

Managing Diagnostic Report Data: Interacting between systems to serve diagnostic reports using OpenMRS and FHIR

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Why are we talking about an
OpenMRS GSoC project for a GHI
WIP???



The FHIR Diagnostic Report Resource

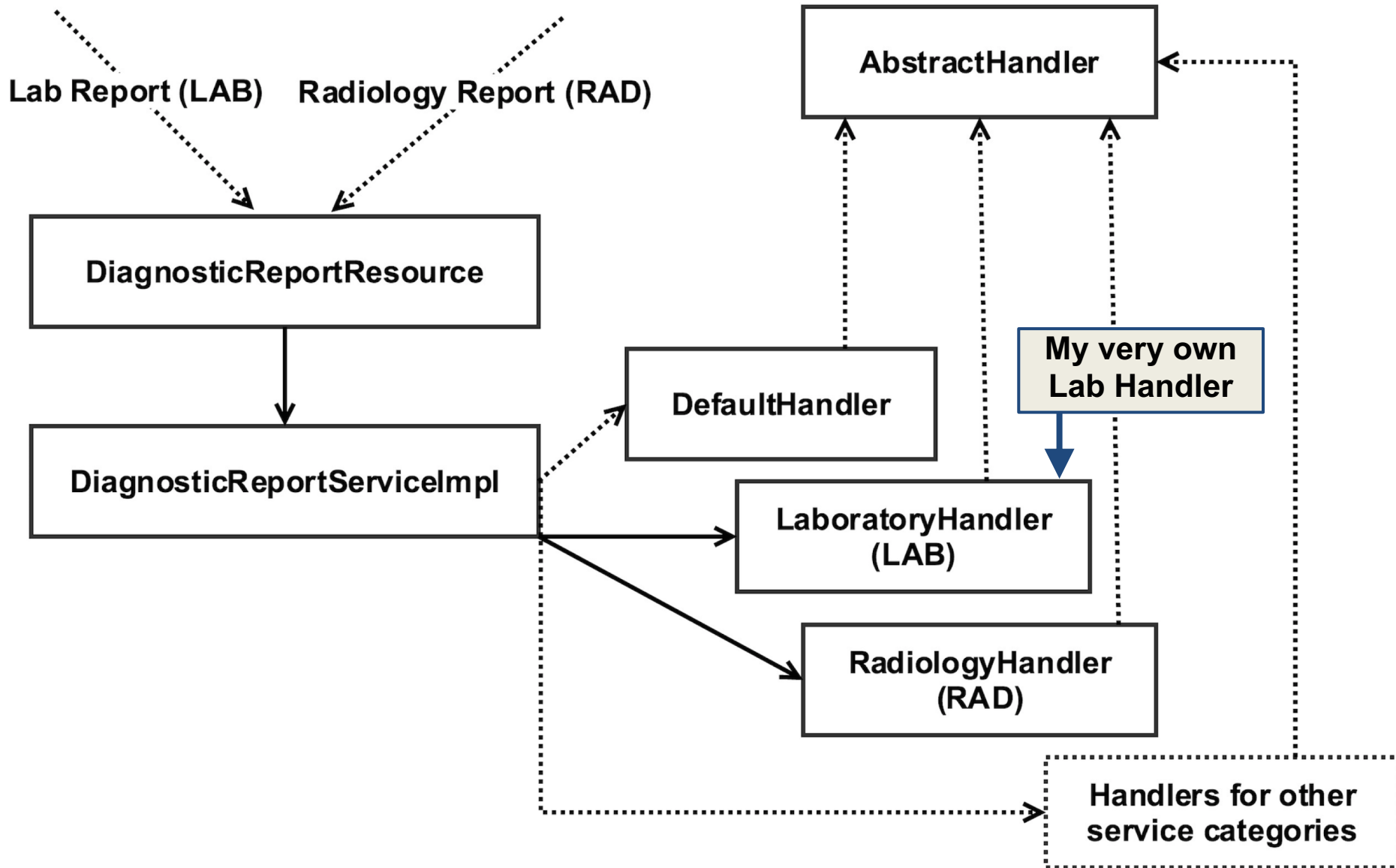
- Set of information that is typically provided by a diagnostic service
- Information can include
 - atomic results
 - text reports
 - images
 - codes

Diagnostic Report Resource can be used for...

- Laboratory (Clinical Chemistry, Hematology, Microbiology, etc.)
- Pathology / Histopathology / related disciplines
- Imaging Investigations (x-ray, CT, MRI etc.)
- Other diagnostics - Cardiology, Gastroenterology etc.

