CLINICAL DECISION SUPPORT
- A CLINICIANS' VIEW -

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Workshop: Clinical decision support in practice – HL7 standards, interoperability, and selected applications
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Why Clinical Decision Support?

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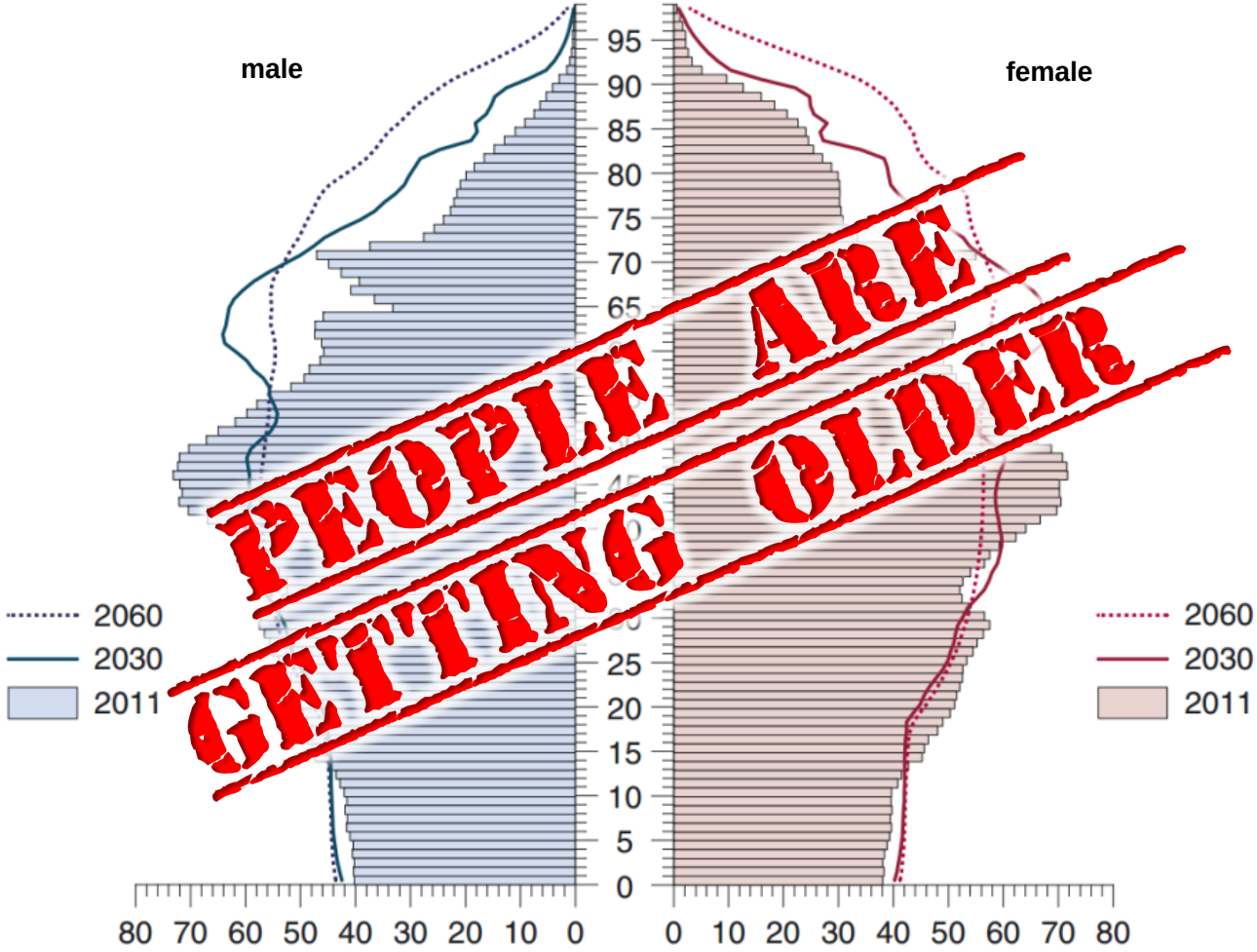

