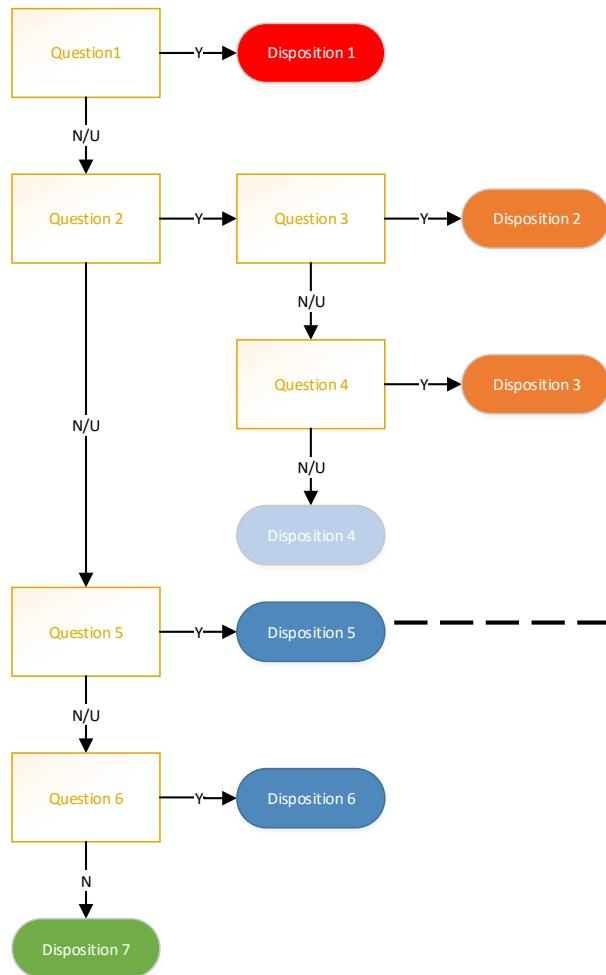


2018

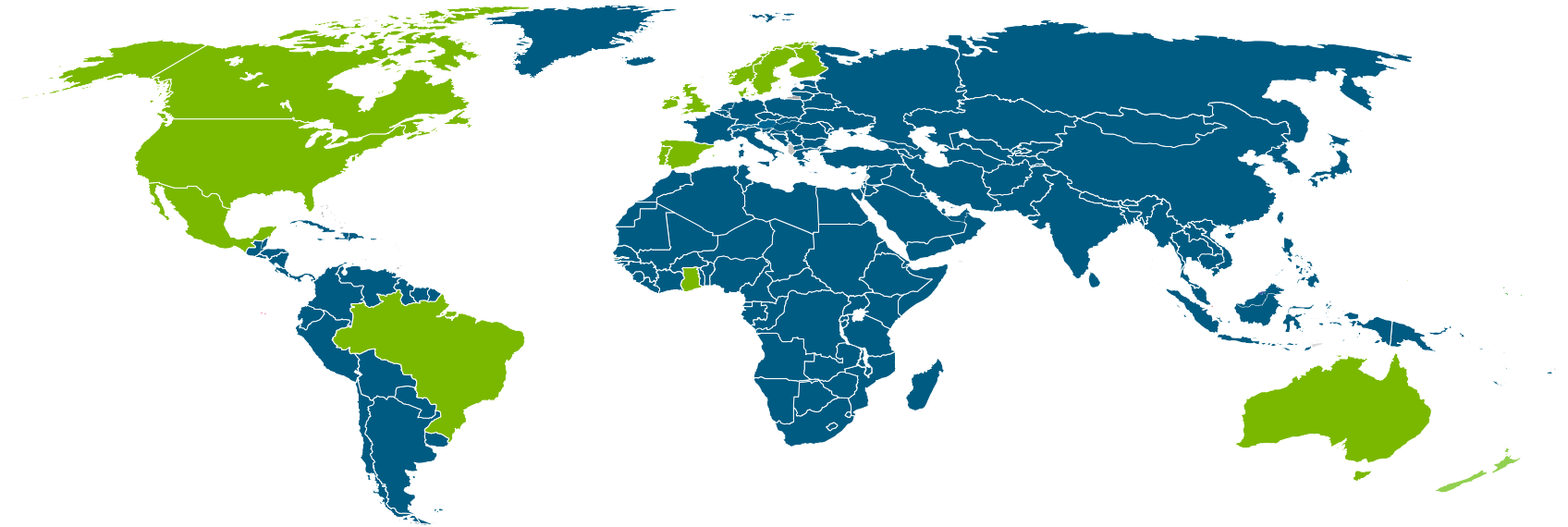
- **Evidence based** 
- **Local protocol** 
- **Costs** 



