



Federaal Kenniscentrum voor de Gezondheidszorg
Centre Fédéral d'Expertise des Soins de Santé
Belgian Health Care Knowledge Centre

Coupling of the Permanent Sample with the Hospital Data

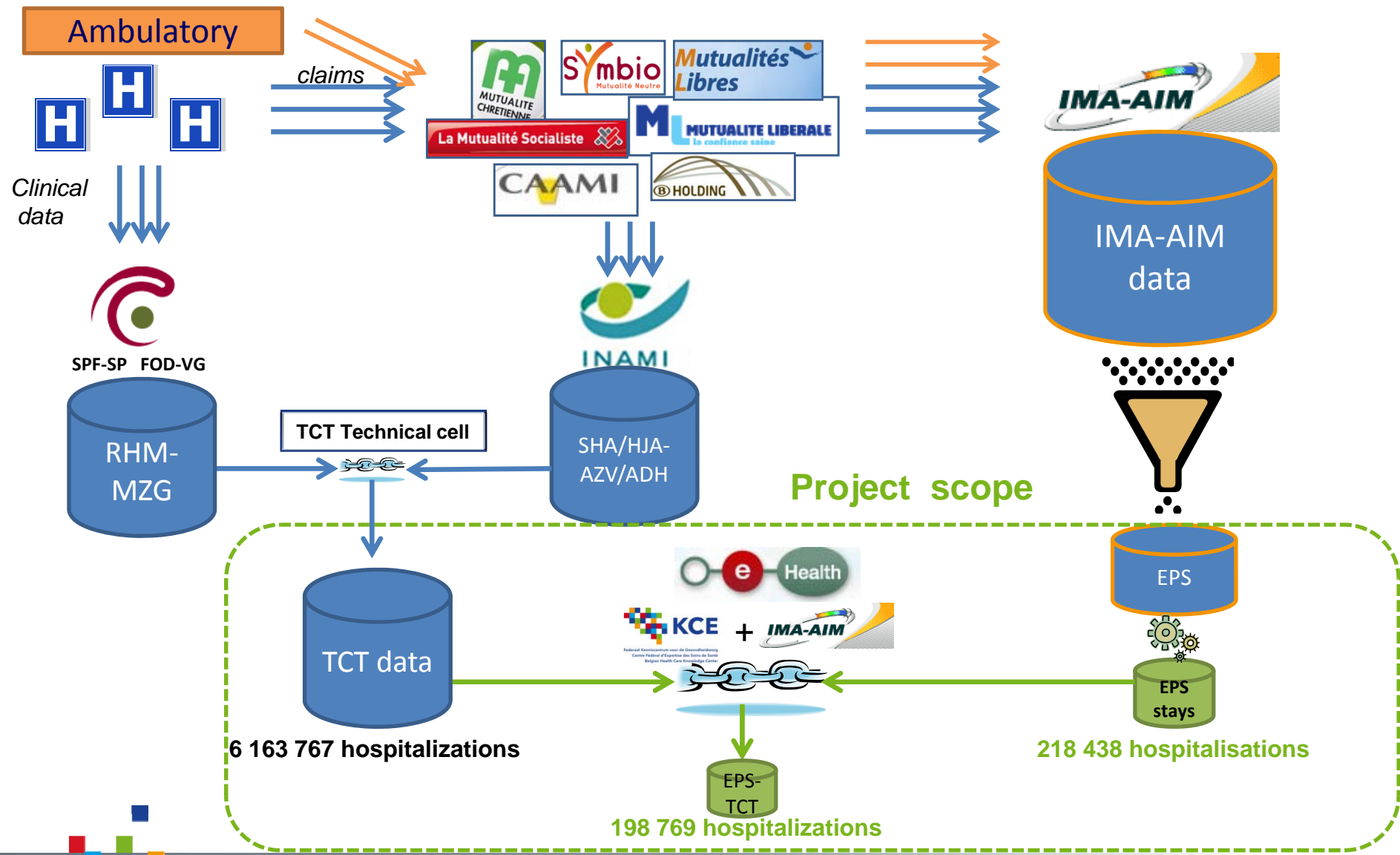
Feasibility and data representativeness study

