

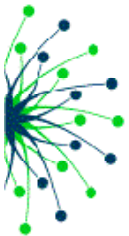


Innovative Medicines Initiative

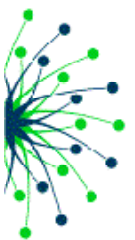
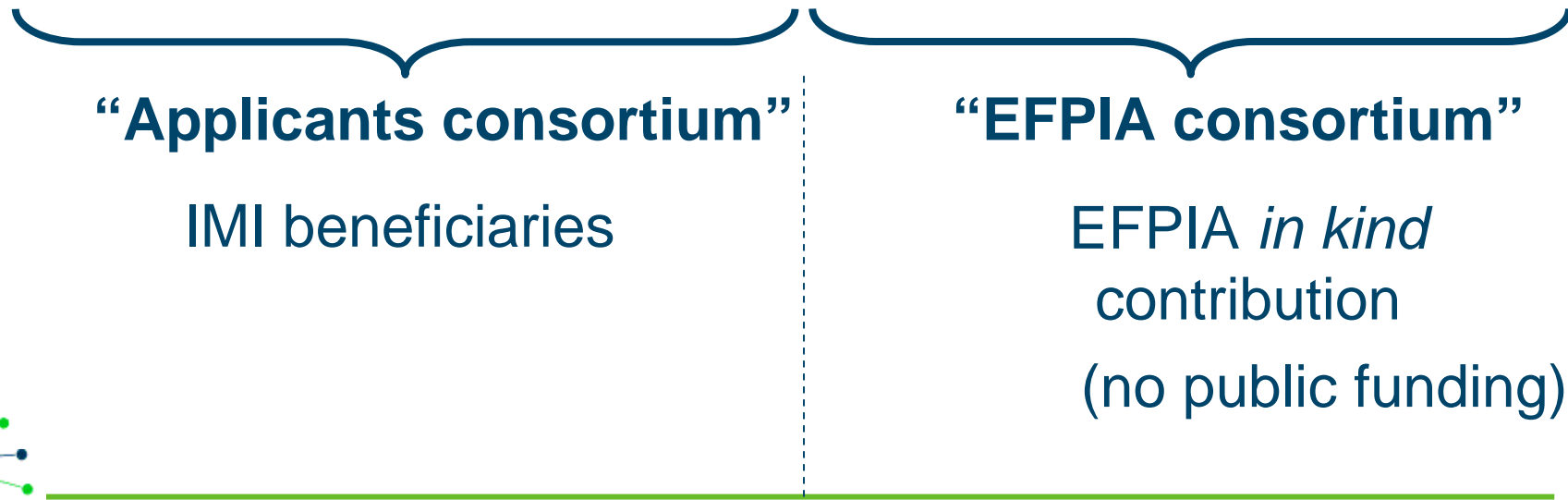
# IMI focused on the needs common to pharmaceutical industry and patients

ICT-enabled solutions for affordable personalised health services

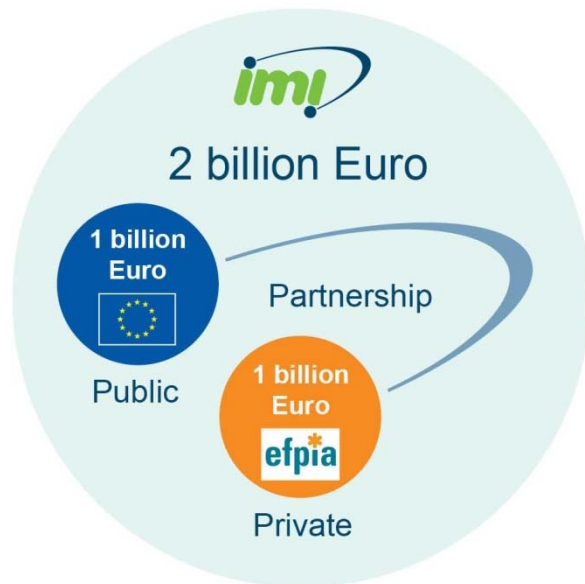
Ann Martin – IMI JU



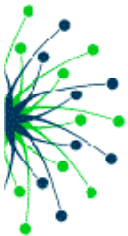
# Innovative Medicines Initiative



# IMI projects so far



- Pre-competitive research in Efficacy, Safety, Education&Training, Knowledge Management
- Call 2008: 15 projects initiated
- Call 2009: 9 full project proposals in preparation



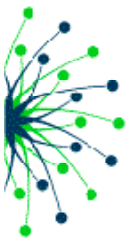
# Knowledge Management @ IMI

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2 objectives for the data pooling and processing infrastructure:

- Translational Knowledge Management supporting Safety and Efficacy projects by ensuring implementation of standards and integration of the project results into the KM platform
- Knowledge Management Platform – an integrated biomedical data platform with interactive scientific exploration tools