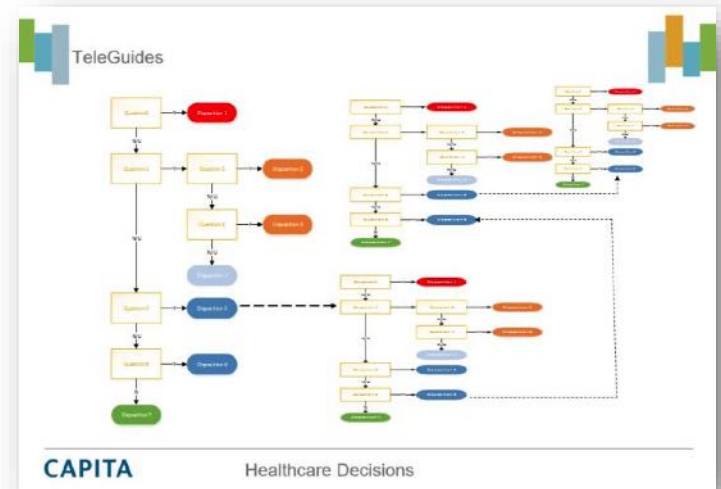
2018



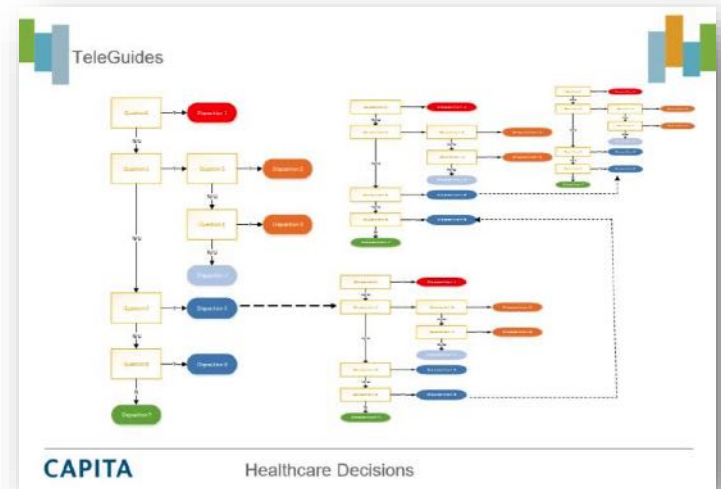
- Over 100 million safe, efficient clinical interactions
- 320 million people protected globally using TeleGuides and WebGuides every day