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Joined project IMA-KCE

- **Proposal from Technical Commission EPS**
- **Start: February 2011**
- **Exec. board: March 2012 => September 2013**

Databases and data flows



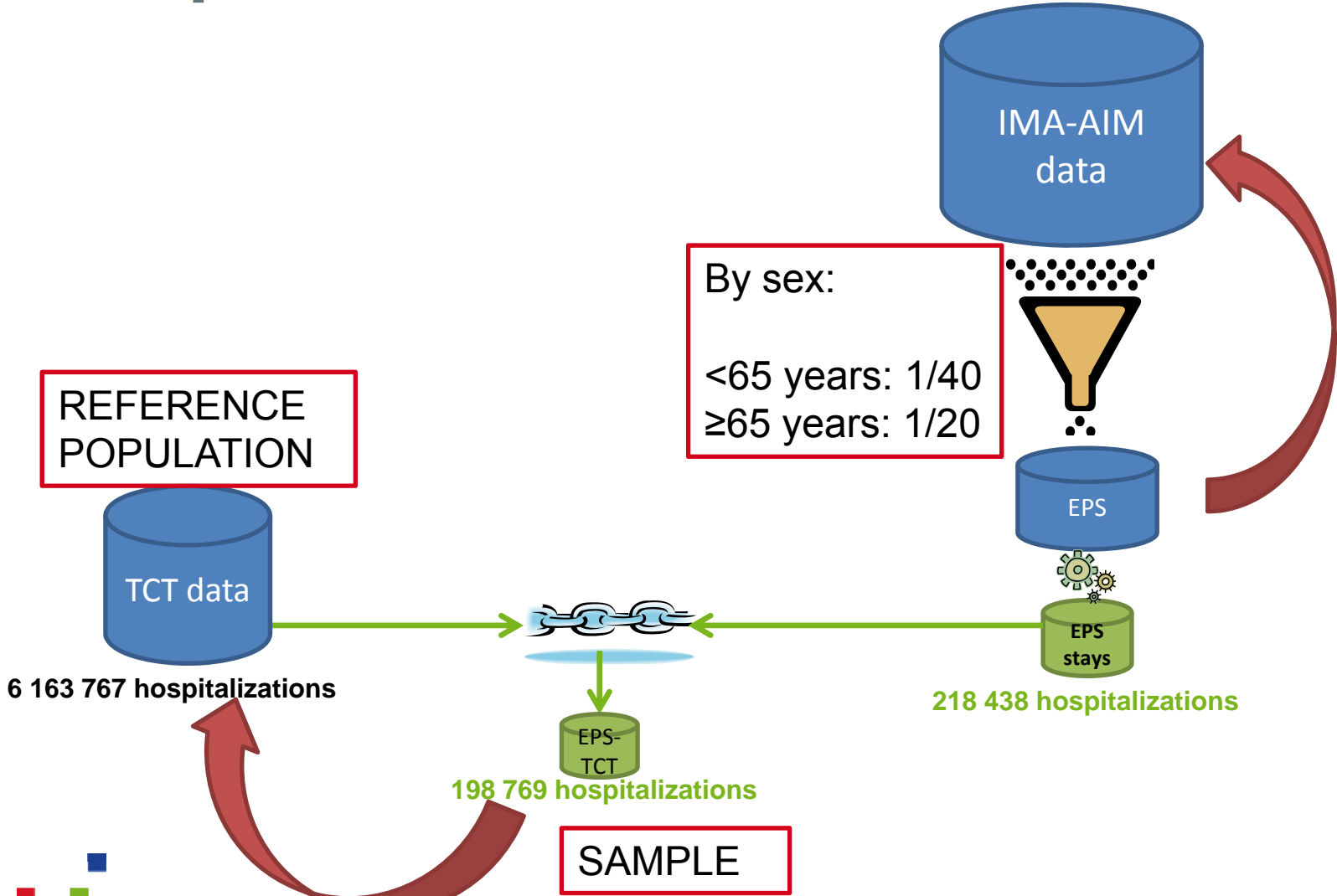
3-steps process

1. Hospital stays reconstruction (EPS)

2. Coupling EPS with TCT data

3. EPS-TCT Representativeness tests

Representativeness tests



Tests principle

- **Construction of a confidence interval around the **sample** value**
- **Check if **population** value fits into interval**
 - If **inside** interval → sample representative on this factor
 - If **outside** interval → sample **not** representative on this factor (alpha error risk).

