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Appropriateness of prostate specific antigen testing in a health maintenance organization – Unimed-BH

Valle EA, Kelles SMB, Amaral CFS, Carvalho LMA, Mendonça ICA, Bretas CG, Avelar SOS, Azevedo DC, Castro MSM, Bersan SAL

NATS Núcleo de Avaliação de Tecnologias em Saúde | HC UFMG Hospital das Clínicas | IATS | Unimed Belo Horizonte

Disclosure of potential conflicts of interest

- The authors declare no financial conflict of interest related to this project.
- The authors did not receive or will not receive any compensation with value that may be affected by the outcome of the study.

R1595/2000 Conselho Federal de Medicina (CFM) Resolução RDC 102/2000 (ANVISA)

Background

Unimed-BH

1 million
clients

5 thous
cooperate physicians

5 million
medical apointments/year

R$1,12 bi
Aported in local health system

85%
Clients' general satisfaction

258
Health services affiliated

106 thous
hospital admissions/year

Best
HMO outside Rio-São Paulo

Background

• Prostate cancer is the most common non-skin cancer in male gender worldwide and is the second leading men's cause of death from cancer in Brazil

• Prostate cancer screening is a matter of controversy in the literature, including prostate-specific antigen (PSA) tests

Recommend	Not recommend
American Cancer Society (2010)	U.S. Preventive Services Task Force (2008)
American Urological Association (2009)	United Kingdom National Screening Committee (2009)
European Association of Urology (2010)	Royal Australian College of General Practitioners (2009)
	Japanese Guideline for Prostate Cancer Screening (2009)
	INCA - Brazilian National Cancer Institute (2007)

Background

• Even those who recommend screening, they established criteria for using PSA tests.

Age interval
Frequency of examination
Relevant cut-off points
Association of tests (PSA & digital rectal examination)
Maximum age recommended

Objectives

Assuming that prostate cancer screening is valuable as a predictor of prostate cancer, the objectives were to evaluate:

- the appropriateness of PSA test indications
- its overall expenditures with this test in Unimed-BH
- potential savings if tests were performed exclusively based on recommended criteria

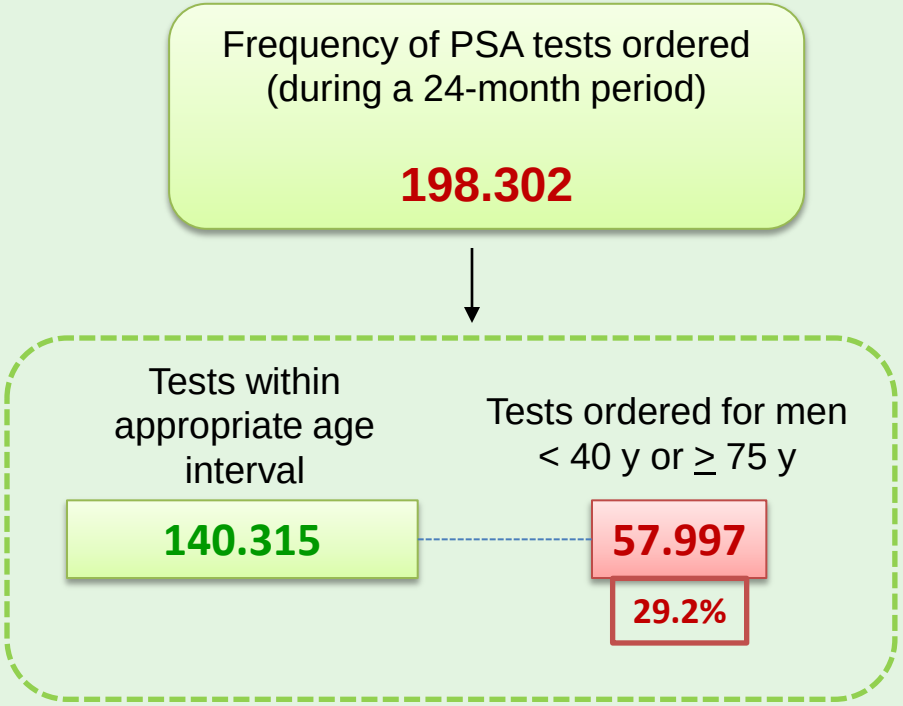
Methods

• All PSA tests recorded on Unimed-BH administrative database from August 2008 to July 2010 were analyzed.