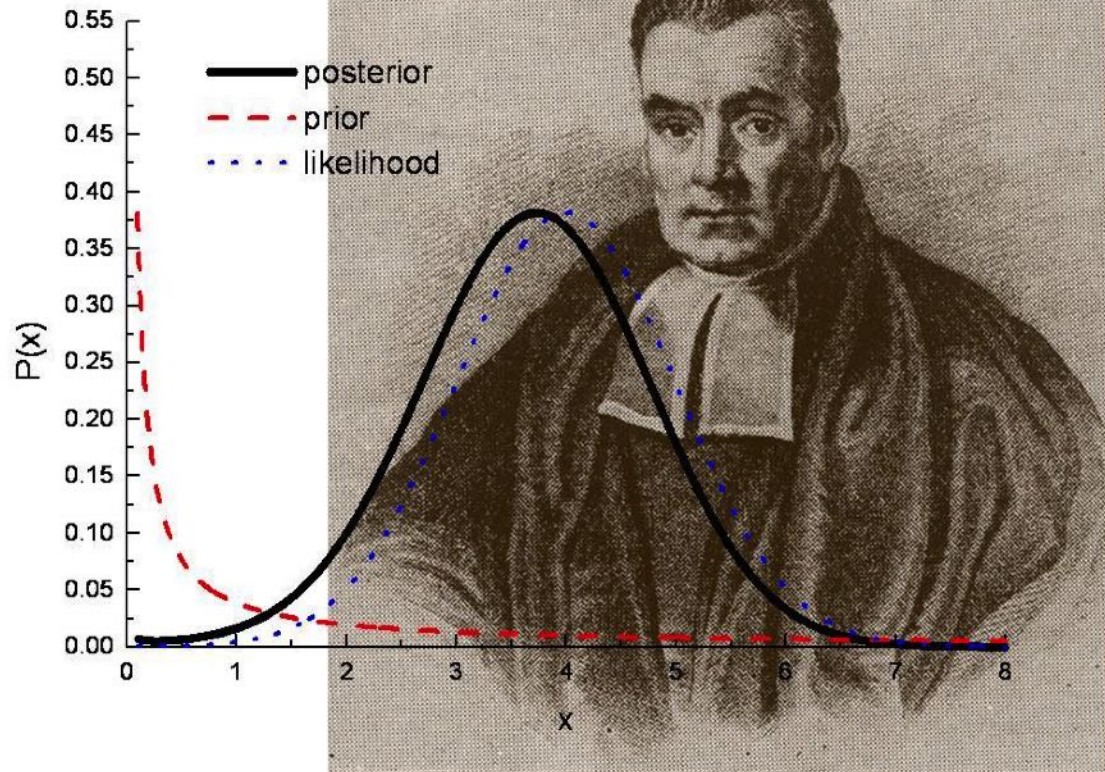


- **Evidence based**
- **Local protocol**
- **Costs**



- **Active**
- **Person focused**
- **Dynamic**





The future:
Bayes
non-linear
machine learning
clinician and patient centric

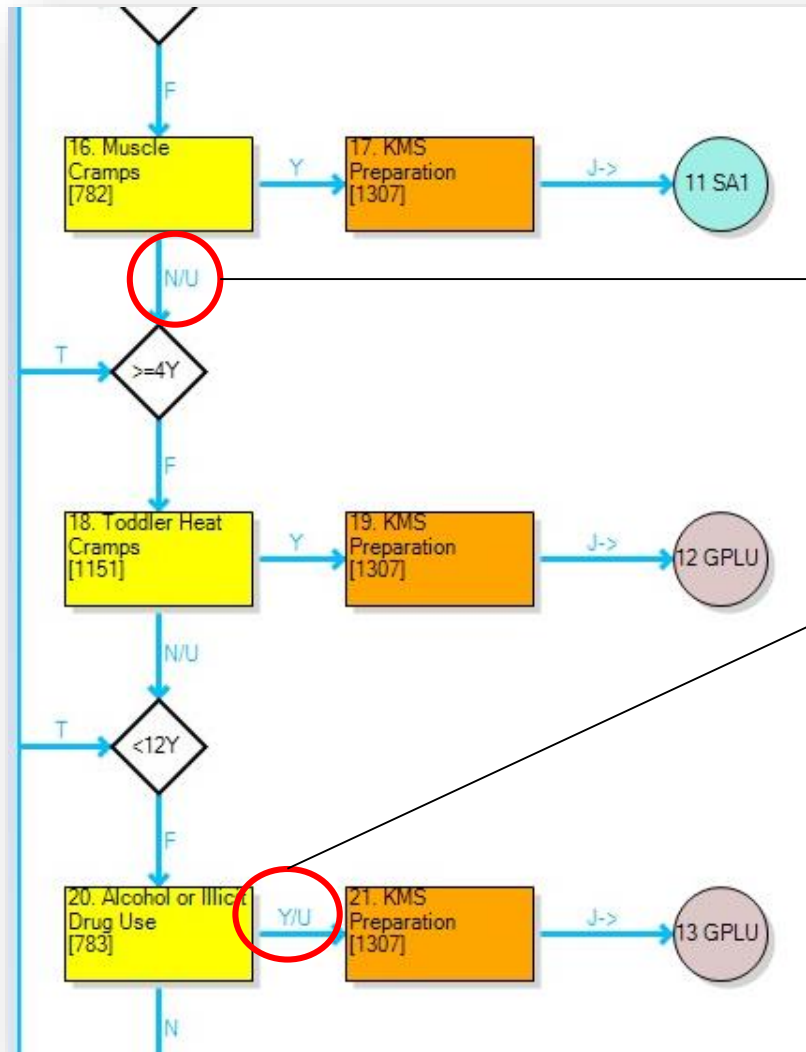


Bayesian theory / networks



- **Boolean** – Information that is either true or false is known as Boolean logic
- **Bayesian** – Bayesian theory is a branch of mathematical theory that allows uncertainty modelling
- **Algorithm** – process or set of rules to be followed in calculations or problem solving operations