Tested parameters

- **Age, sex**
- **Hospitalization type**
- **Localisation (province, region, arrdt)**
- **Preferential status**
- **Total reimbursements (TCT calculation)**
- **MDC, APR-DRG or SOI, principal diagnosis**

- **Level: Global – APR-DRG – APR-DRG/SOI**

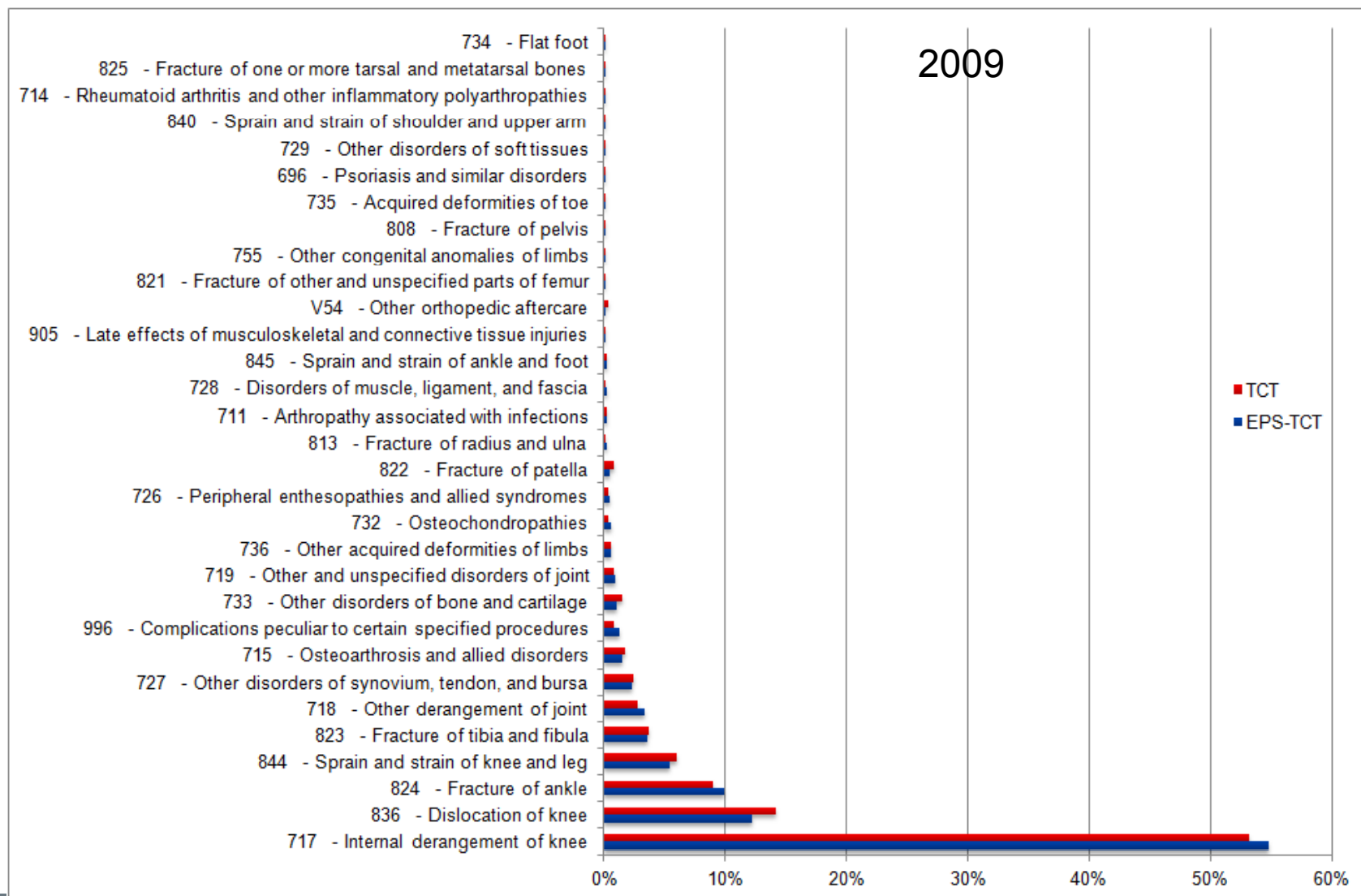
Globally: patient region 2009