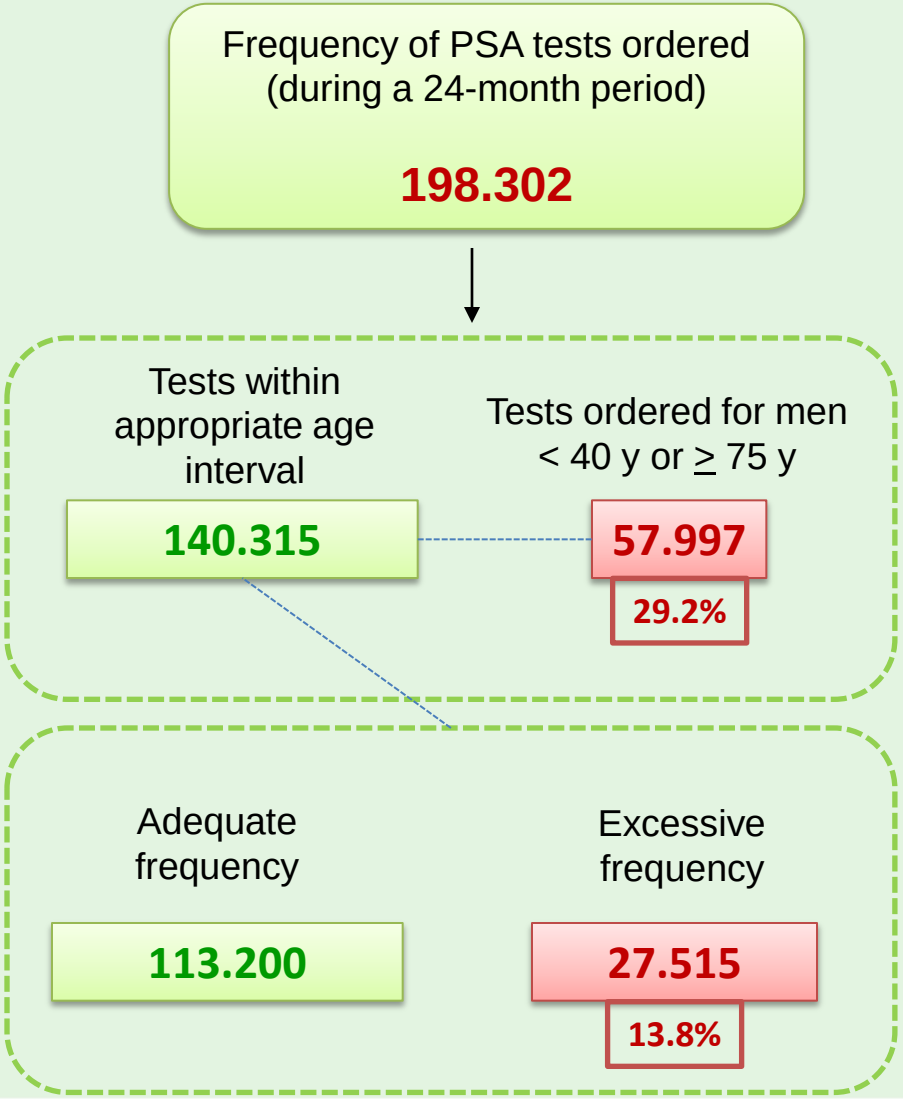
• A protocol for appropriate PSA tests indications, approved by consulting committee of specialists, was defined as follows:

Criteria description	Range
Age interval for screening (in years)	41 to 74
Frequency of examination	Yearly (if ICD code ≠ C61) Up to 4 times/year (if ICD code = C61)

Results


Frequency of PSA tests ordered
(during a 24-month period)
198.302
Tests within appropriate age interval
140.315
Tests ordered for men < 40 y or ≥ 75 y
57.997
29.2%

