

### School of Management and Law

# Swiss Medical Board: What is the impact on routine care in Switzerland? A case study



**Building Competence. Crossing Borders.** 

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### Swiss Medical Board: What are the tasks of the SMB?

The Swiss Medical Board (SMB) produces Health Technology Assessment (HTA) reports and evidence-based recommendations

#### For which services?

Controversial but already reimbursed diagnostic and therapeutic services under the Swiss social insurance scheme (§: "effective – appropriate - efficient")

#### Examples:

- Mammography screening for breast cancer
- -Statins for primary prevention of CVD

#### Purpose of the SMB:

Recommendations for clinical care in Switzerland

No legal mandate to formulate reimbursement decisions



# **Swiss Medical Board: Aim of Impact Evaluation**

#### Aim of impact evaluation:

To assess the impact of Swiss Medical Board (SMB) reports on routine care in Switzerland

(Evidence generation for Health Services Research)

#### **Study question:**

What is the impact of two selected SMB reports?

-Report 1 (2011): Prostate specific antigen (PSA) screening for prostate

cancer

-Report 2 (2009; update 2013): Treatment for rupture of the anterior cruciate ligament [ACL] of the

knee

#### Research team:

Winterthur Institute of Health Economics, Zurich University of Applieds Sciences

Management and Law

Caiontifically independent

### Swiss Medical Board: Impact Evaluation PSA-Screening Report

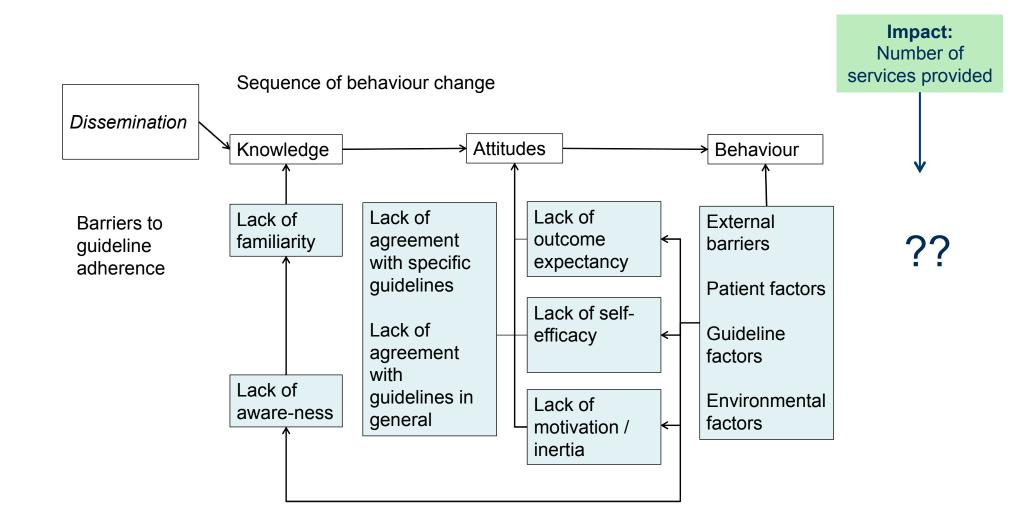
swiss medical board

# Stellenwert des PSA-Wertes bei der Früherkennung des Prostatakarzinoms



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## Swiss Medical Board: Impact Evaluation Conceptual Framework of behaviour change





## **Swiss Medical Board: Impact Evaluation Methods (1)**

#### **Methodological Expert Group:**

- -Clinicians (GPs; traumatologist)
- Experts from social insurance system;
- Epidemiologist (expertise in guideline implementation);
- -Expert for patient advocacy

**Design:** Observational study with interrupted time series analysis

#### **Data sources:**

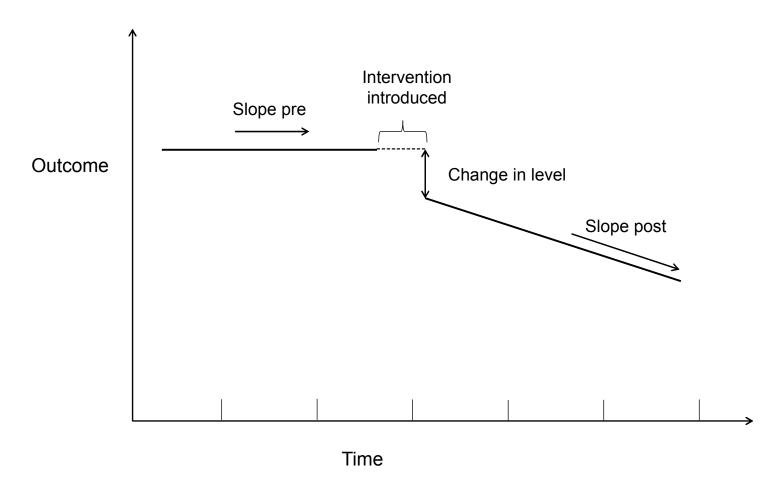
Claims data (Helsana): quarterly PSA tests in 662,874 outpatients; aged

50 to 70 years (2005 to 2013)

Registry data (SSUV\*-DB): annual rates of ACL repair surgery in 101,737 patients with knee injury (1990 to 2011).

