

WENNBERG INTERNATIONAL COLLABORATIVE SPRING POLICY MEETING 2018

Working on avoidable variation among
performance of Italian Teaching Hospitals:
What is the role of the research activity?

Daniel Adrian Lungu

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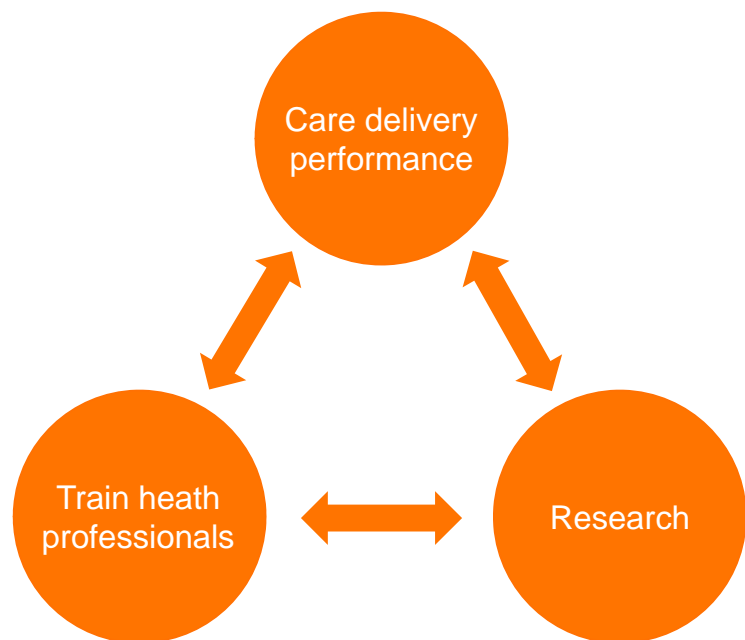
Smarter Health Care
National Research Programme



Scuola Superiore
Sant'Anna



The mission of Teaching Hospitals (THs)



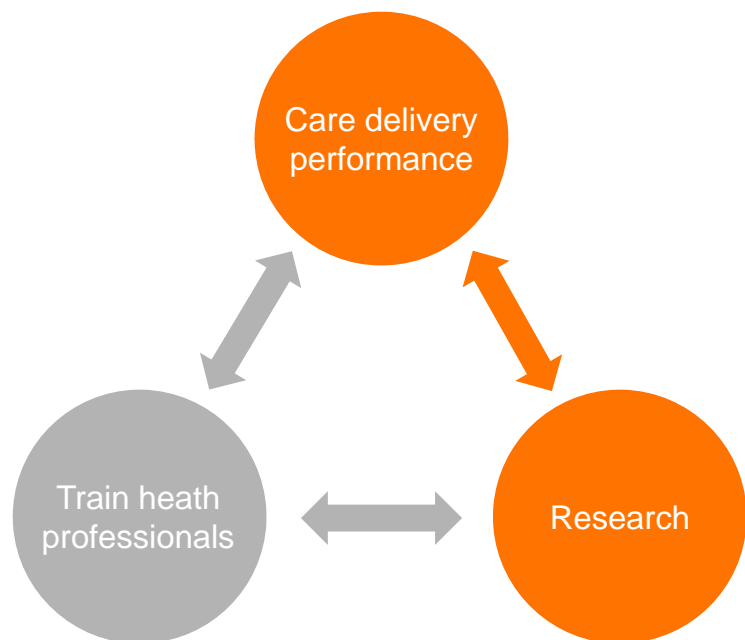
The Background

- Care delivery performance: THs vs. General Hospitals
- «Unwarranted variation» in care delivery performance of THs

The research question

- Which is the relationship among the 3 pillars?

The mission of Teaching Hospitals (THs)



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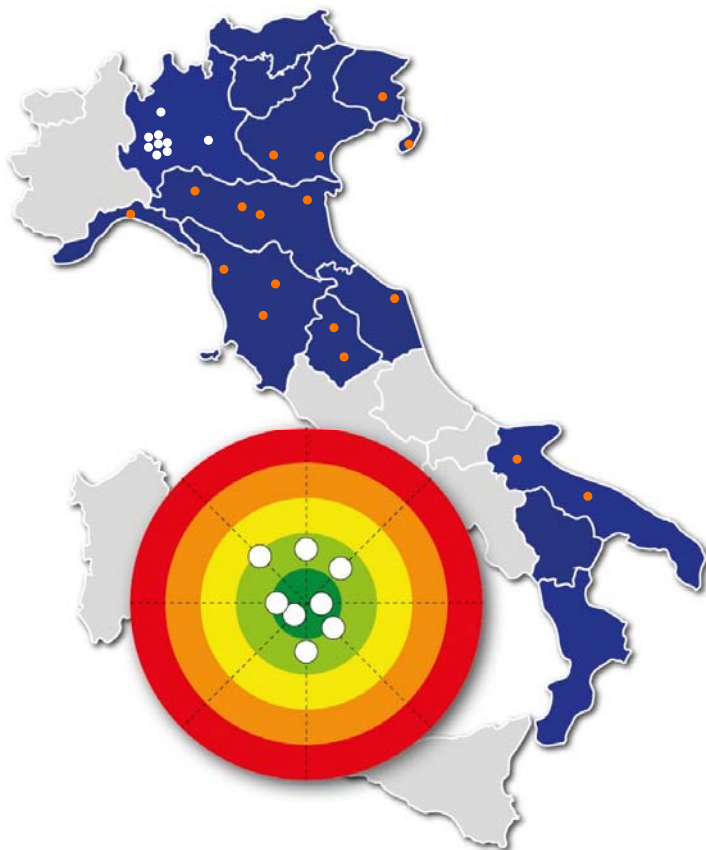
The research question