Results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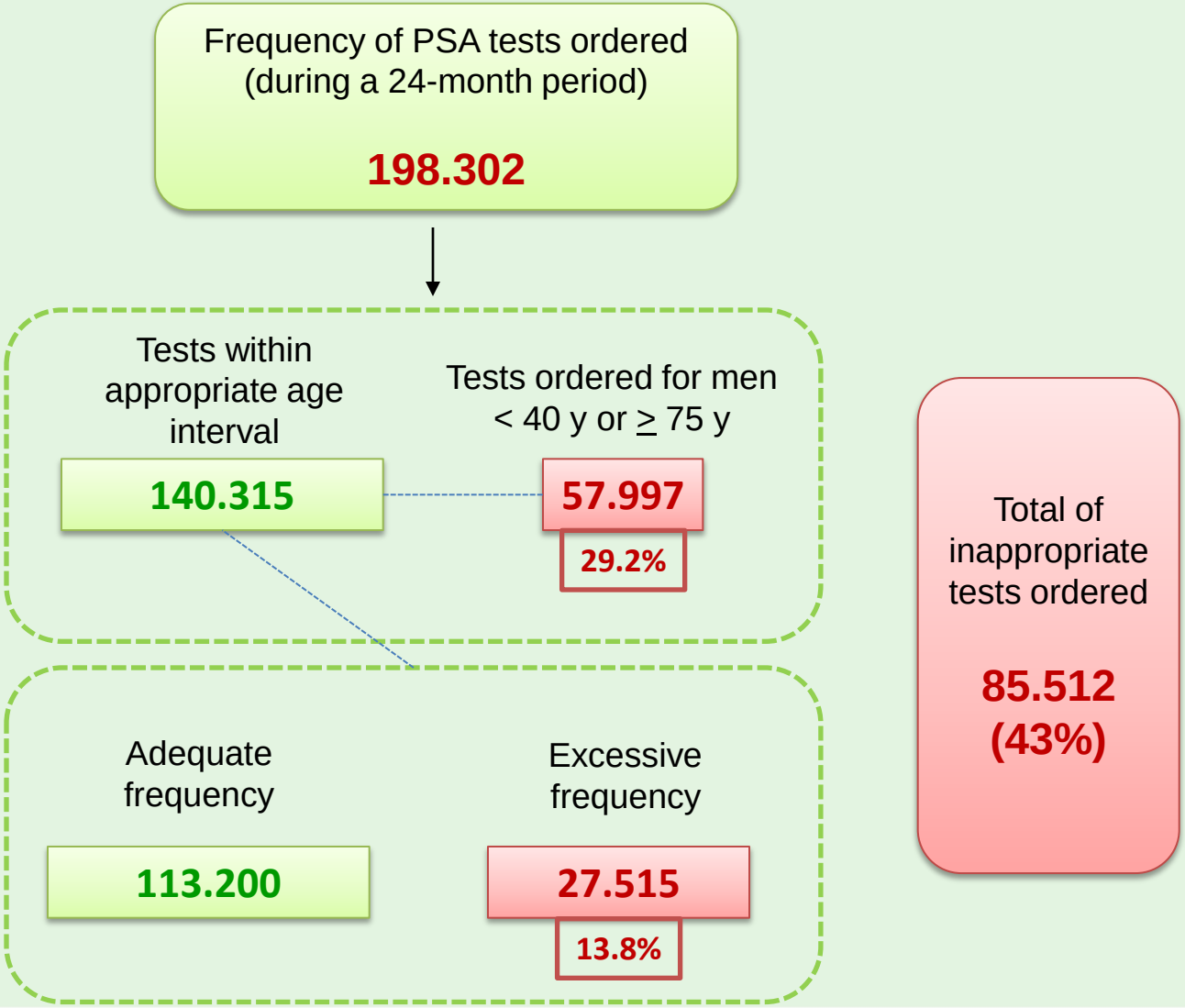
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Excessive frequency
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13.8%
Total of inappropriate tests ordered
85.512 (43%)

Results

Total expenditure with

PSA tests in two years

R$ 6,2 million

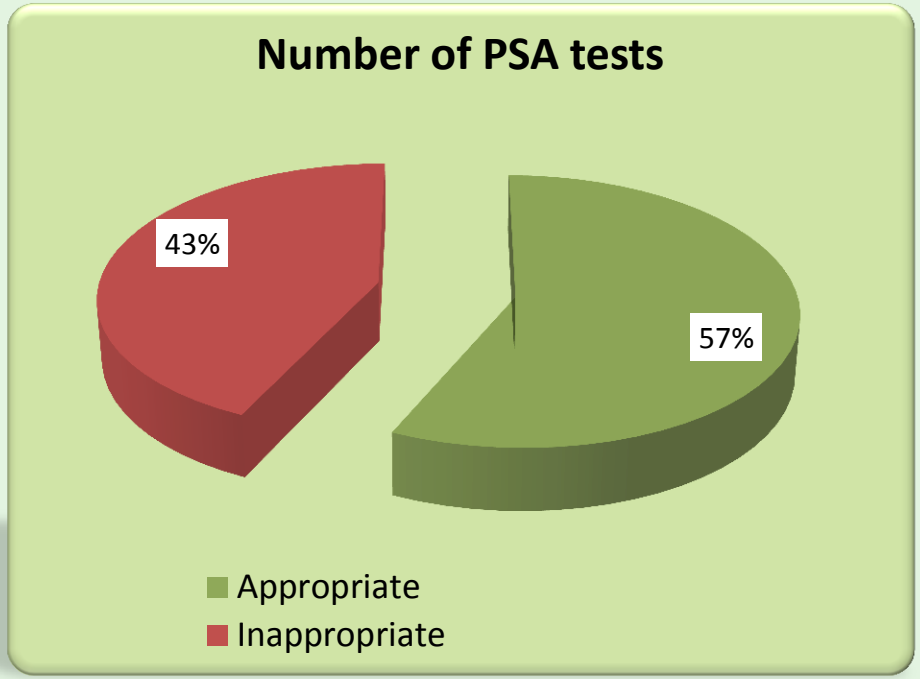
($ 3.7 million)

Estimated expenditure with

inappropriate tests ordered

R$ 2,8 million

($ 1.6 million)



0.8 million dollars per/year without clinical impact!

