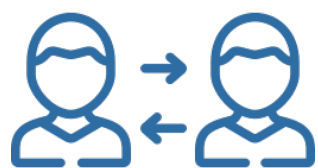


What you need to know to get started in VALUE

What is Interactive Process Mining (IPM)?

IPM



Interactive Process Mining is a paradigm that...

involves experts in the middle of the learning process,

must offer a clear care process understanding in a better way compared to other data mining techniques that are seen as black box systems,

allows physicians to correct protocols in each iteration (**datarodeo**), preventing critical errors due to automatic learning errors and extracting evidence from the results presented by intelligent algorithms.

What is an Interactive Process Mining Data rodeo?

Data rodeo



An Interactive Process Mining Data rodeo is...

a highly coupled multidisciplinary interactive data analysis, carried out in a session between health experts and a data miner,

aimed at building **interactive process indicators** that allow understanding, quantifying and qualifying processes,

and their changes in an objective, comprehensive and exploratory way.

What is an Interactive Process Indicator (IPI)?

IPI



An IPI provides ...

a way to understand, measure, and optimize the process and allows the expert to navigate behind the model discovering the features and specificities of the process, the analysis of individual and personalized aspects of the processes **going to the general to the individual**,

not only numbers but also **advanced views in the form of enhanced processes** that provide a human-understandable view that supports the expert in the better perception of the processes for an advanced assessment.

An IPI can address all three important success factors: **time, cost and quality of care**, in different areas of hospitals.

What is PMAApp?

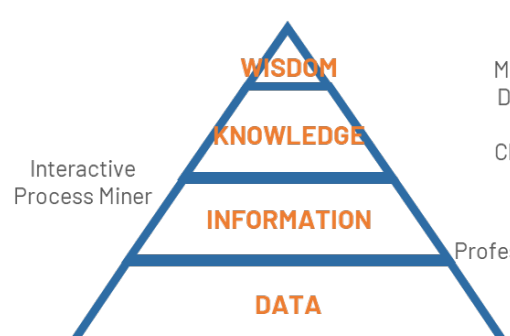
PMAApp



PMAApp is...

a tool for generating custom **PM dashboards** for visualization of process data coming from the health organizations and producing advanced processes views provided by the **IPIs** to empower the analysis made by the health stakeholders.

Who is involved in?



Bottom-up process

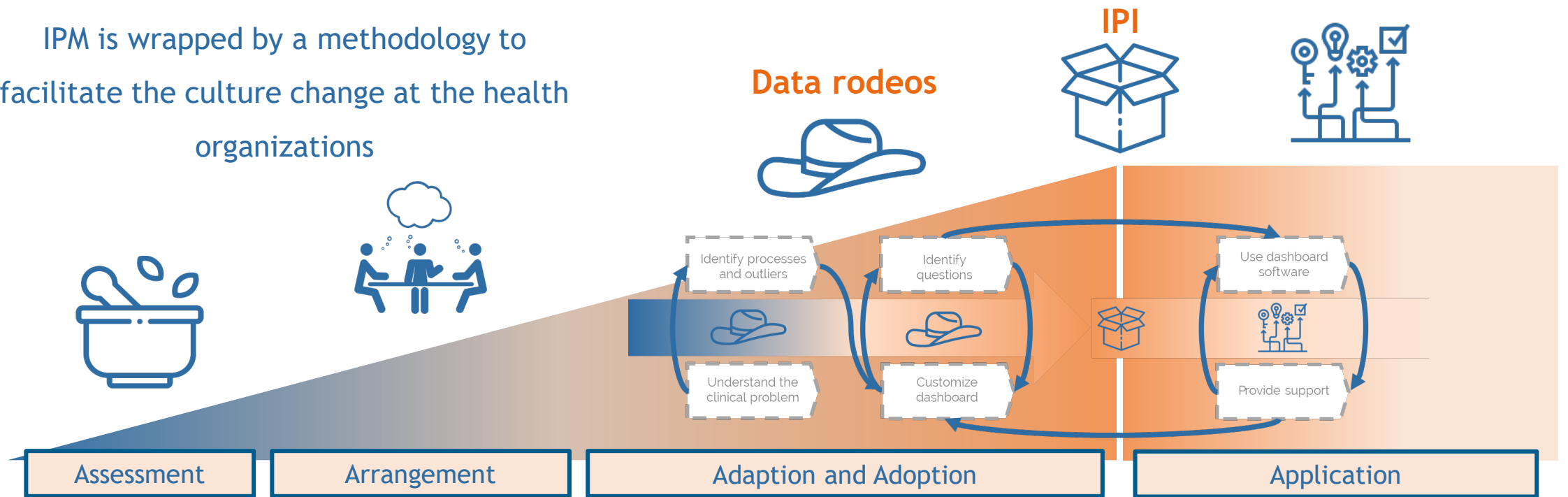
IT department of the hospital facilitates access to the data required to make the IPM analysis.

