



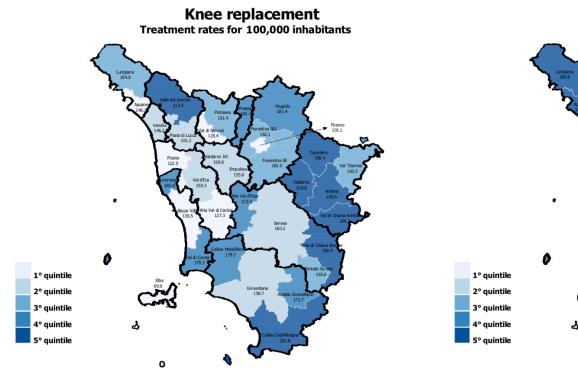
The role of Patient Reported Outcome Measures (PROMs) in managing geographical variation in orthopaedic elective surgery

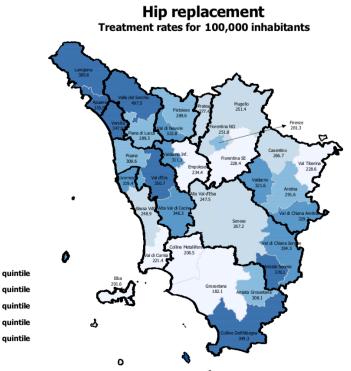
Francesca Pennucci, <u>Daniel Adrian Lungu</u>, Sabina De Rosis, Sabina Nuti Scuola Superiore Sant'Anna, Pisa, Italy



Background







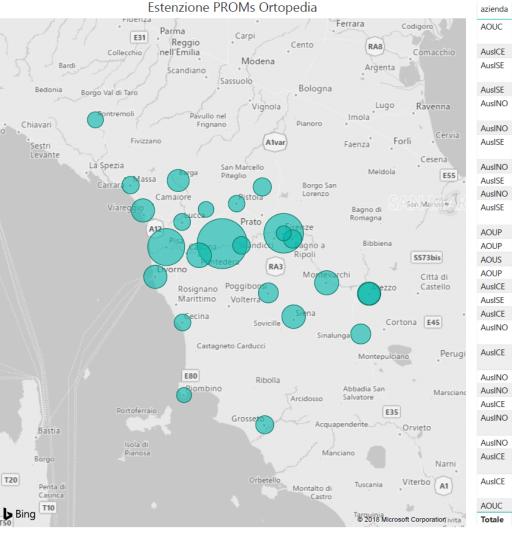


PROMs Observatory in Orthopeadic elective surgery

stabilimento







AOU Careggi AusICE Ospedale Fucecchio - San Pietro Igneo AusISE Ospedale Montevarchi - Valdarno Santa Maria della Gruccia Ospedale Arezzo - San Donato AusISE Ospedale Castelnuovo di Garfagnana -AusINO Santa Croce - Lucca AusINO Ospedale Pontedera - Felice Lotti AusISE Ospedale Cortona - Fratta - Valdichiana Santa Margherita AusINO Ospedali Riuniti Livorno AusISE Ospedale Poggibonsi - Alta Val d'Elsa AusINO Ospedale Unico Versilia - Viareggio AusISE Ospedale Montepulciano - Riuniti della Val di Chiana - Nottola **AOUP AOU Pisana** AOU Pisana **AOUP AOU Senese AOUS** AOU Pisana **AOUP** AuslCE Ospedale Prato - Santo Stefano AusISE Ospedale Misericordia Grosseto AusICE Ospedale Empoli - San Giuseppe AusINO Ospedale Massa - Nuovo Ospedale delle Apuane Ospedale Bagno a Ripoli - Santa Maria AuslCE Annunziata AusINO Ospedale Civile Cecina AusINO Ospedale Lucca - San Luca Ospedale Pistoia - San Jacopo AusICE **AusINO** Ospedale Pontremoli - Sant'Antonio Abate