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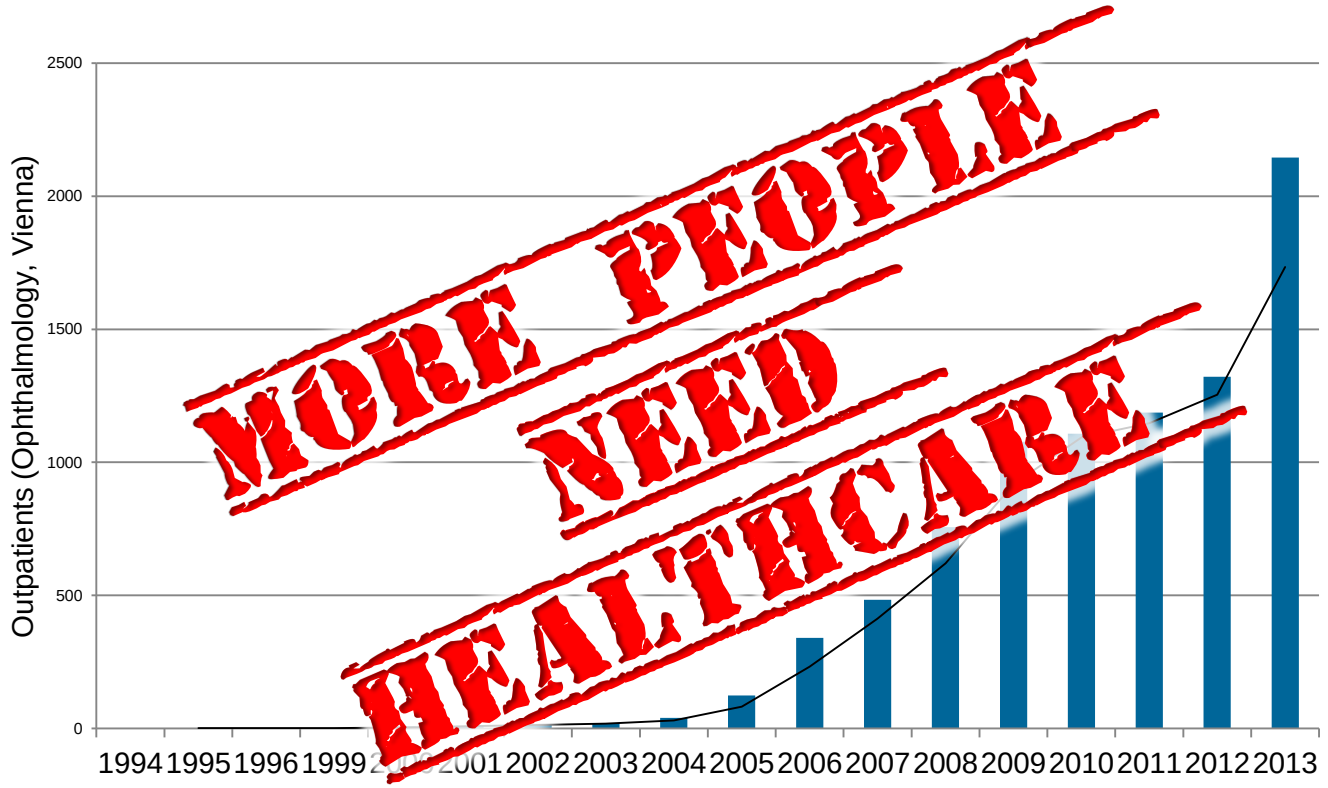