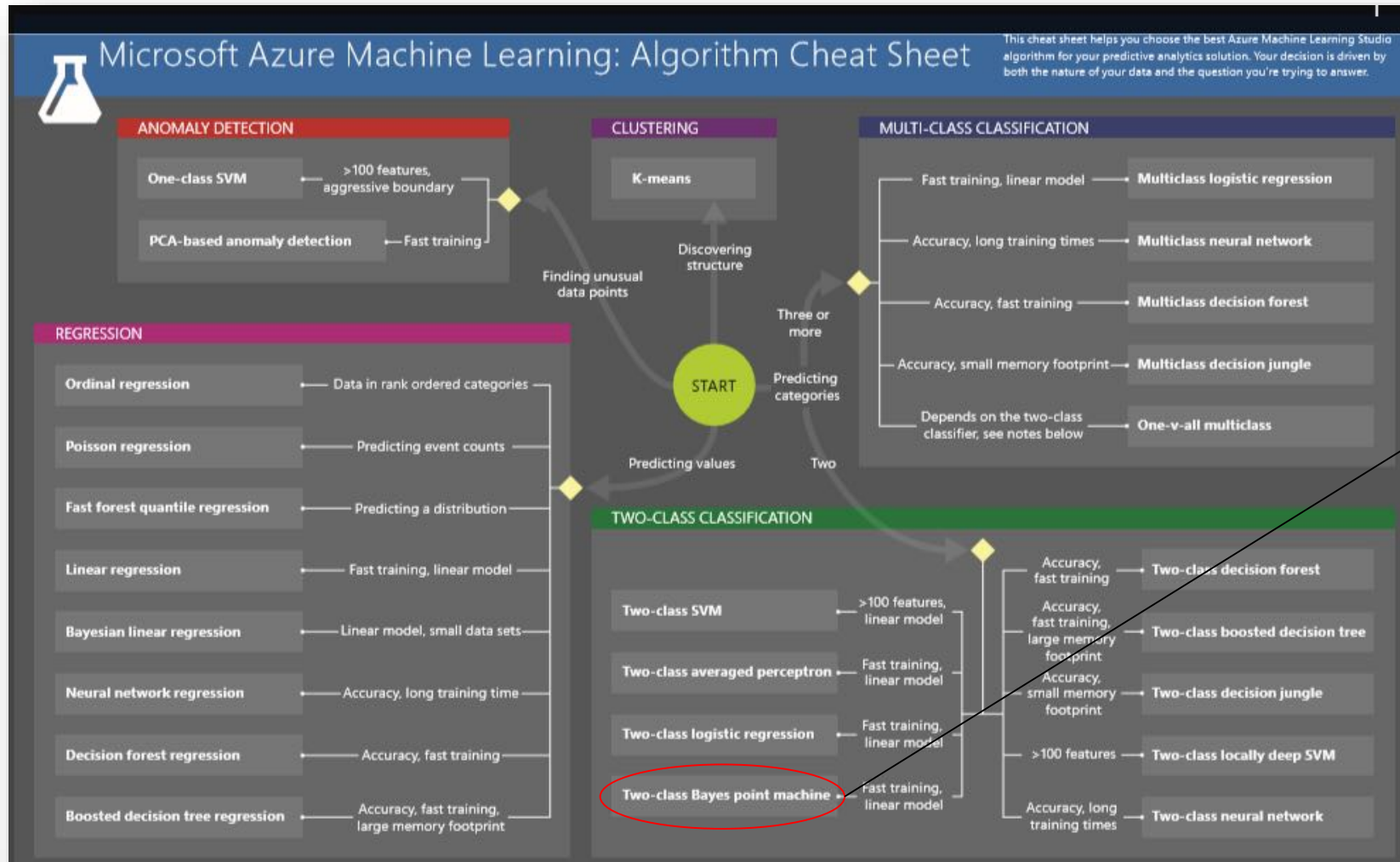
TeleGuides and uncertainty



'N/U' = No / Unsure

'Y/U' = Yes / Unsure

Triage, Machine Learning, and Bayes



Two-class Bayes point machine learning

Patient-centricity



"My leg hurts"

When, where, how?

Foot symptoms?

MSK symptoms?

When, where, how?

Chest symptoms?

Neuro symptoms?

ABC symptoms?



Foot symptoms?

Chest symptoms?

Neuro symptoms?

MSK symptoms?

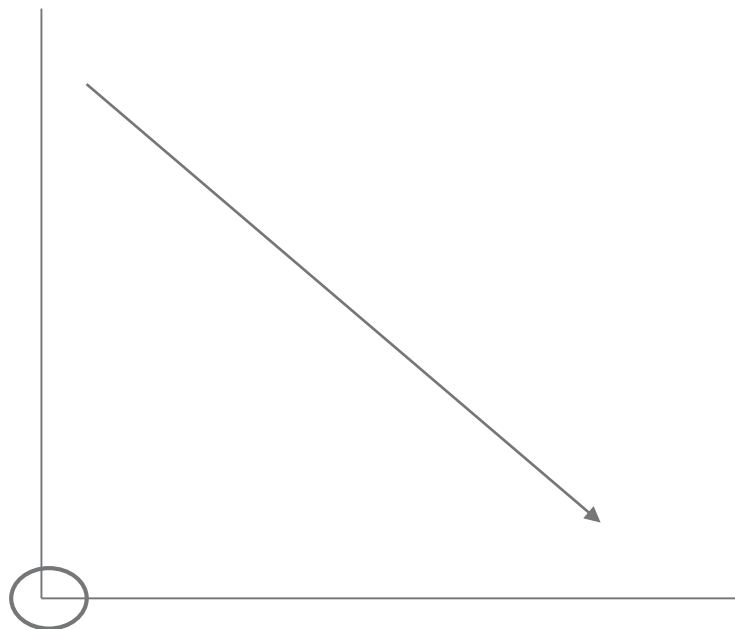
When, where, how?

ABC symptoms?

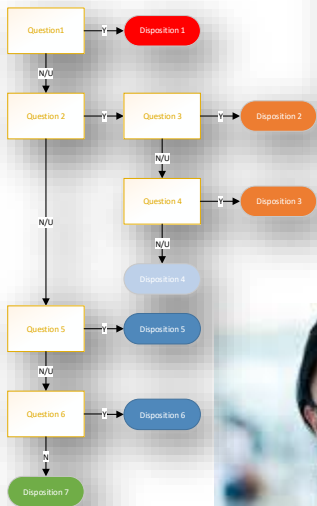
Call handler-centricity



Information
support



Experience /
knowledge



- **Active**
- **Focused on the person**
- **Dynamic**



- **Evidence based**
- **Local protocol**
- **Costs**



Quality improvement in health systems



Improving quality is about making health care safe, effective, patient-centred, timely, efficient and equitable.