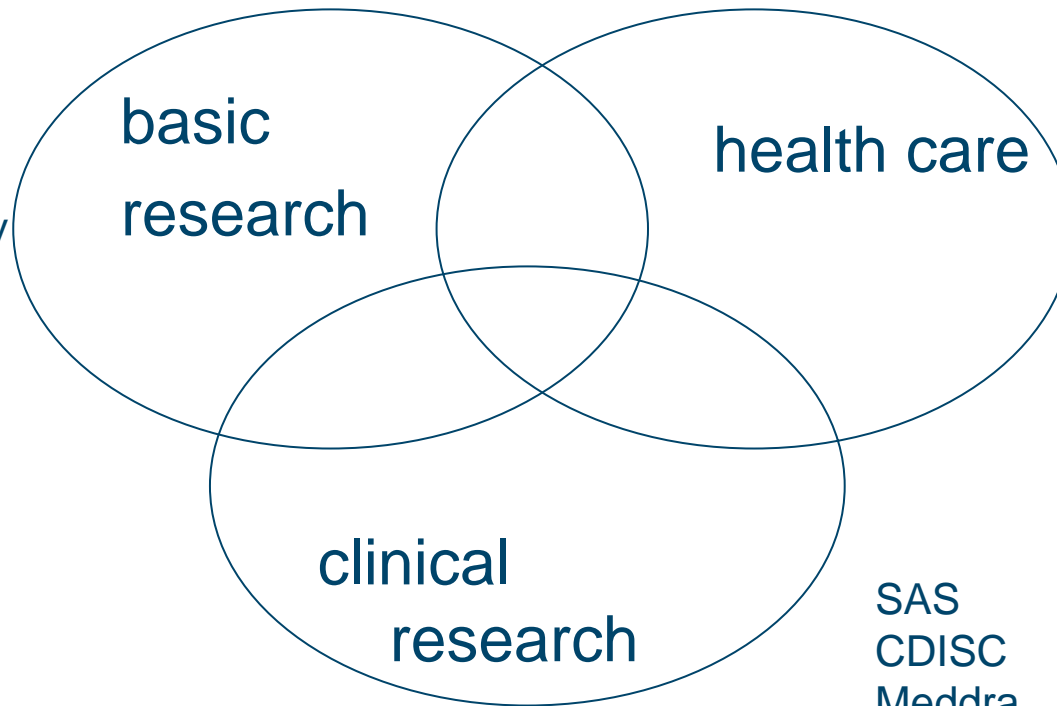


# Current situation

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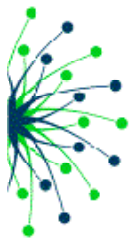


R-language, SQL  
SBML  
MAGE-ML  
CELLML  
GO  
OBO Foundry



HL7  
DICOM  
LOINC  
SNOMED

SAS  
CDISC  
Meddra  
Snomed  
LOINC



# Drug Disease Modelling Library and Framework

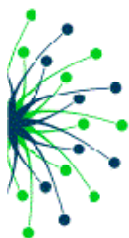
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- Improve Modelling & Simulation (M&S) activities for model based drug discovery and development
- Create common ontology to describe pharmacometric & mechanistic modelling
- Develop library for pharmacometric, statistical and systems biology models
- Create software interoperability framework

→ Improved M&S infrastructure for public/private institutions

→ Releases data, models & framework in public domain



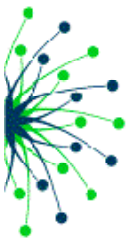
# Open Pharmacological Space

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- Data, tools and workflows for drug discovery i.e. drug targets and drugs for public/private institutions
- Data from public/private institutions shared openly with secure and stable service models
- Biological and chemical structure data relevant to early drug discovery
- Open source data infrastructure, free for the scientific community

→ Improved capabilities for drug discovery for public and private institutions



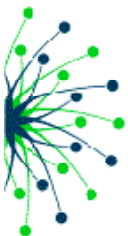
# Electronic Health Records

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- Sustainable framework for interoperability and secondary use EHR data
- Focus on clinical trial protocol feasibility, patient recruitment, drug safety, and cost effectiveness
- Clear value demonstration through execution of pilot projects
  - demonstrate integrity, security, performance & scalability
  - across European regions and/or countries
  - in an ethical and safe way complying with legal requirements
  - designed to protect patient confidentiality
- Provide forum for emerging EHR initiatives across Europe through consistent adoption of best practices

→ Improved infrastructure for clinical research,  
convergence clinical care and research





# Conclusion

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- Translational Knowledge Management
- Improved M&S infrastructure for public/private institutions, releases data, models & framework in public domain
- Improved capabilities for drug discovery for public and private institutions
- Improved infrastructure for clinical research, convergence clinical care and research

2-way Interoperability of Standards to the GOLD Standard?

*to advance predictivity in safety and efficacy research*