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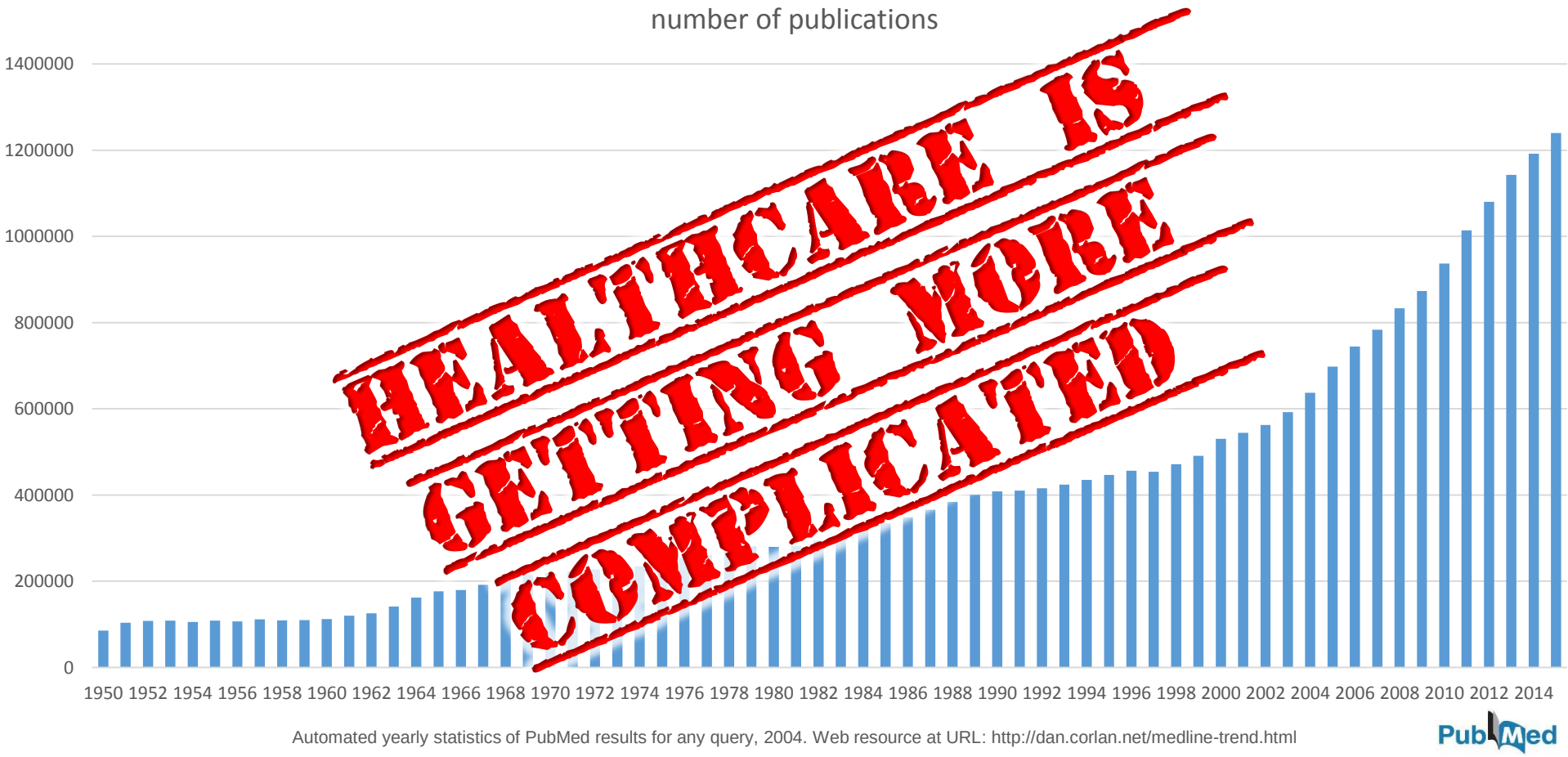
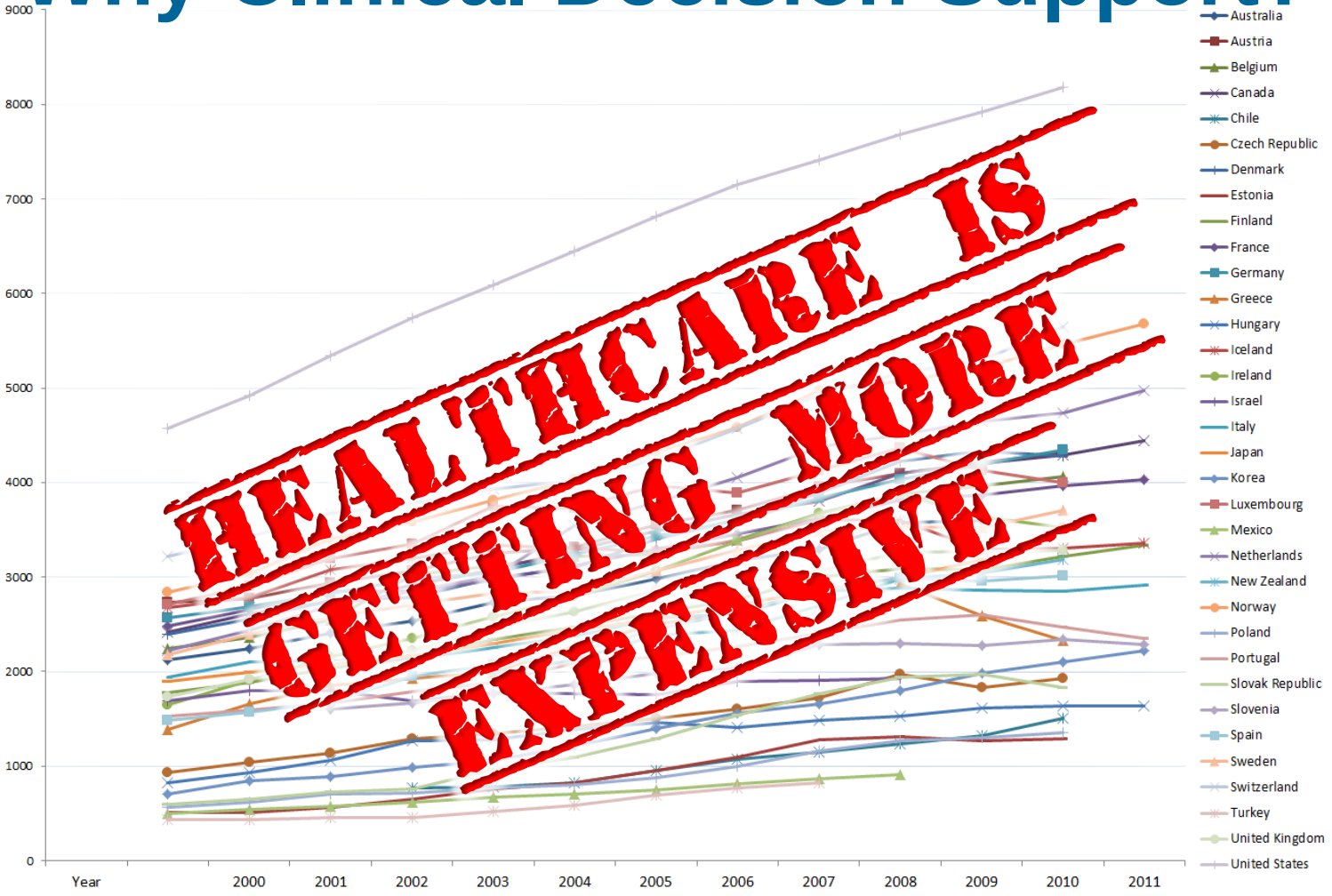


Automated yearly statistics of PubMed results for any query, 2004. Web resource at URL: http://dan.corlan.net/medline-trend.html

PubMed

Why Clinical Decision Support?



public + private sectors (USD/capita)