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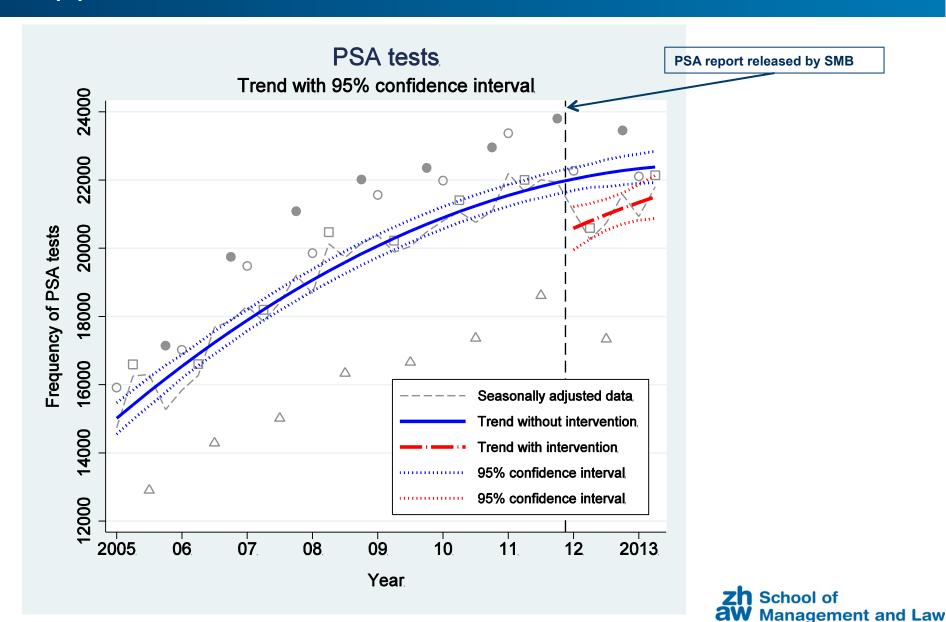
## Swiss Medical Board: Impact Evaluation Methods (2): interrupted time series analysis



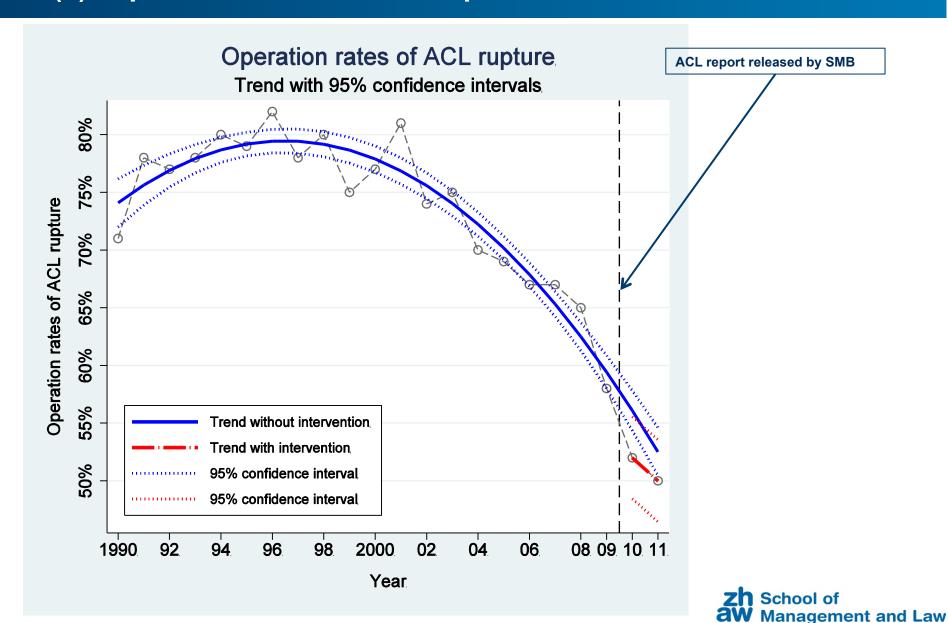
Source: Adapted according to Matowe et. al., Clinical Radiology 2002(57):575-78



## **Swiss Medical Board: Impact Evaluation Results (1): Number of PSA tests over time**



### Swiss Medical Board: Impact Evaluation Results (2): Operation rates of ACL rupture over time



### **Swiss Medical Board: Impact Evaluation Conclusions**

#### **Conclusions:**

- -Some evidence of a possible change in services
- -However, no sustained and significant impact of SMB recommendations on the provision of services (i.e. the number of PSA tests or the operation rate of ACL rupture)
- Longer term data are needed

#### **Limitations:**

- Observational study (despite statistical adjustment residual confounding by cointerventions possible)
- -Case study of 2 SMB reports only (Do results apply to other SMB reports?)
- Few post-intervention observations



## Swiss Medical Board: Impact Evaluation Further reading...

Established in 1871

# Swiss Medical Weekly Formerly: Schweizerische Medizinische Wochenschrift

The European Journal of Medical Sciences

Original article | Not yet published, doi:10.4414/smw.2020.14140

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Impact evaluation of Swiss Medical Board reports on routine care in Switzerland: a case study of PSA screening and treatment for rupture of anterior cruciate ligament

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#### Disclosures

The study was commissioned by the Funding Body of the Swiss Medical Board. The funding source had no influence on design of the evaluation; on the selection, analysis, and interpretation of the data; on the writing of the manuscript; and the decision to submit the manuscript for publication.