Ospedale Civile Piombino

Damiano

AOU Careggi

Ospedale Pescia - Santi Cosimo e

Ospedale Torregalli - San Giovanni di

More than 1200 enrolled patients in 2018

Ongoing, 2290 until today

Response rate before surgery 31%

Response rate 1 month after surgery 74%





Objective

To determine how PROMs data can be used to detect differences in elective surgery and:

- provide insights whether variation is preference-sensitive or supply-sensitive;
- have stronger evidence regarding the appropriateness of orthopaedic elective surgery;





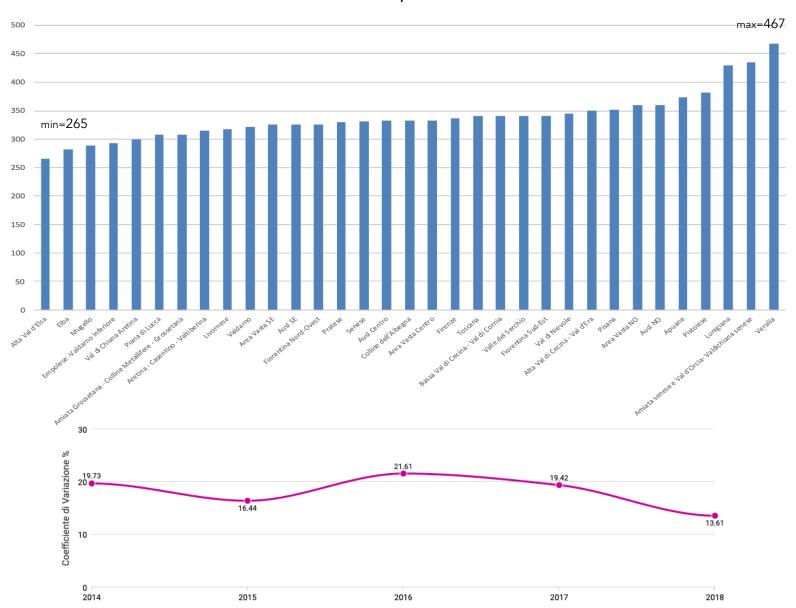


- Hip and knee replacement volumes and rates from 2018 administrative data.
- **PROMs data** from patients who underwent elective hip (n=410) or knee (n=225) replacement procedures in Tuscany.
- We computed **outcome scores using the Oxford Hip and Knee Score** scales (0-48) before, 1-month and 6-months after surgery.
- We compared patients' scores and improvements between hip and knee replacement.