- Which is the relationship among the 3 pillars?

RQ: Is there a relationship between care delivery performance of THs and their research activity?

The starting point

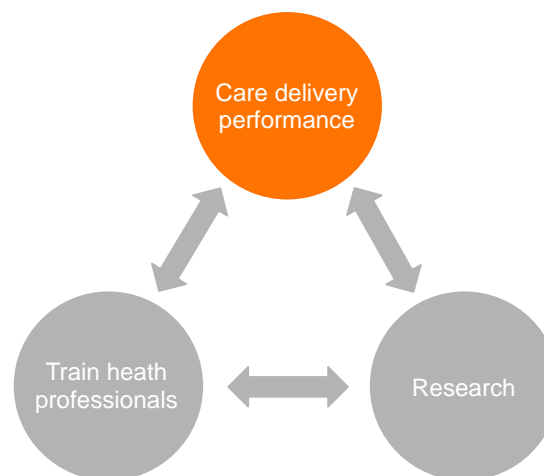
The experience of the Network of Italian Regions



- Started in 2008
- 13 regions
- More than 300 indicators
- Results presented in benchmark
- Since 2014, a specific Network for THs
- 27 THs

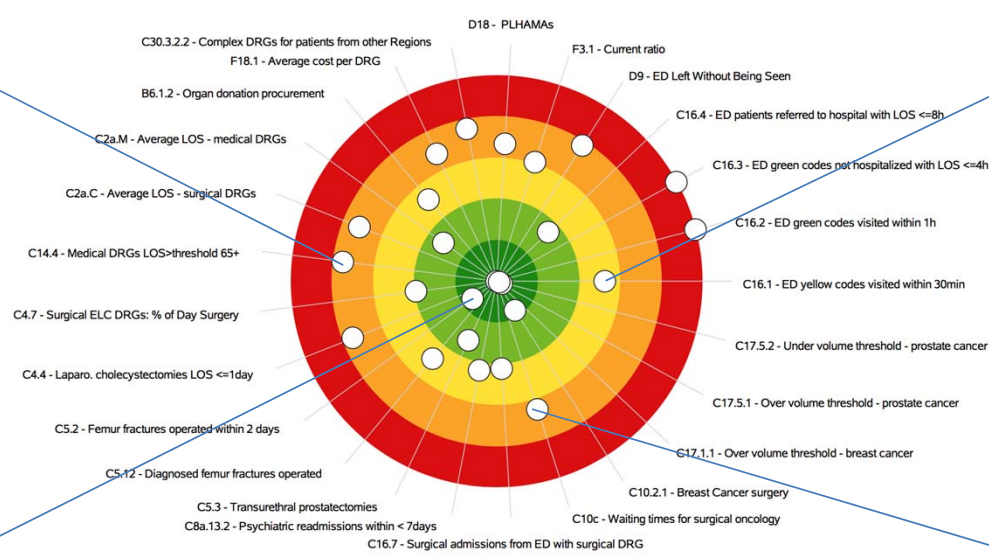
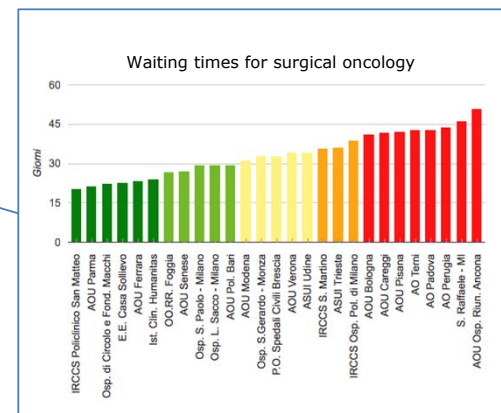
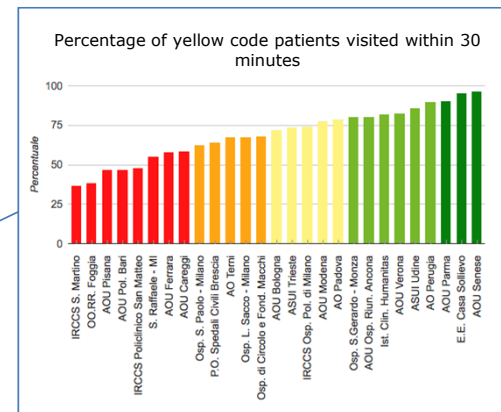
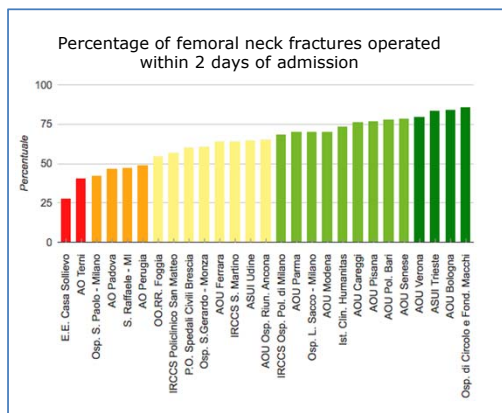
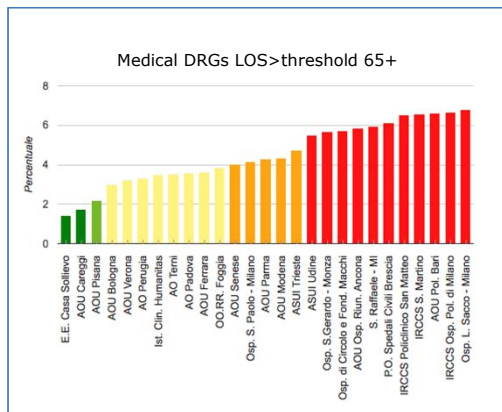
Methods (1)