Process Miner (PM) deals with the data quality and shows first process views to the clinical staff.

Health professionals (HP) provide their experience to interpret the information obtained from PMAApp, this information helps them to empower their decisions.

How does it work?

IPM is wrapped by a methodology to facilitate the culture change at the health organizations



Assessment & Arrangement

Steps followed in the assessment and arrangement phases...

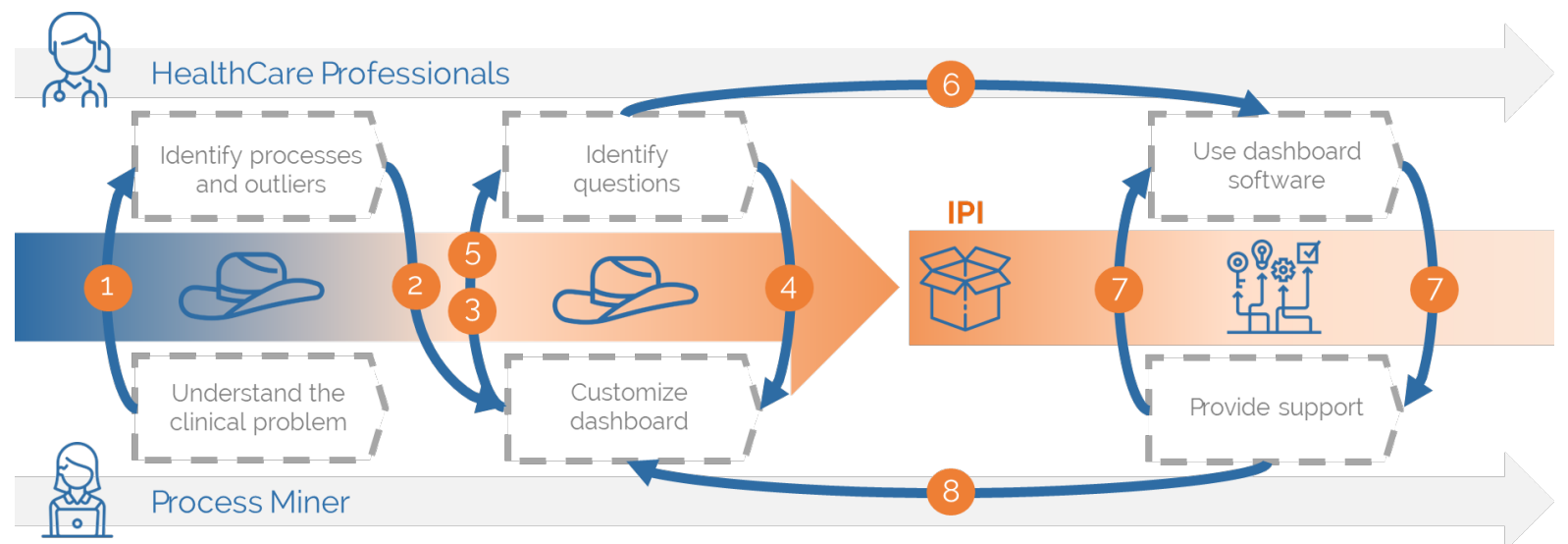


to assess the **readiness** of the organization to adopt a disruptive technology,
to identify the **team**, who will be the **contact person**, **data rodeos** and **other meetings**,
to solve any **concern or doubt** related to the technology,
to understand what **data** is needed to build an IPI.

Adaption and Adoption & Application

A couple of at least one process miner and a health professional carries out as much data rodeos as needed to build an IPI

- 1 The PM expert shows first process views ...
- 2 ... the HPs identify processes and outliers that bring to new questions and hypothesis ...
- 3 ...that the PM expert translates into new process views...
- 4 ... these new process views are presented to the HPs may lead again to new inquiries...



- 5 ... that are interpreted by the PM expert as new process views.
- 6 At that moment, the IPI is distributed between HPs as the PMAApp dashboard
- 7 Then, the HPs use the dashboard in their daily practice to empower their decisions...
- 8 ... until new questions need to be answered, where they will be back to data rodeos until it is ready again.

Icons made by monkik, Flaticon, Freepik, Eucalypt and srip



Value based healthcare supported by process mining tools
Creating VALUE through clinical pathways optimization

Activity Leader: Iván Pau de la Cruz. Ivan.pau@upm.es
Project manager: Gema Ibáñez Sánchez. geibsan@upvnet.upv.es



<http://www.valueproject.eu>



EIT Health is supported by the EIT, a body of the European Union

VALUE is supported by EIT Health