Hip replacement
Treatment rates for 100,000 inhabitants - 2018

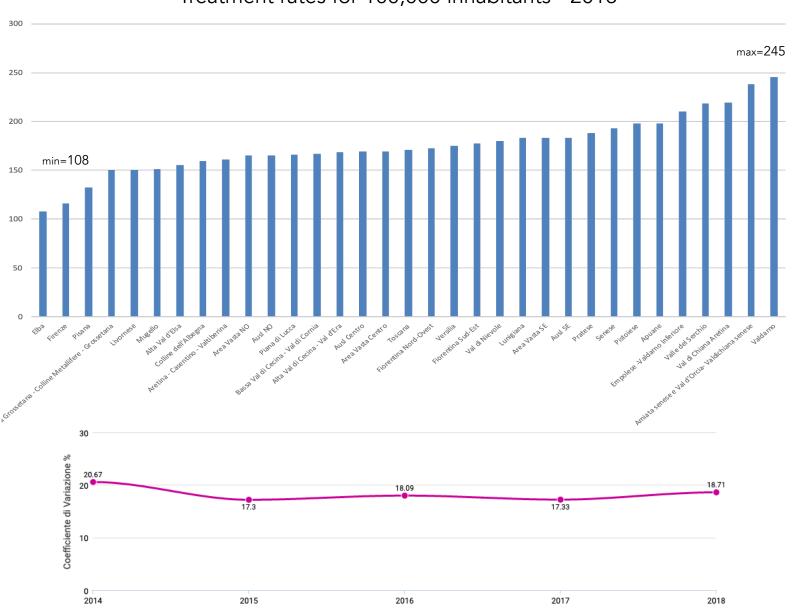






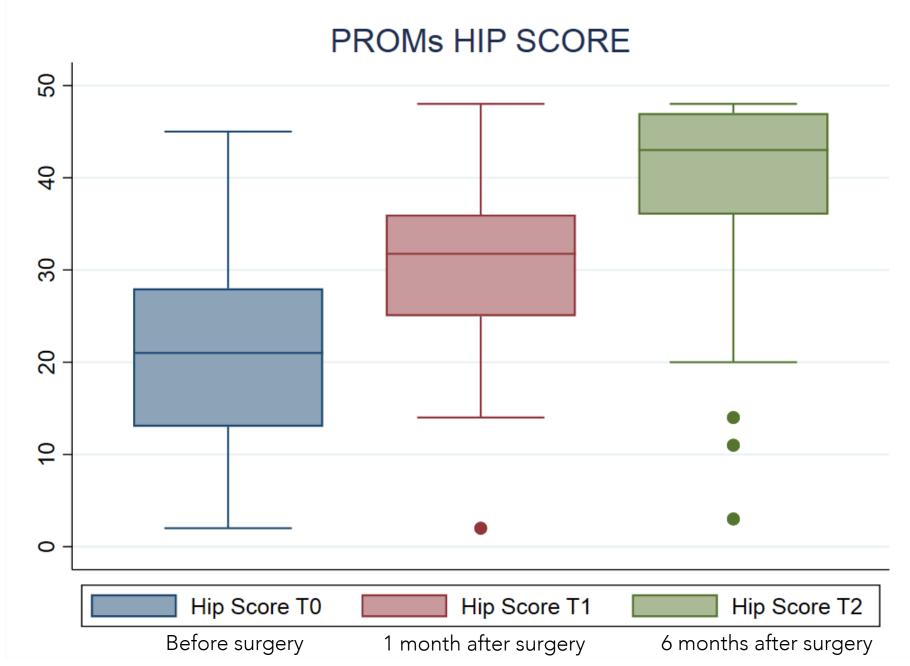
Knee replacement

Treatment rates for 100,000 inhabitants - 2018



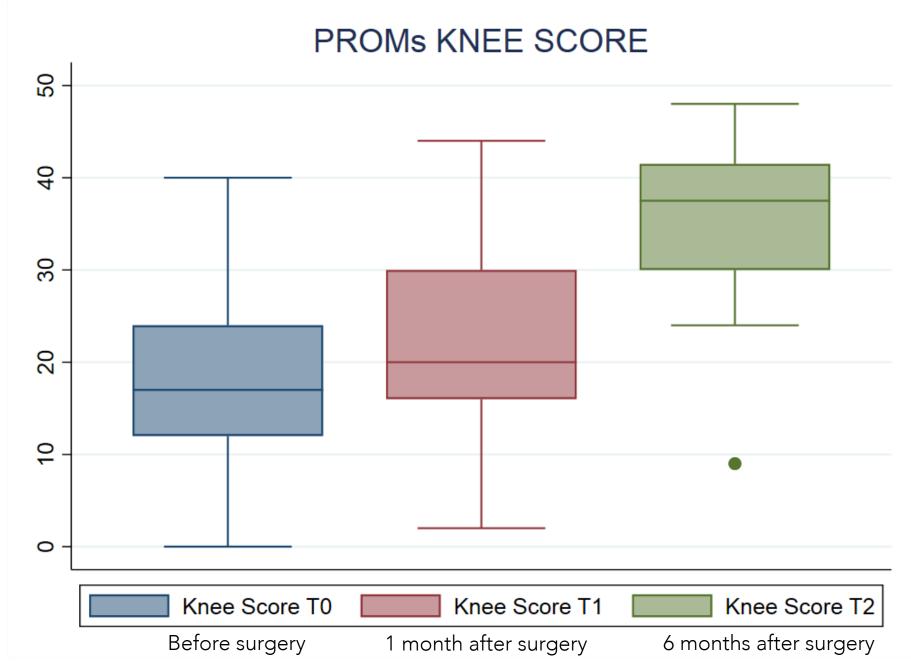








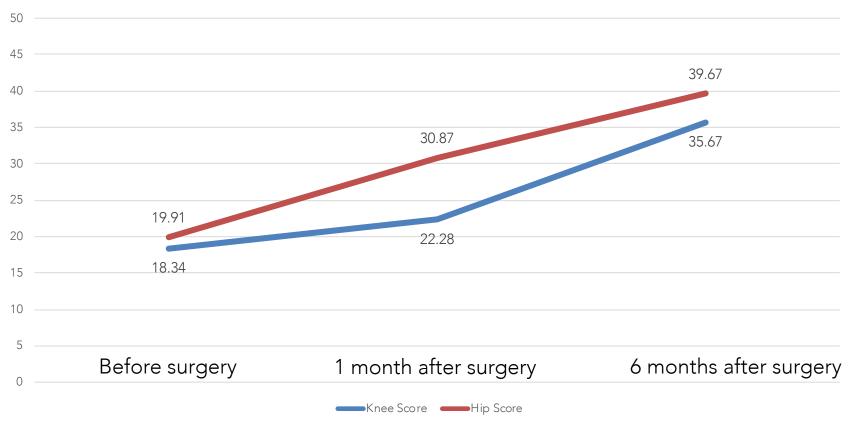








Comparison of Hip and Knee average scores

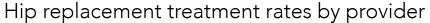


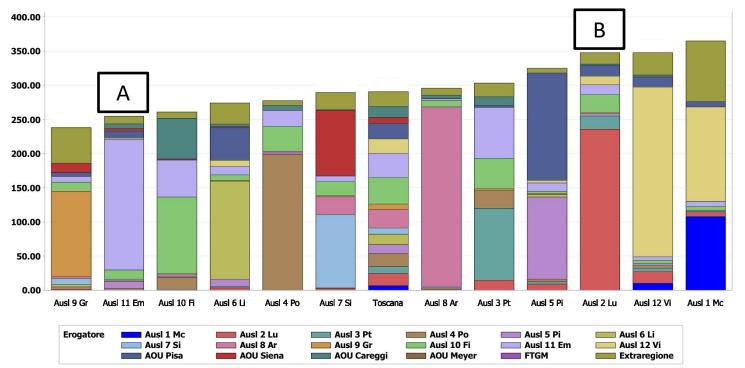




The differences between PROMs average scores and improvement observed might suggest that:

- knee replacement patients are more likely to face the risk of receiving inappropriate care
- while in the case of hip replacement there could be an under-use problem

