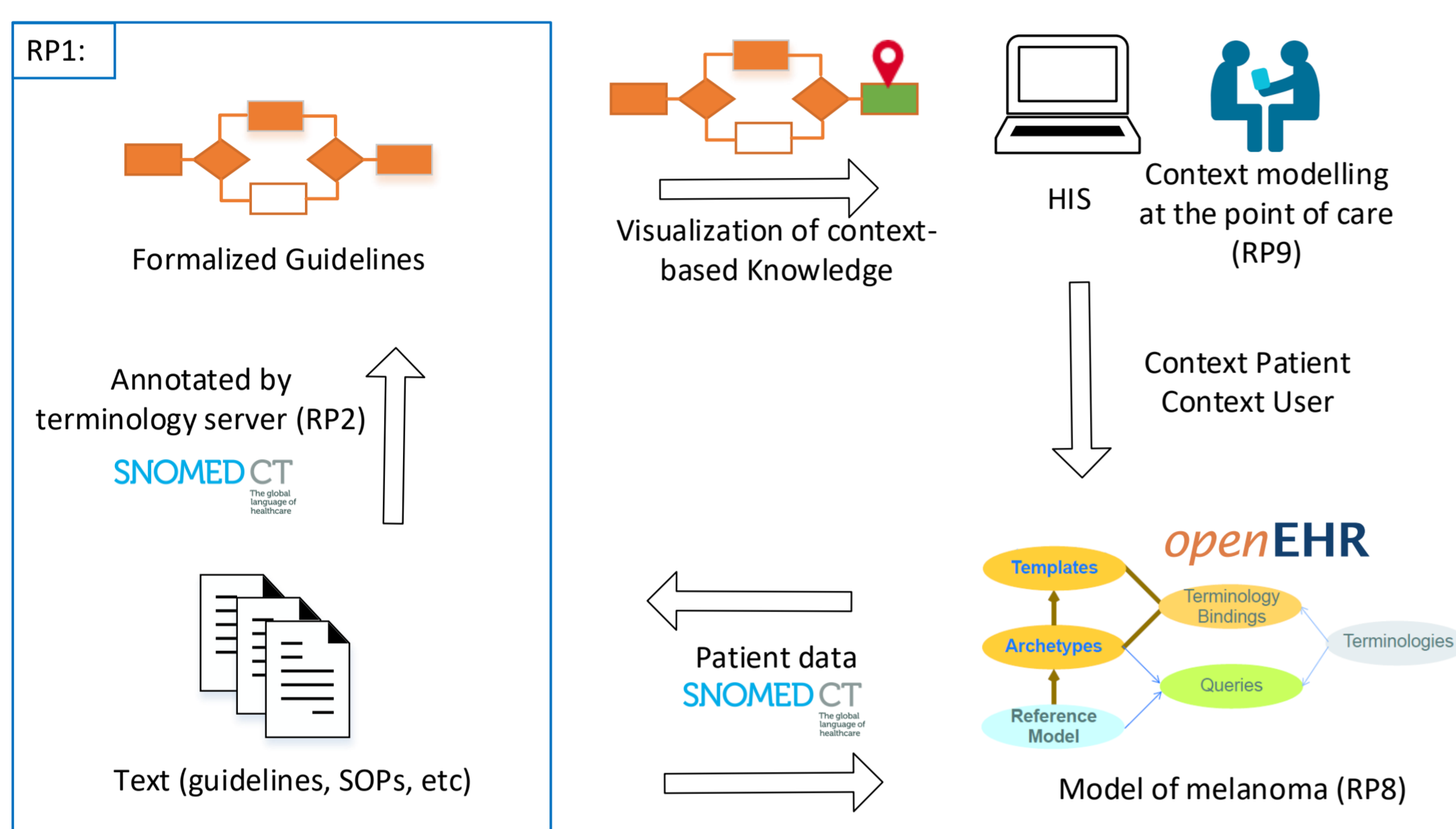


RP1 - Context modelling and mapping of guidelines and SOPs

Research question

- Relevant information of a guideline, which fits the context of the patient, but also of the user has to be searched for and compared with internal clinic standards [1]
- Can patient data such as co-morbidities, comediations, ECOG be included to identify relevant passages [2]?
- Is it possible to determine and display the SOP appropriate to the patient and user context?