Introducing FHIR service category

- Identifies all possible types of diagnostic reports
- [40 codes?](#) (too lazy to count)
- Specific behavior per each service category



Support for Laboratory data

- How have we been storing lab data?
- Whats the best way to store lab data?

One Lab report == one OpenMRS Encounter

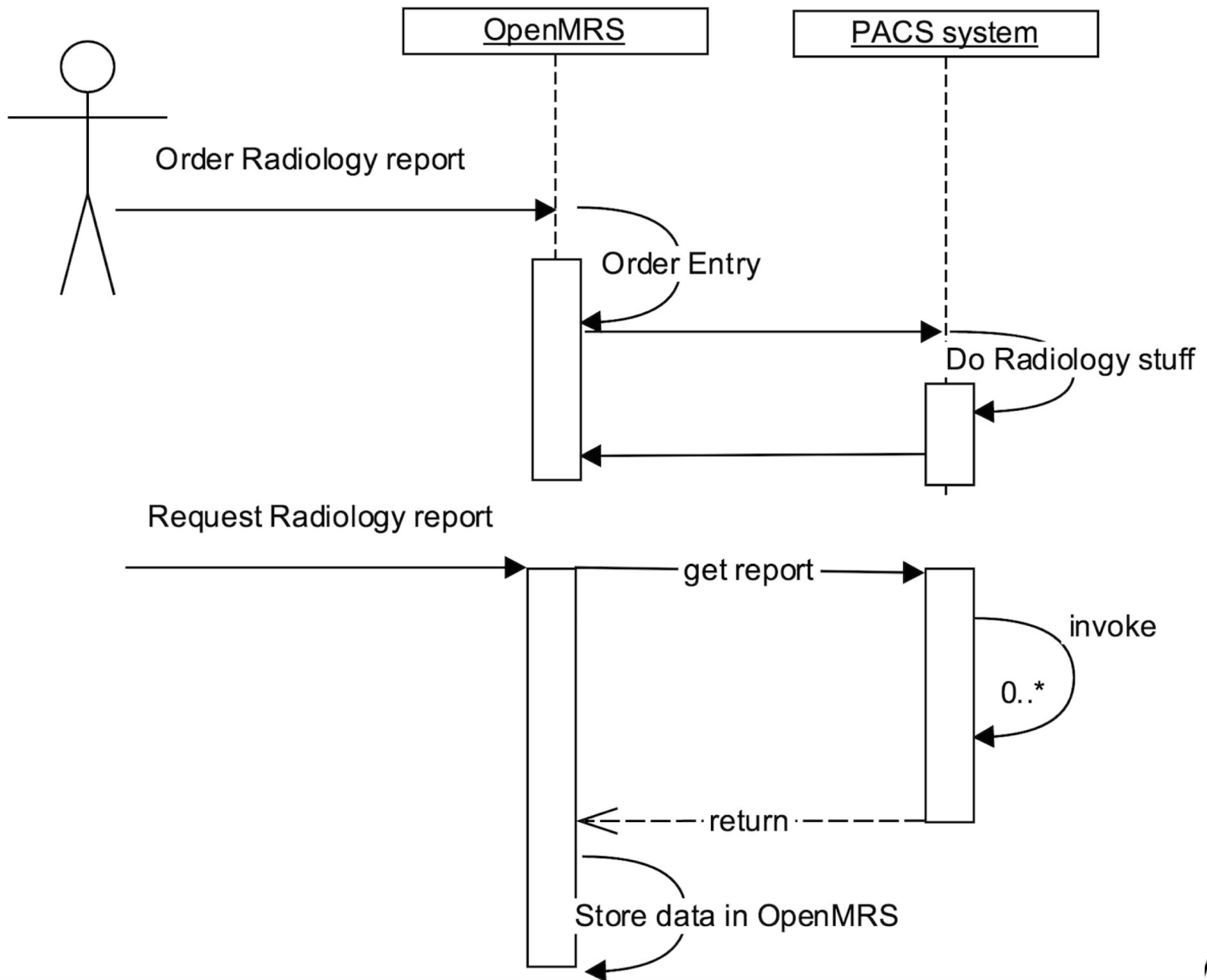
Support for Radiology Data

- How have we been storing radiology data?
We haven't and we wont :)
- Whats the best way to store radiology data?
PACS systems
- Aaaaand the ImagingStudy Resource

Radiology report content

Think structured and unstructured data

- Name/subject/performer
- Imaging study
 - Reference to full details of imaging
- Image
 - images associated with this report
- Conclusion
 - Clinical Interpretation of test results