- Data **17 THs**
- Year **2016**
- **25 indicators covering multiple dimensions**
- Evaluation from **1 to 5** based on benchmarking
- Created a composite indicator of care delivery performance by the arithmetic average of 25 single indicators



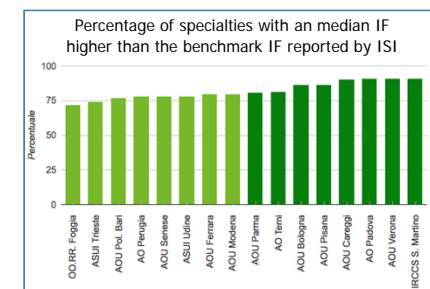
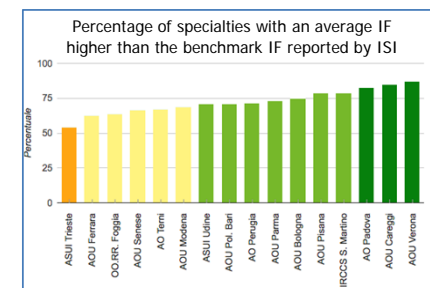
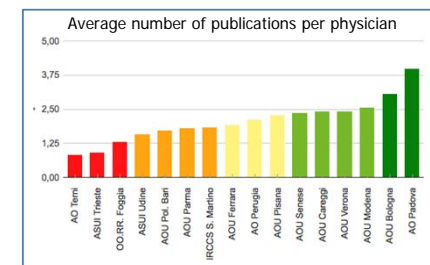
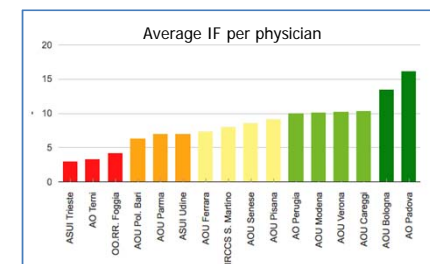
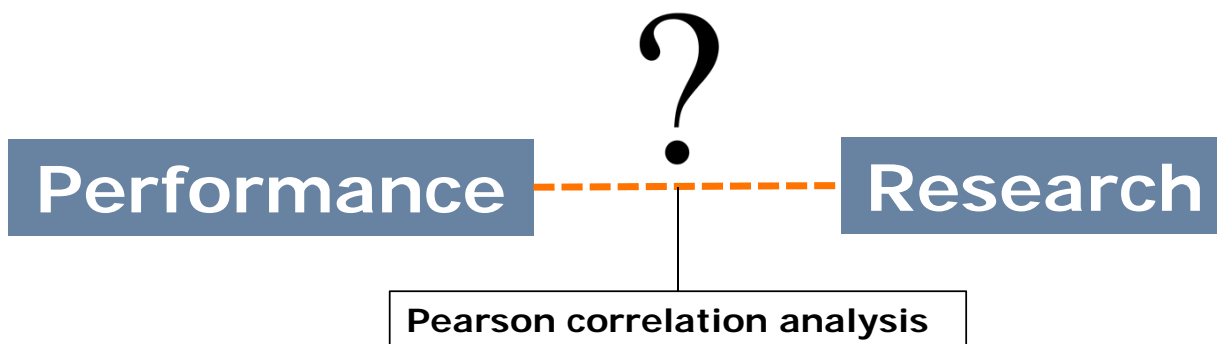
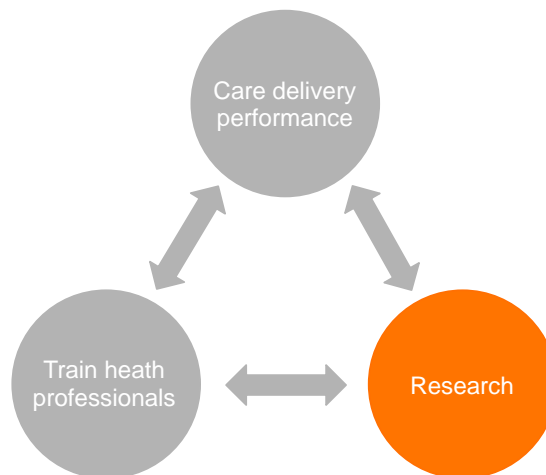
1.	Waiting times for surgical oncology
2.	Percentage of over-threshold medical admissions of patients ≥ 65 years
3.	Percentage of yellow code patients visited within 30 minutes
4.	Percentage of green code patients visited within 1 hour
5.	Percentage of green code patients not referred to hospital and with a length of stay ≤ 4 h
6.	Percentage of patients referred to hospital with a length of stay ≤ 8 h
7.	Percentage of surgical admissions from the ED with surgical DRG upon discharge
8.	Performance index for average hospital length of stay of acute surgical DRGs
9.	Performance index for average hospital length of stay of acute medical DRGs
10.	Percentage of hospital admissions for patients resident in other Regions - Complex DRGs
11.	Percentage of laparoscopic cholecystectomies performed in one day
12.	Percentage of Day Surgery admissions for "ELC surgical DRGs"
13.	Percentage of operated femur fractures of all diagnosed femur fractures
14.	Percentage of femoral neck fractures operated within 2 days of admission
15.	Percentage of transurethral prostatectomies
16.	Percentage of psychiatric patient readmissions within 7 days from discharge
17.	Percentage of hospitalized patients leaving against medical advice
18.	Patients leaving the Emergency Department without being seen (LWBS)
19.	Organ donation procurement: percentage of organ donors
20.	Percentage of admissions over the volume threshold for breast cancer
21.	Percentage of admissions over the volume threshold for prostate cancer
22.	Percentage of caesarean section deliveries (NTSV)
23.	Percentage of episiotomies (NTSV)
24.	Percentage of operative vaginal deliveries (use of forceps or vacuum)
25.	Percentage of breast-conserving or nipple/skin sparing surgery for breast cancer