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

OECD.StatExtracts
Complete databases available via OECD's iLibrary

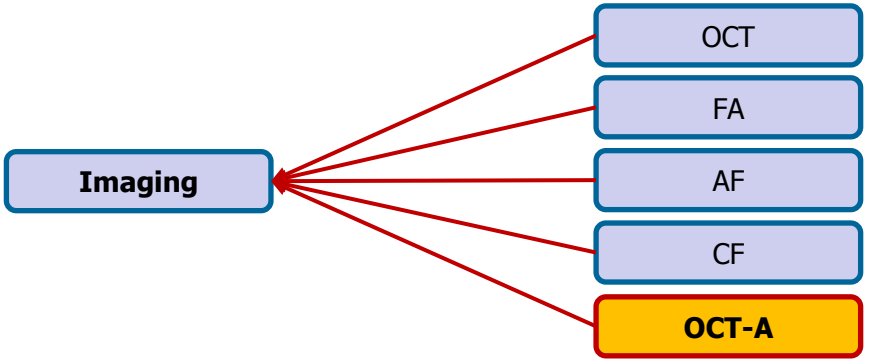
Healthcare Challenges

- Quantitative
  - Age-related
  - Lifestyle-related
  - Medicine itself-related
- Qualitative
  - Medicine is on the doorstep to Precision Medicine:
    - Better, but largely more expensive and complicated diagnosis
    - Better, but largely more expensive and costly (time and money) treatment

eHealth as a solution

- Guideline-based management and treatment
- Available Knowledge Management Systems
  - Assures quality
  - Optimizes resources
- Population-based studies (EHR)