■ Distribution

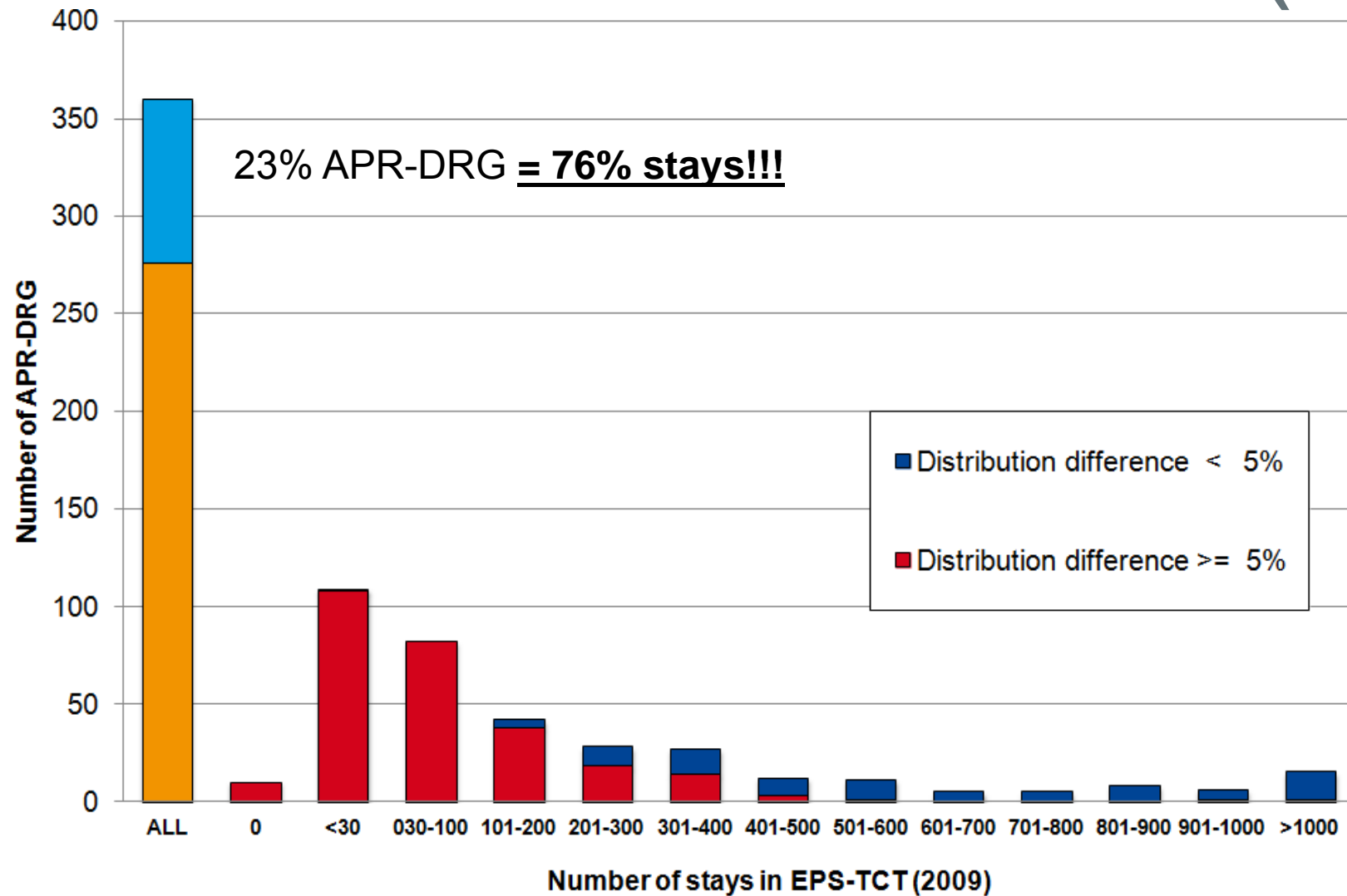
Year	Region (patient)	Reference (= TCT)	Sample (TCT weights)	
		Distribution	Distribution [IC 95%]	Difference with Reference
2009	Brussels	7,8%	7,8% [7,6%; 8,0%]	-0,02%
	Flanders	61,8%	61,7% [61,3%;62,0%]	-0,17%
	Wallonia	30,4%	30,6% [30,3%;30,9%]	+0,19%
	Total	100%	100%	p=0,47