Methods (2)

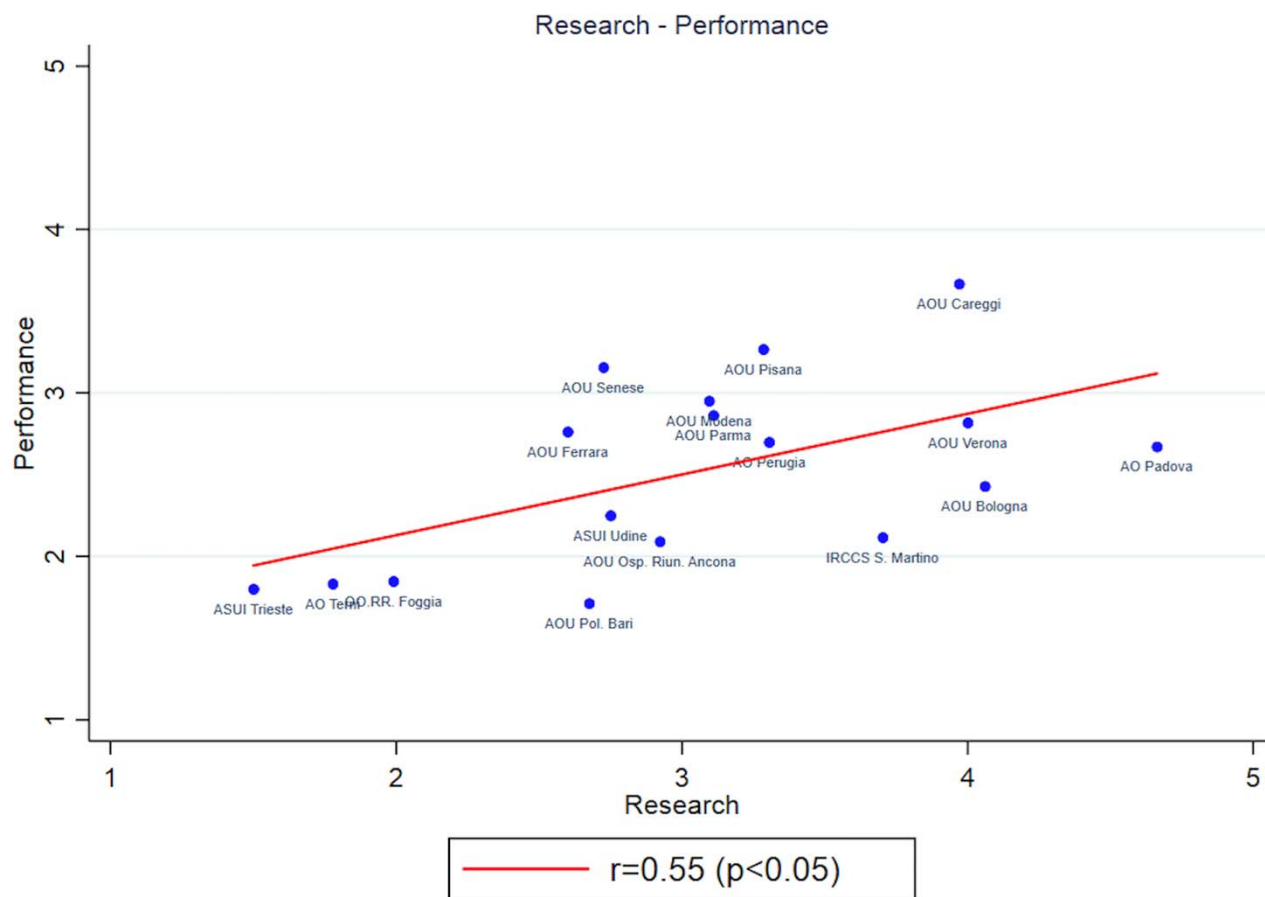


Methods (3)

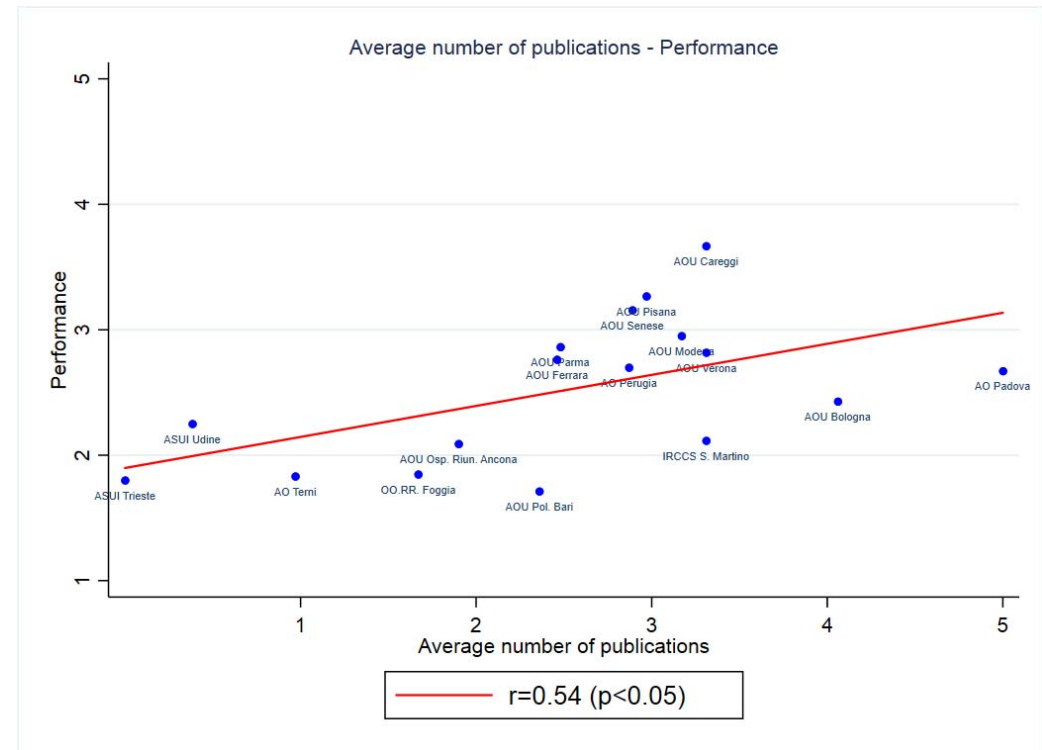
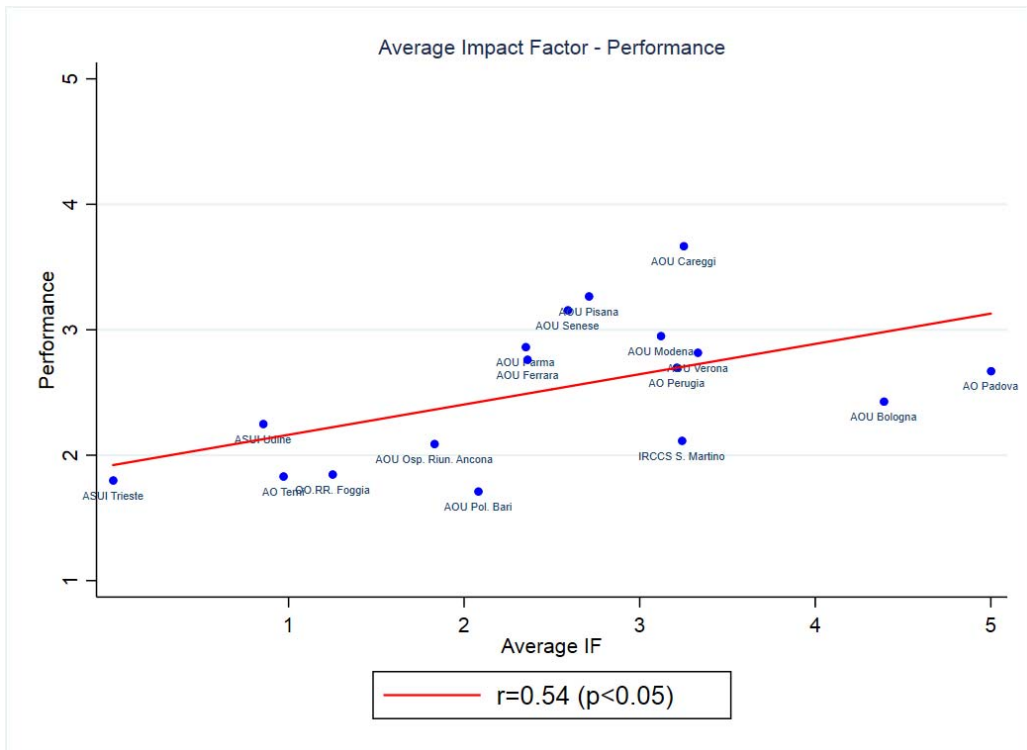
- 2014-2016 Web of Science publications
- **14.000+** physicians, both academic and nonacademic
- **30.000+** publications analysed
- 4 indicators