Solution approach context modelling and mapping of guidelines and SOPs

Solution approach

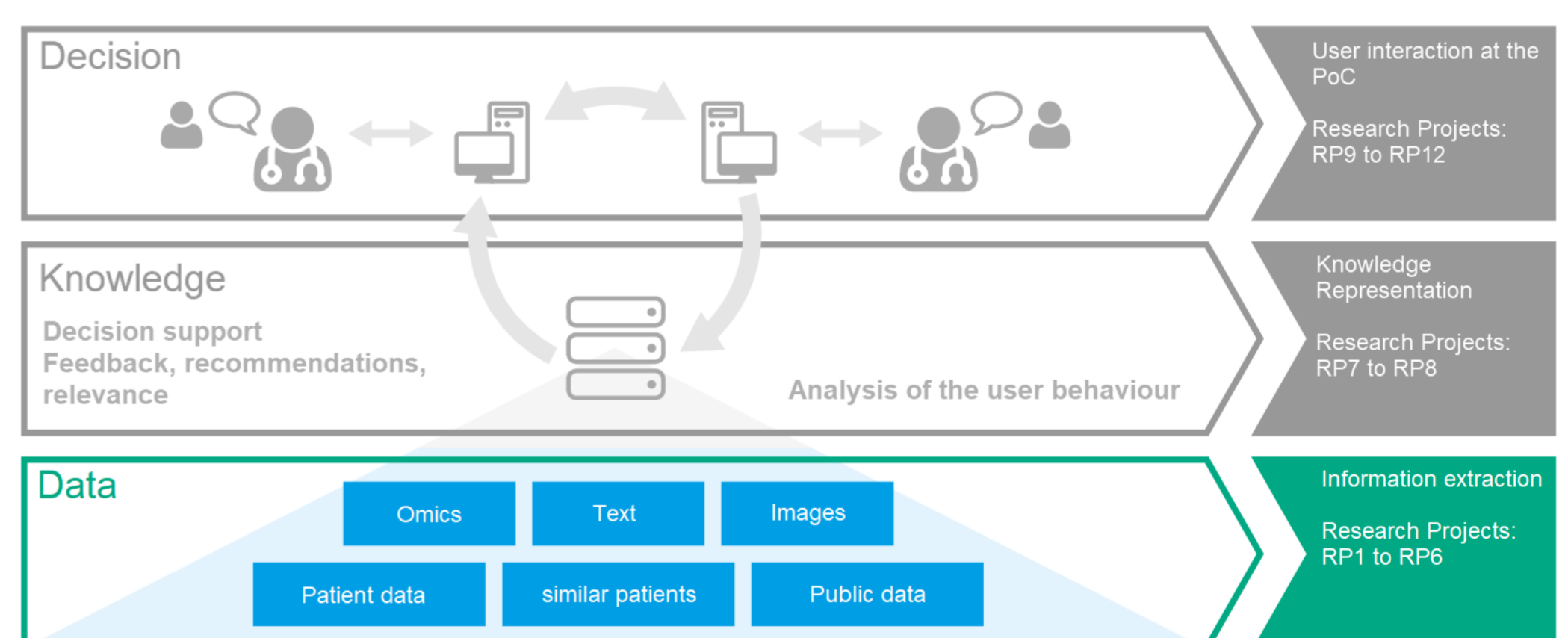
- Identify information components in the guideline by semantic analysis procedures
- Mapping formalized and SNOMED CT annotated building blocks to a context model including the position of the patient in the treatment pathway
- Development of a relevance model to take the users context into account (context-related definition of the relevance threshold), which is used to annotate and weight found components

State of the art

- Previous guideline modelling and mapping procedures do not take into account the specific patient or user context
- Multilingualism is a challenge when using international terminologies such as SNOMED CT for context modelling [3, 4]
- Unstructured information base (texts and illustrations):
 - National S3 guideline for the diagnosis, therapy and aftercare of melanoma [5].
 - international guidelines (e.g. NCCN guideline for cutaneous melanomas and the NCCN guideline for uveal melanomas)
 - hospital internal standard operating procedures (SOPs) in a document management system

Integration

- Selection of suitable knowledge modules taking into account the user context (user interaction at the PoC, FP9)
- Integration of the formalised and SNOMED CT annotated computer-interpretable components from guidelines into openEHR model for knowledge representation (FP8)
- Enrichment of the formalised guideline using the terminology server (FP2)



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