CDS and precision medicine
- in Ophthalmology -


Imaging
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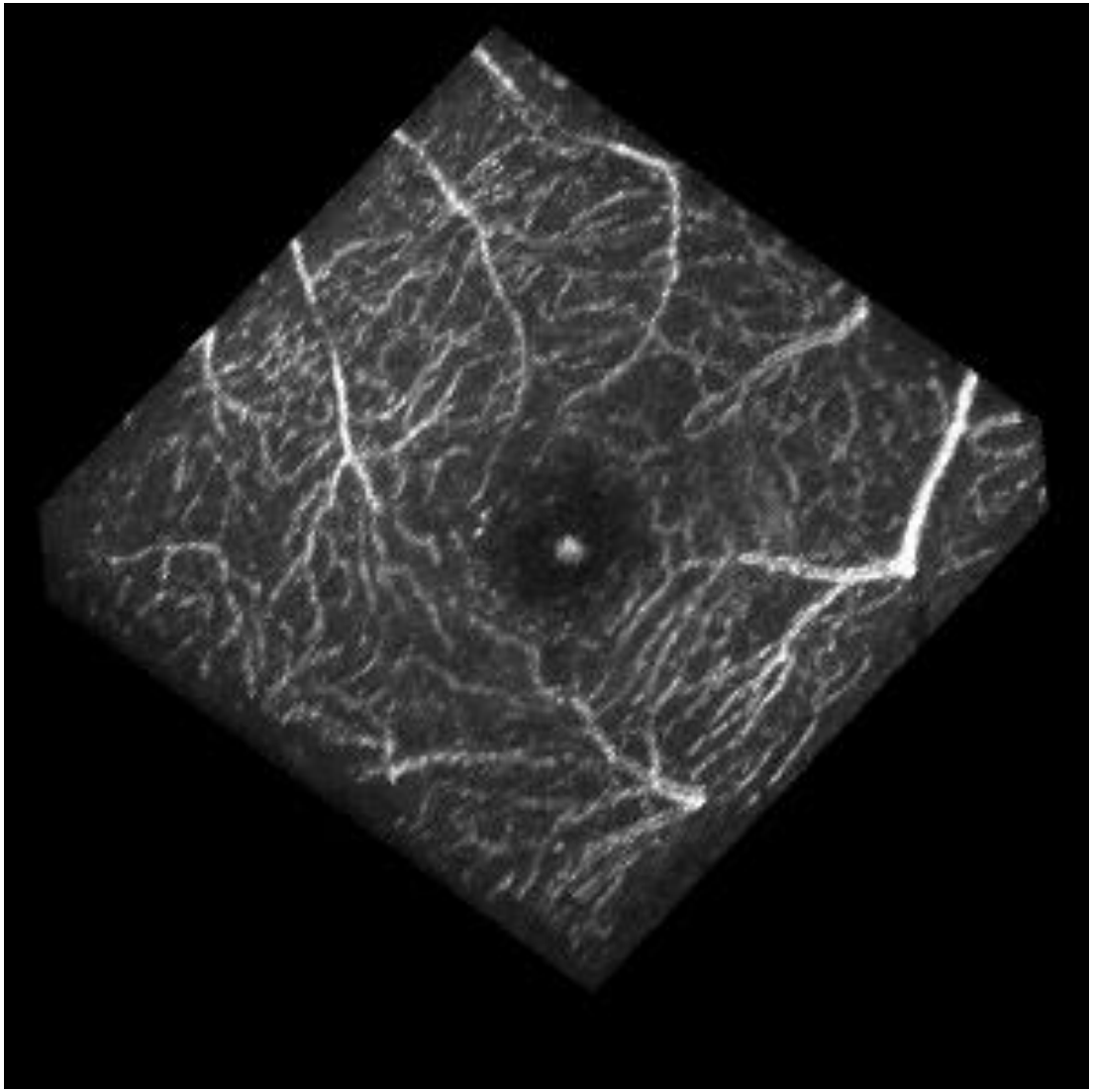