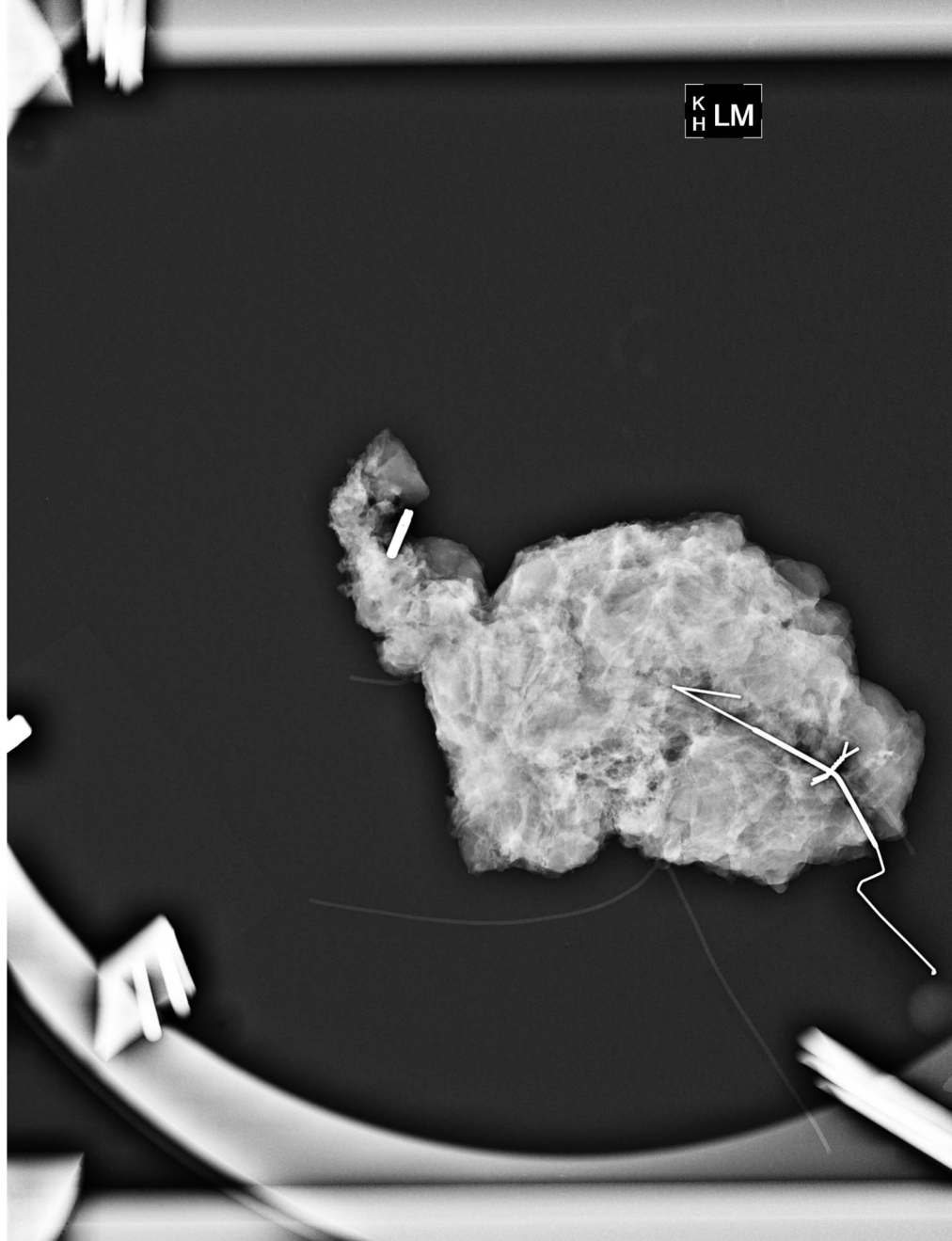
Identifying a Use case

What PACS system would we demo against?

- Introducing SIIM (Society for Imaging Informatics In Medicine)

Working examples... Meh.

- <http://fhir.healthintersections.com.au> - DSTU1
- <http://fhir-dev.healthintersections.com.au/open> - DSTU2
- [http://fhir-dev.healthintersections.com.au/open/DiagnosticReport/_search? format=text/xhtml&service=RAD](http://fhir-dev.healthintersections.com.au/open/DiagnosticReport/_search?format=text/xhtml&service=RAD)



Lessons learnt

Next steps

Blame these people ;)

- Milan Senevirathne
- Harsha Kumara
- Judy Wawira