By APR-DRG: Principal diagnosis distribution

APR-DRG 313 Knee & lower leg procedures (n=1668; N=60 732)

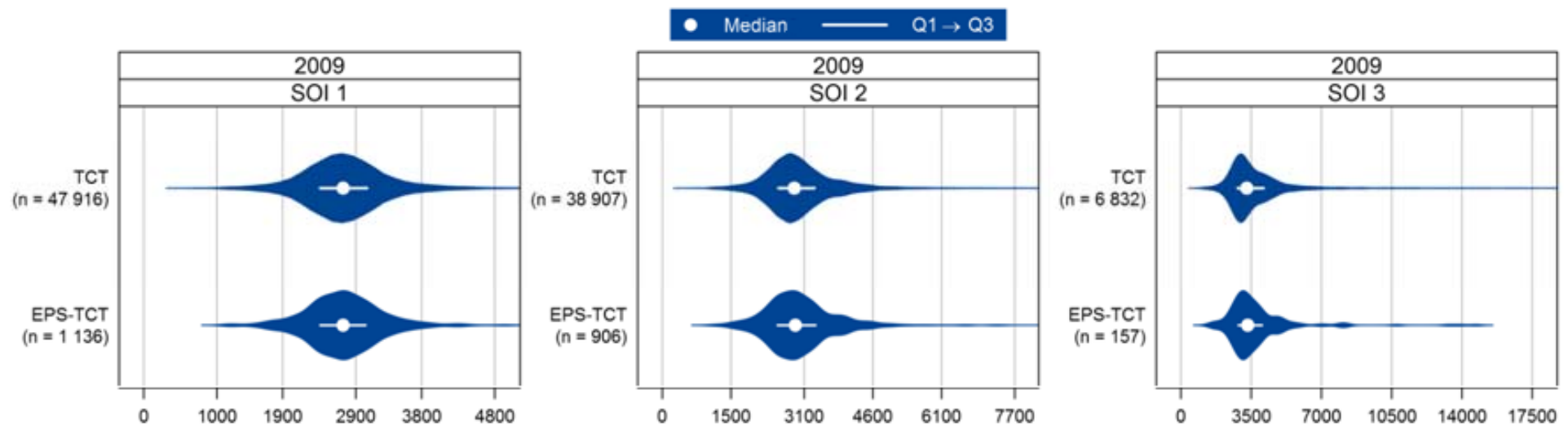


APR-DRG: all variables (cat)



By APR-DRG/SOI: Reimbursements distribution

APR-DRG 560 Vaginal delivery



Total amount of reimbursements

Conclusions

- **Stays reconstruction algorithm & coupling**
 - Valid, based on existing expertise.
- **Representativeness**
 - Globally OK but not 'below'.....
 - To be done on other variables, groups, years.
- **Small cells analysis by TCT**
 - Risks by sampling and regrouping categories.
- **Perennity EPS-TCT sample**
 - Efficiency,
 - Feasibility or longitudinal studies

Recommendations

- **To the Minister of Social Affairs & Public Health :**
 - To avoid « ad hoc » couplings, reducing waiting periods, sparing human and financial resources and allowing longitudinal studies, the coupling of the most recent data EPS-TCT should be **perennial**. The results of the representativeness tests should be made available for the EPS-TCT Sample users. Therefore, legal and operational issues should be solved in the shortest time.

Colophon

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