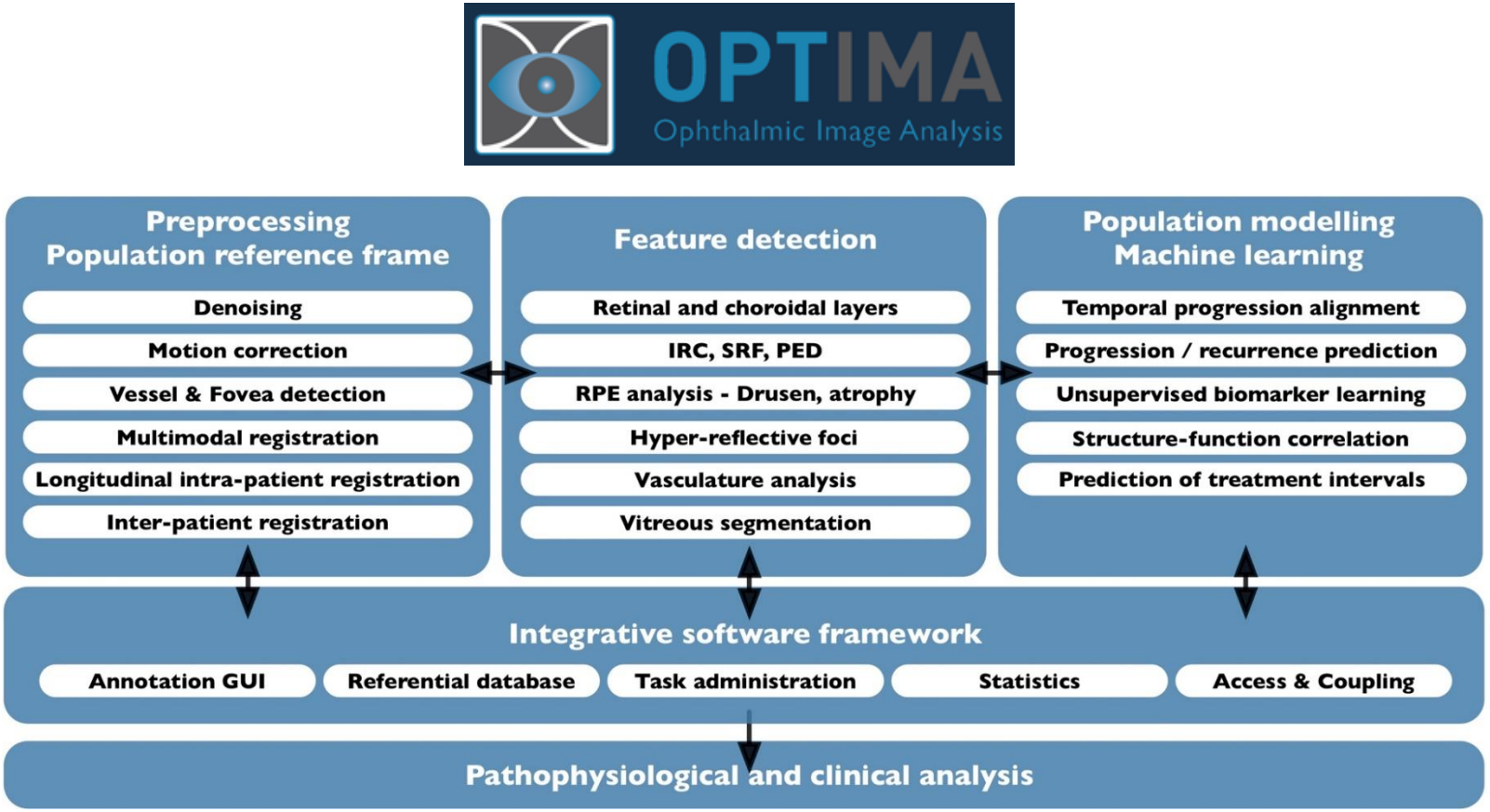
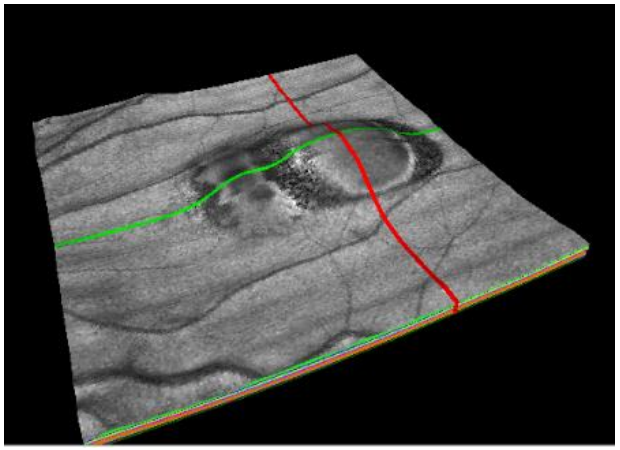
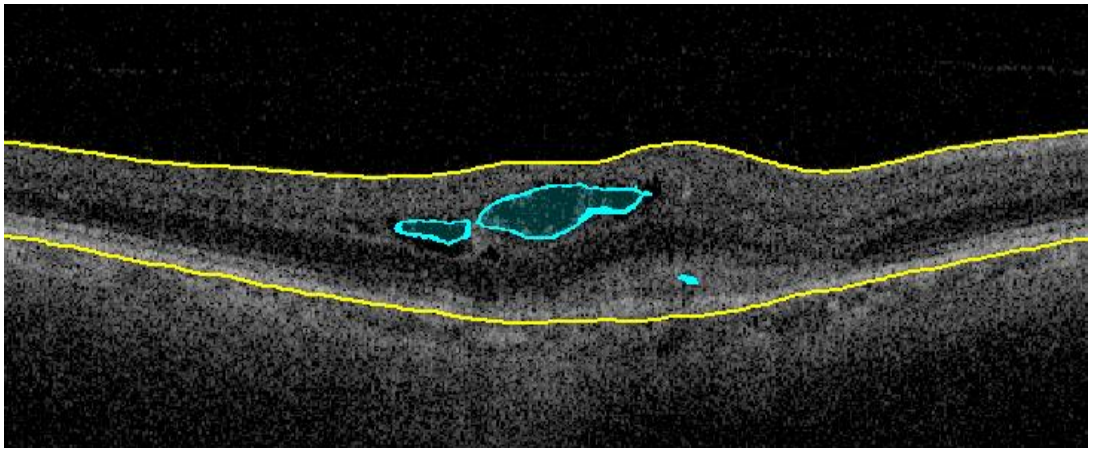