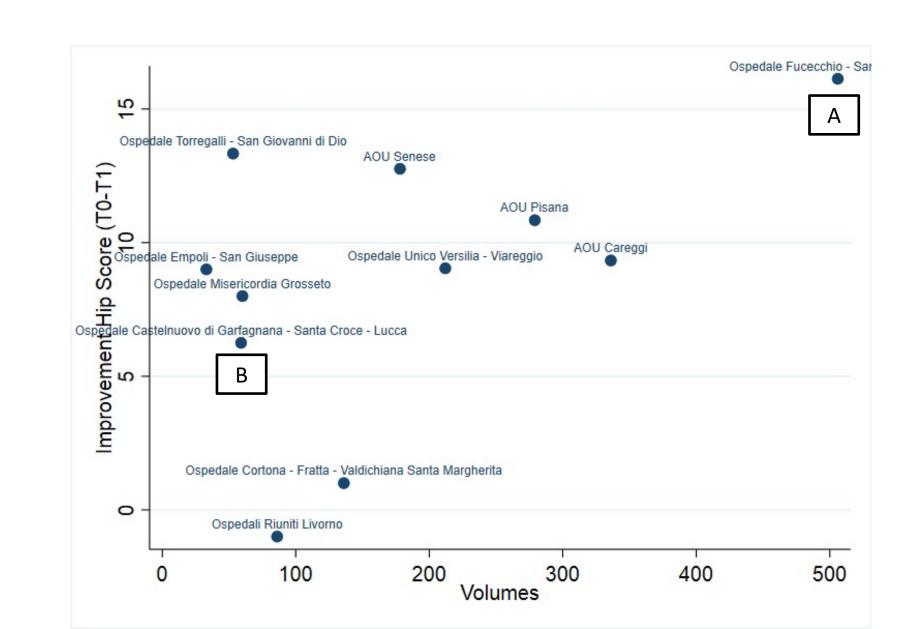








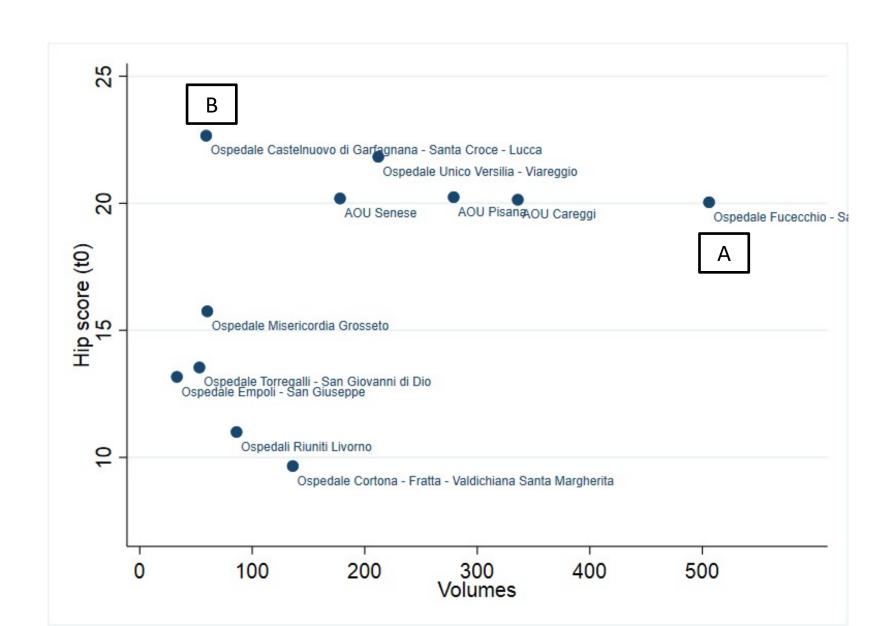
PROMs score improvement







PROMs baseline score

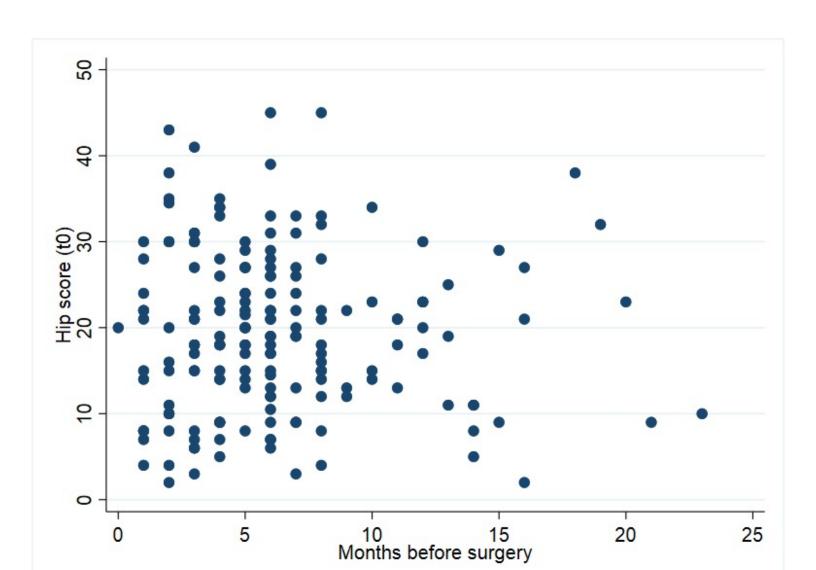






A further development

Use PROMs data as a planning tool and prioritise surgical interventions









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