Research – Performance (1)



Research – Performance (2)

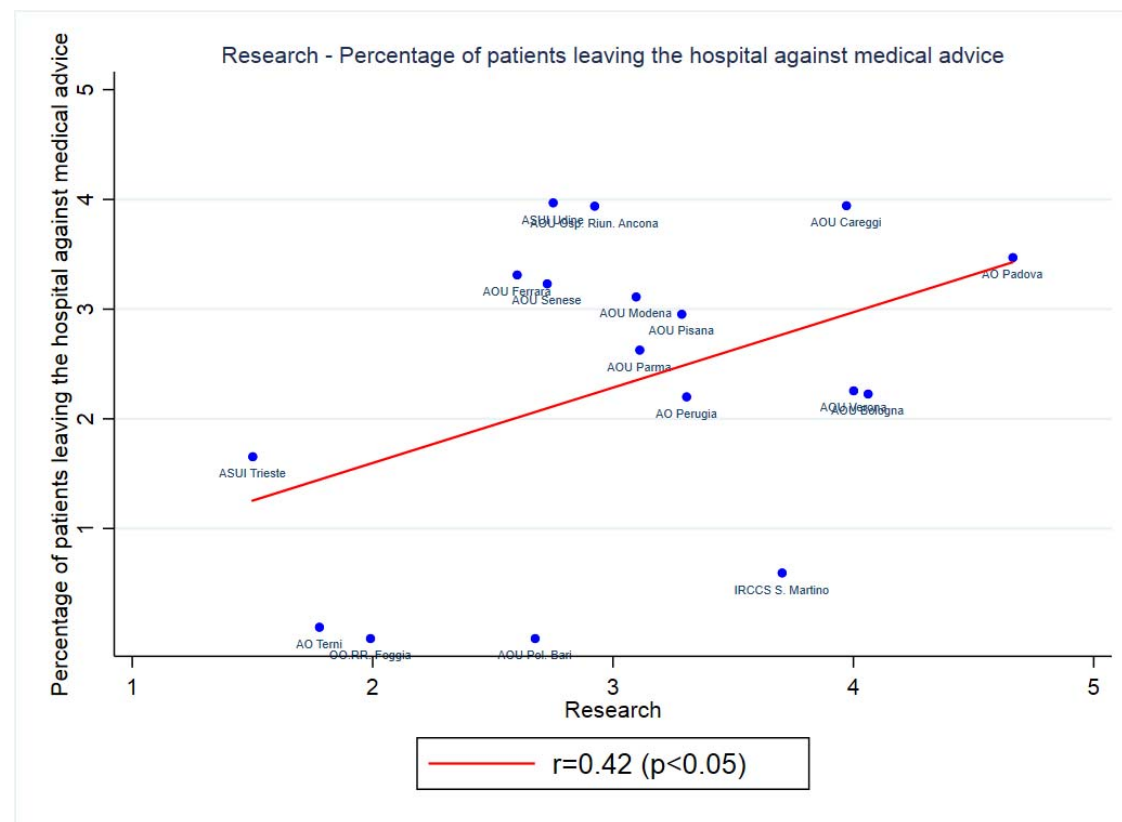


We further explored the relationship between research and:

- Patient satisfaction
- Attractions
- Financial sustainability
- Collaboration between academic and not academic researchers

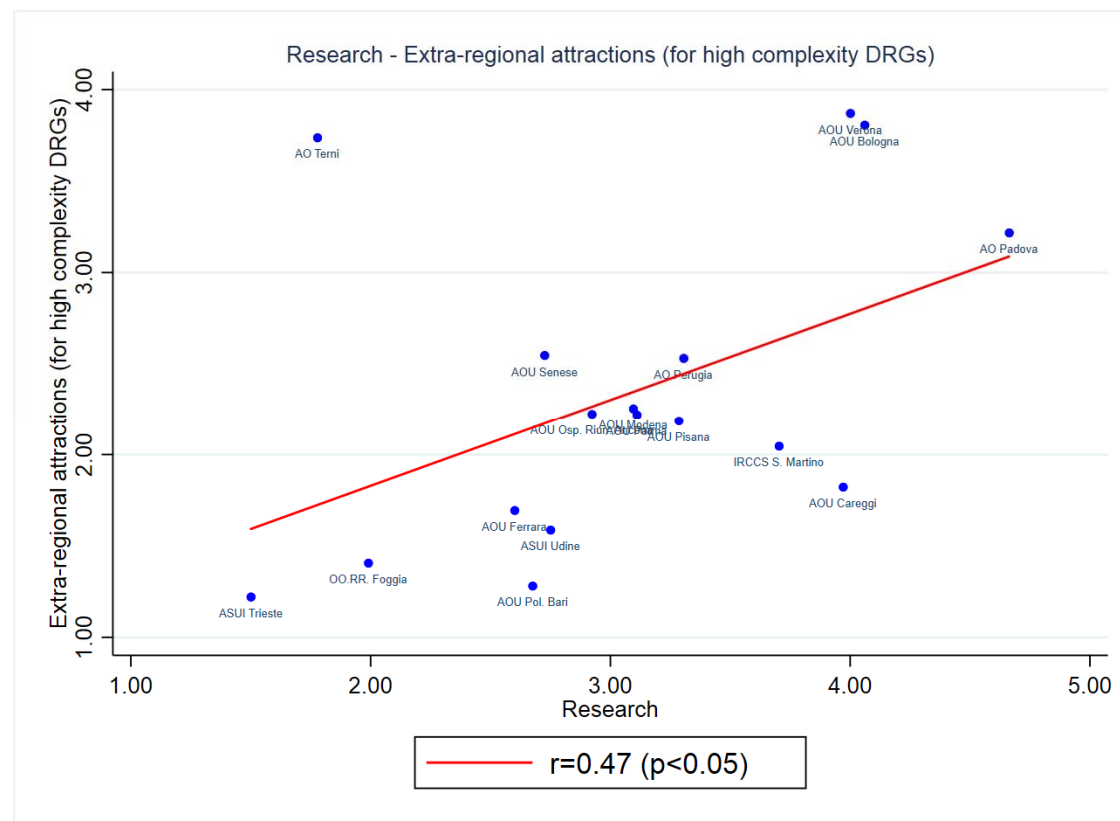
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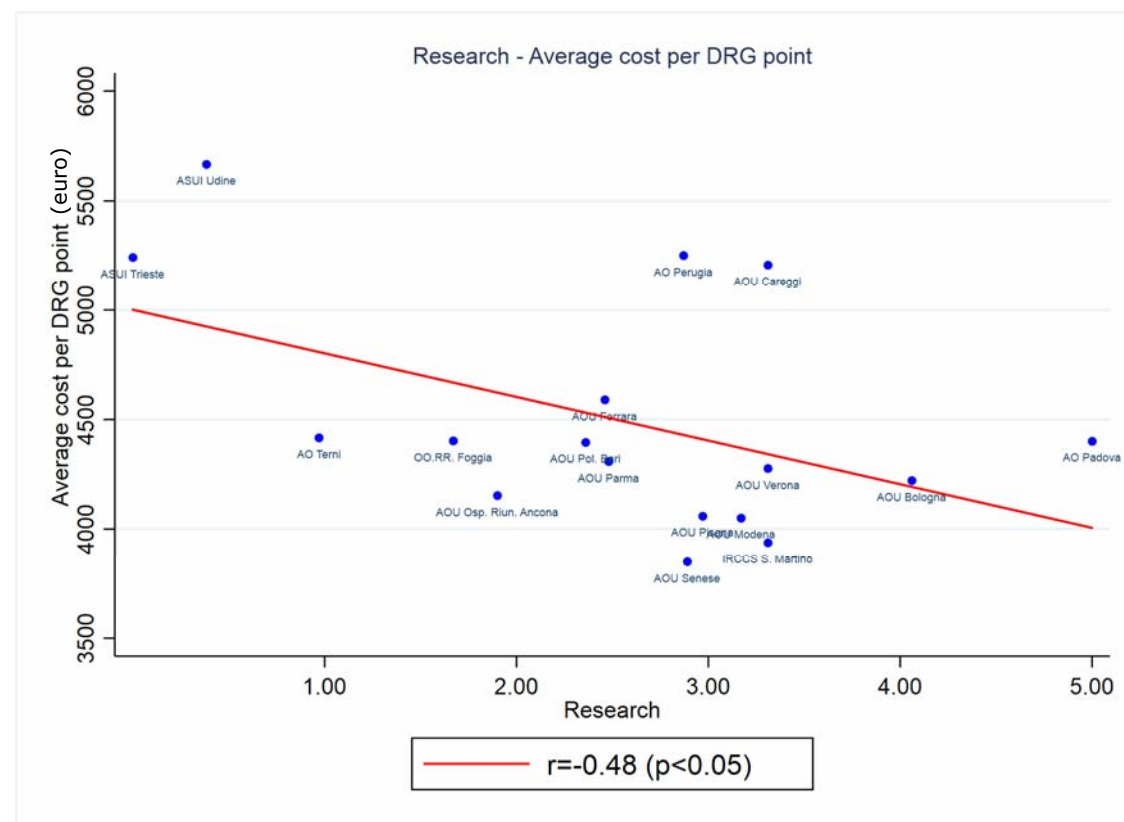
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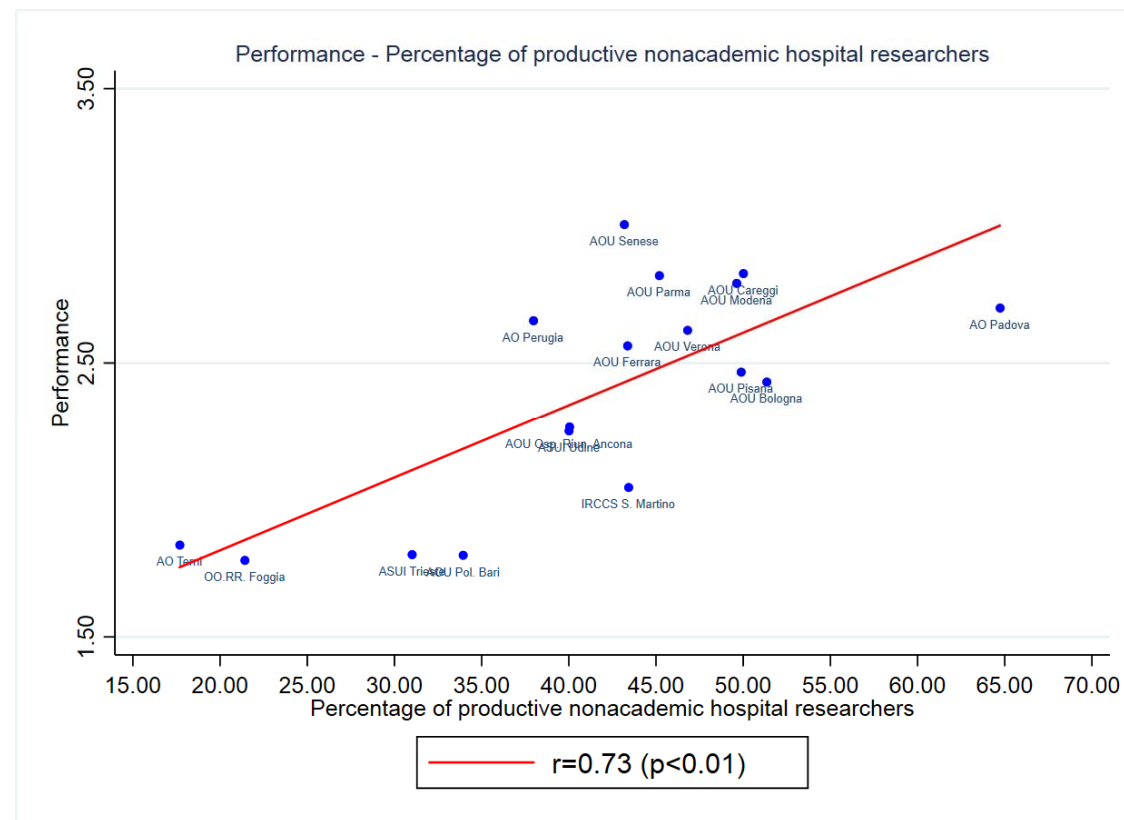
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* productive = at least 1 publication between 2014-2016

Conclusions

What is the role of research in THs?

- The research is a driver of care delivery performance as performance is a driver of good research activity
- Financing THs research in the long run can have a positive impact on performance, outcomes and financial sustainability
- The capacity to work together between academic and nonacademic researchers may be the driver of the virtuous circle that can link together research and care delivery performance.



- ✓ Add observations from other 10 THs
- ✓ Run trend analysis
- ✓ Dig deeper into single medical specialties



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