Moving towards Precision Medicine

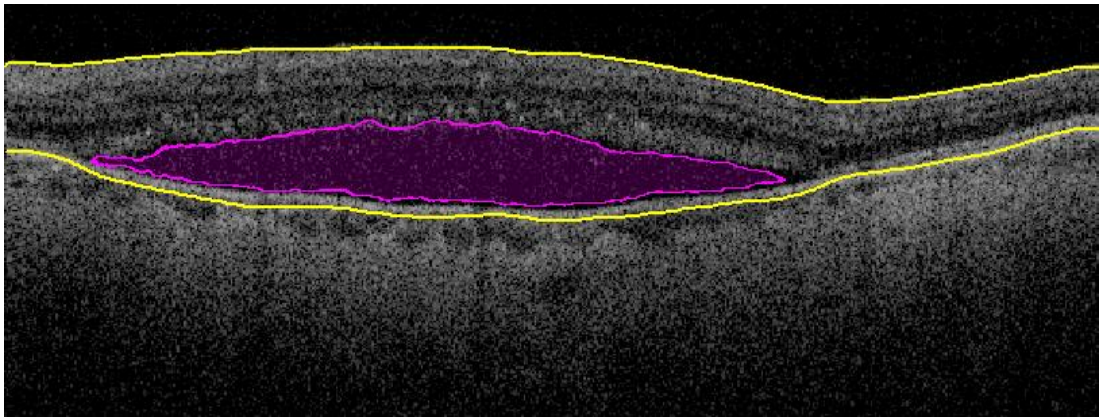


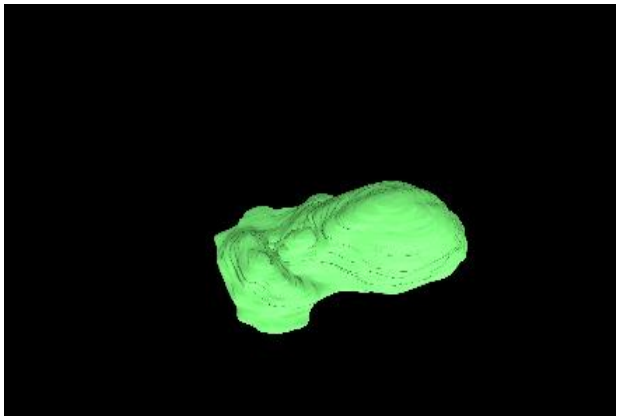
Example: Macular Edema





Intraretinal fluid

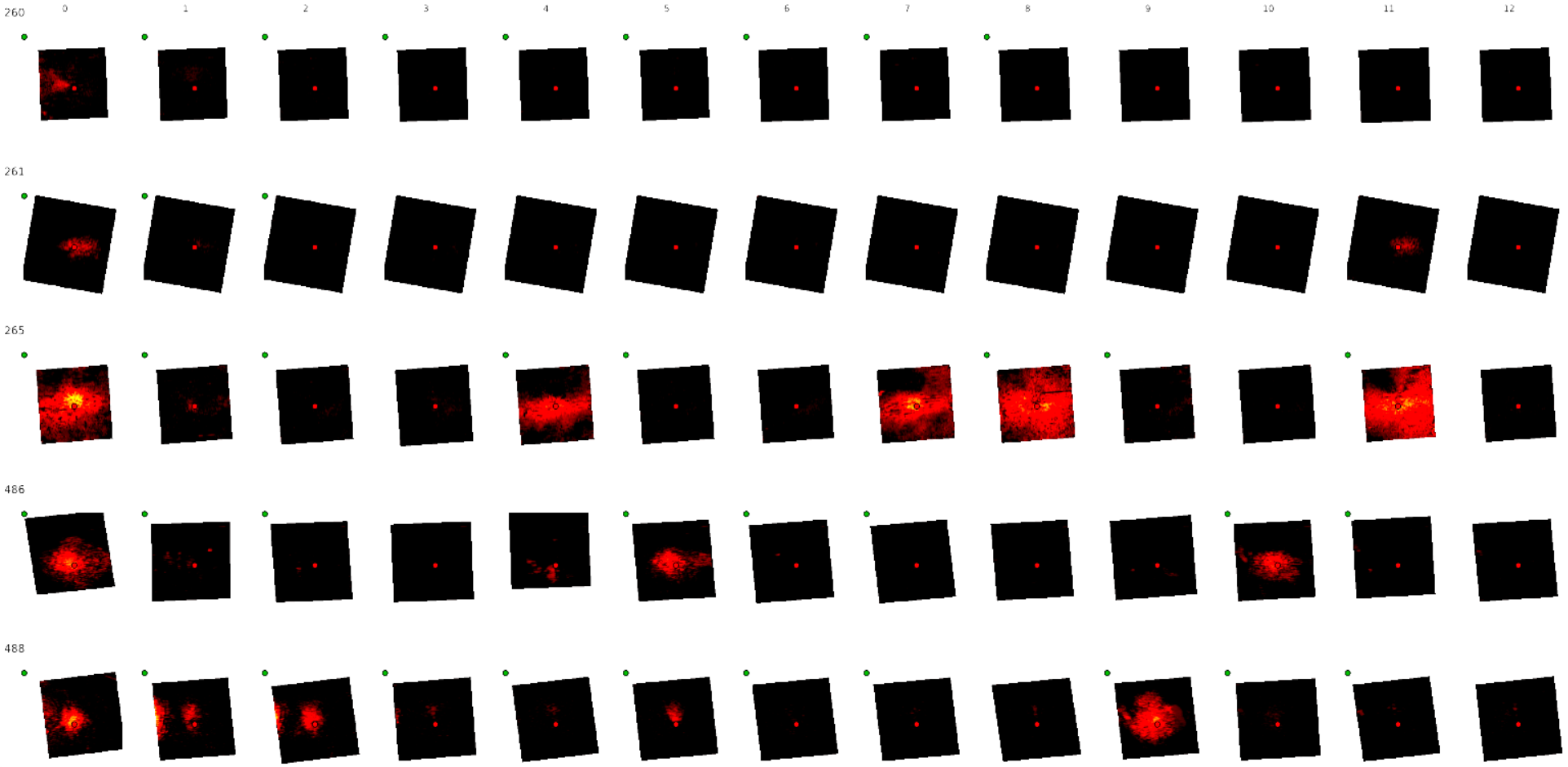




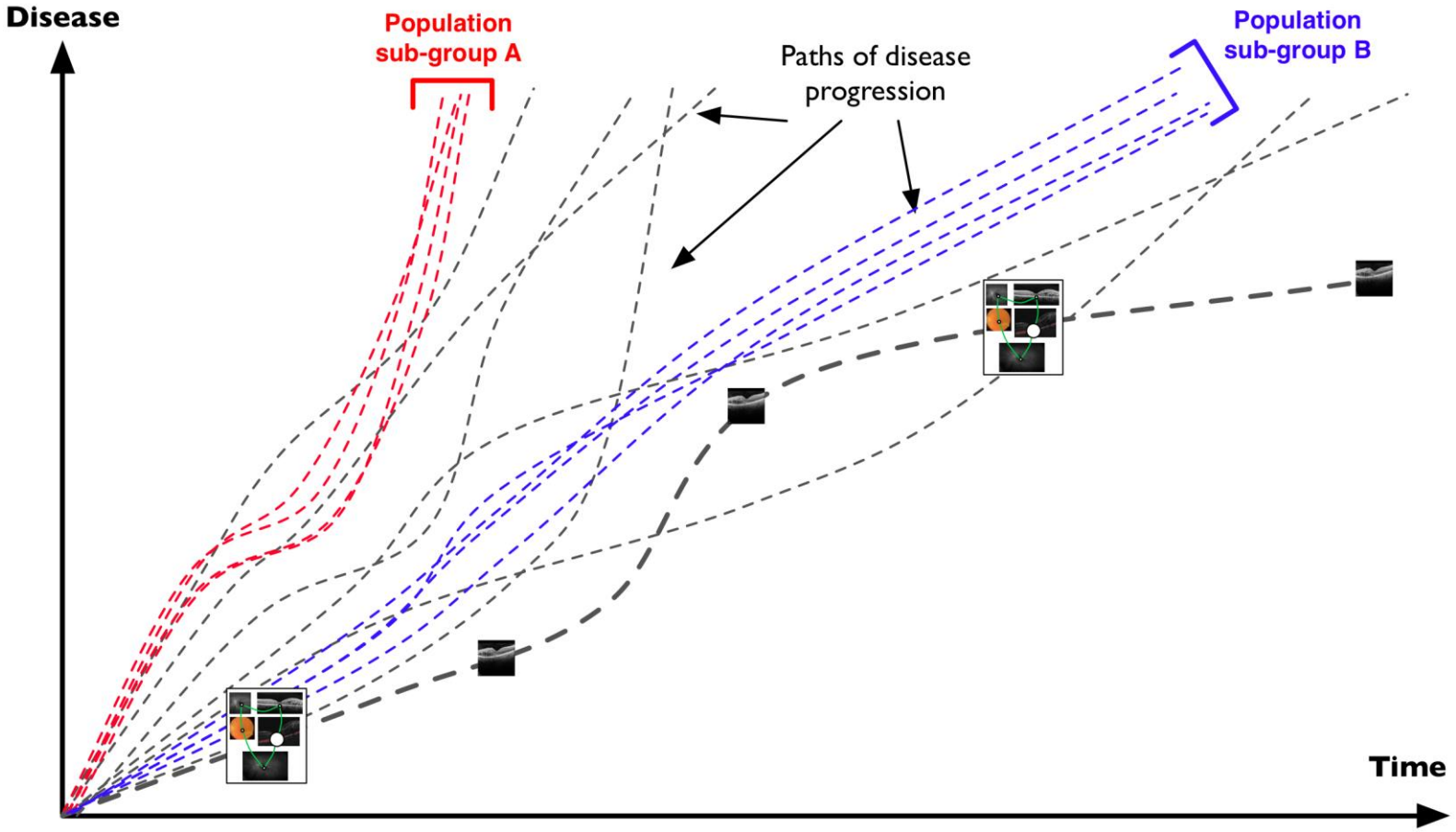
Subretinal fluid

Morphological Patterns

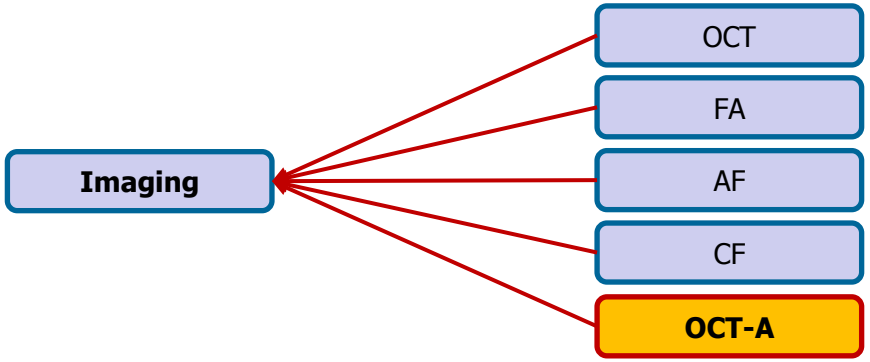
Intraretinal cystoid fluid over time in patients with retinal vein occlusion



Stratified Medicine



An *integrated* view on clinical Ophthalmology