Conclusions

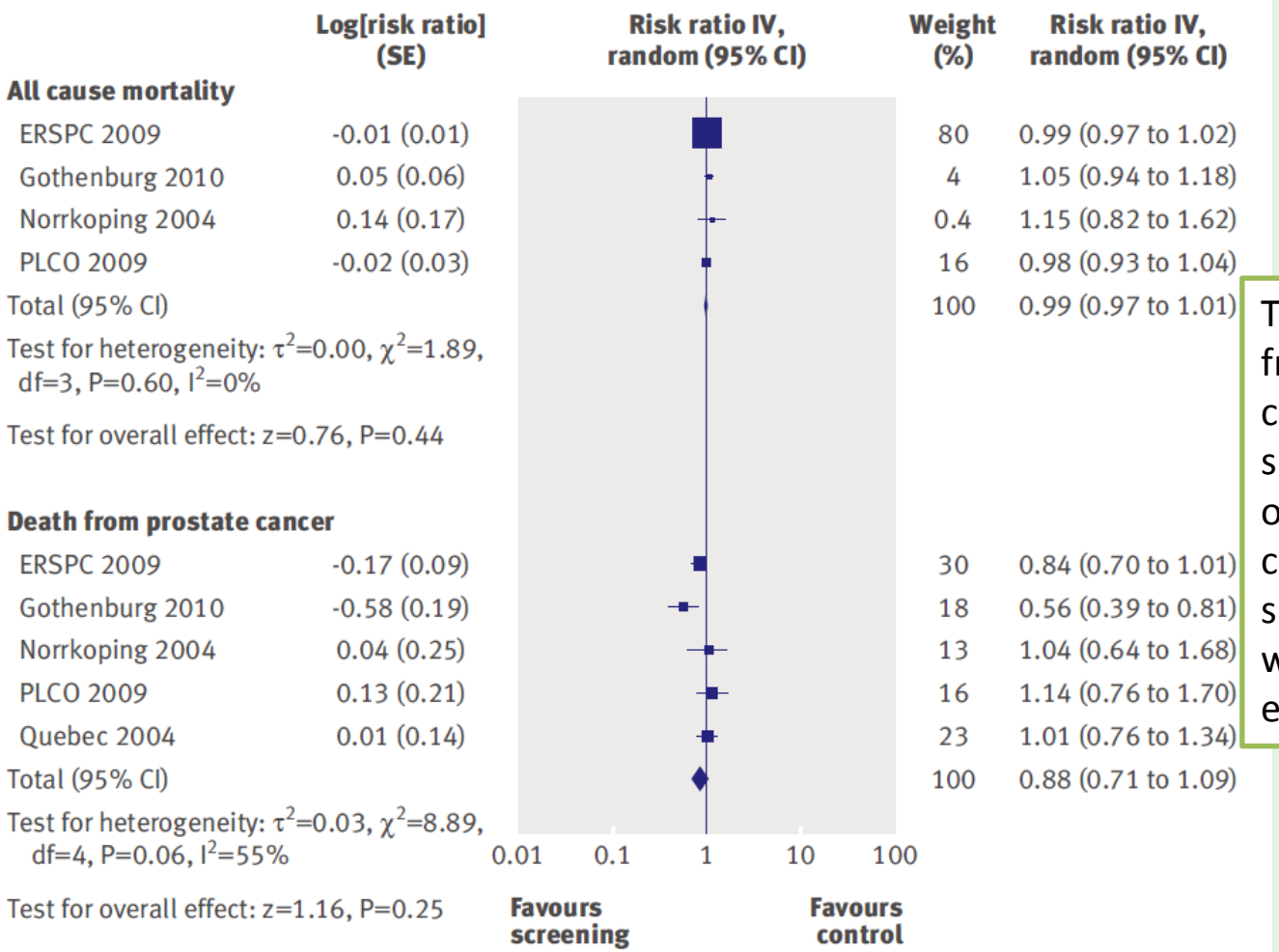
• Prostate cancer screening, in this real life cohort, was largely inappropriate.

• Adherence to a simple evidence-based protocol could result in significant savings.

• However, even according to protocols, patients' benefit with PSA screening is a matter of debate worldwide.

Conclusions

Is it worthy?



The existing evidence from randomised controlled trials does not support the routine use of screening for prostate cancer with prostate specific antigen with or without digital rectal examination.

Djulbegovic et al, BMJ 2010

Thank you

MSc Silvana Kelles *(skelles@unimedbh.com.br)*