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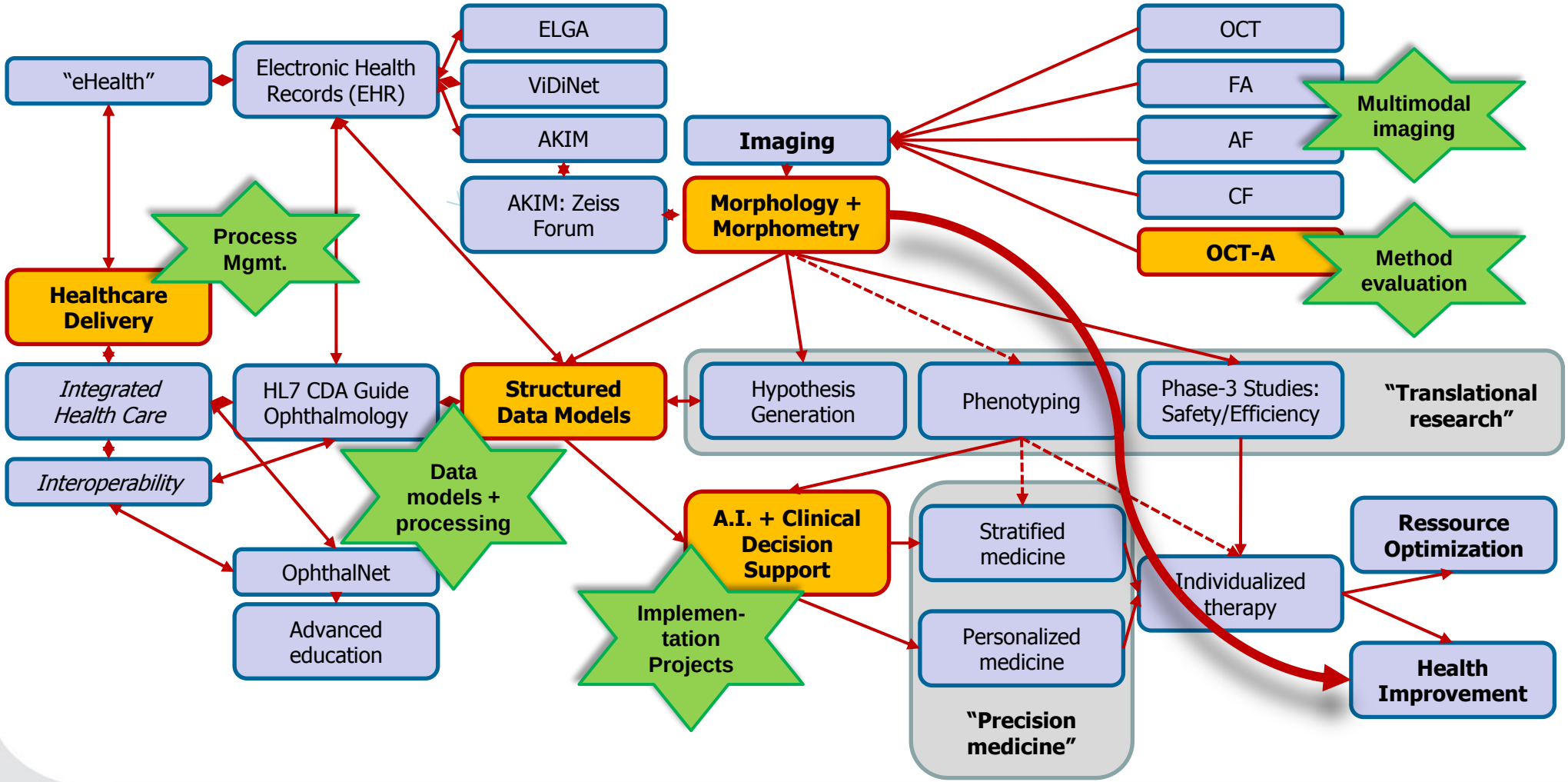

Conclusion

Clinical Decision Support Systems and Knowledge Management Systems will soon be essential to enable physicians to provide up-to-date care

Conclusion

Translational research result and implementation cycles are getting shorter:

Standards need to be applied and test platforms must be implemented to improve transition.

Thank you

"Mr. Osborne, may I be excused? My brain is full."