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# **Swiss Medical Board: Impact Evaluation**

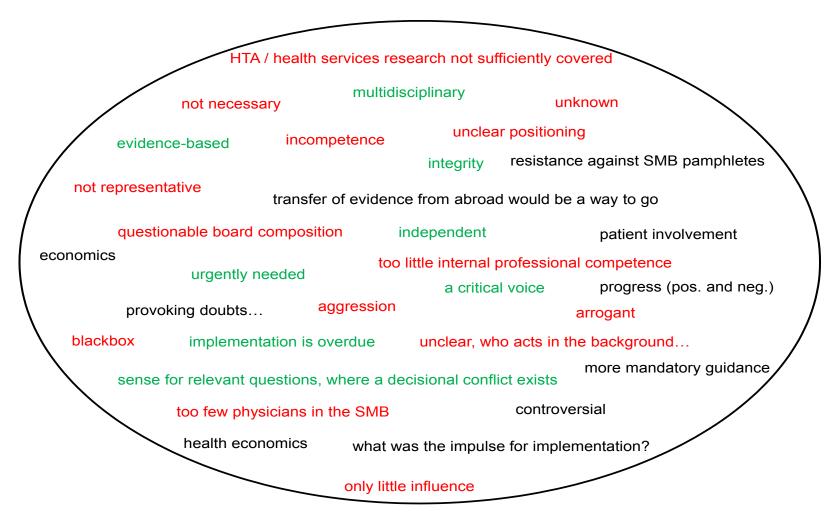
What does all that mean?

Is the work of the SMB meaningless...?



### Swiss Medical Board: Possible reasons for the results: Attitudes of physicians

Interview: "Please give three spontaneous associations, when you think about the Swiss Medical Board."



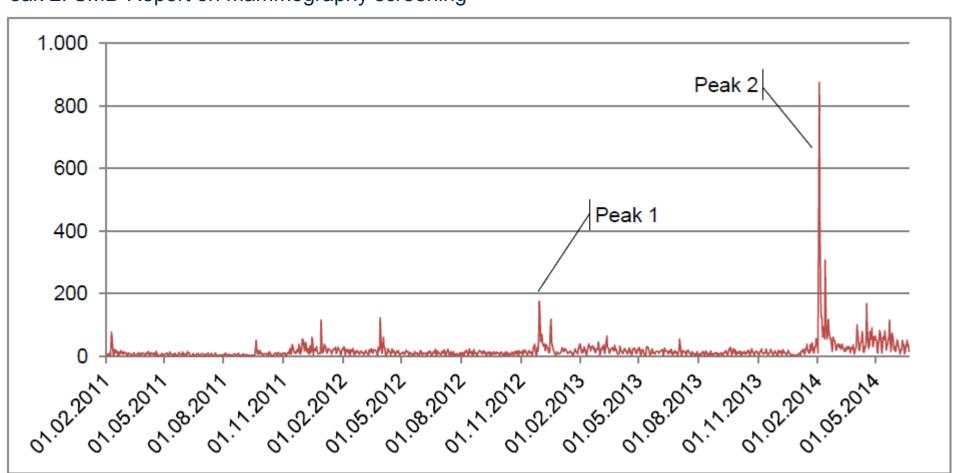
### Swiss Medical Board: Possible reasons for the results: Dissemination

#### Web clicks (per day) on the homepage of the Swiss Medical Board

ACL report: 2009 + 2013; PSA report: 2011;

Peak 1: PSA + ACL patient leaflets;

Peak 2: SMB-Report on mammography screening



# Swiss Medical Board: Impact Evaluation

What does all that mean?

**Open questions:** 

- Have other PSA recommendations also had no effect?

**American Urologic Association Guidelines in 2009:** 

- no routine PSA screening for men aged 40 to 54
- no PSA screening for men aged 55 to 69 without shared decision making
- Which impact is possible, when ALC-repair rates are already declining?



### **Impact Evaluation internationally**

#### Some examples:

Only small decline in PSA screnning (registry data) for men over 75 years after recommendation not to screen this age group <sup>1</sup>

Minimal decline at best in PSA screnning (self report) for men over 75 years <sup>2</sup>

No decline in mammography screening for women aged 40 to 49 in the US despite recommendation not to screen this age group <sup>3</sup>

Impact on ACL repair rates: we found no data....

Significant decline in HRT after Womens Health Initiative trial (2002)...

<sup>&</sup>lt;sup>3</sup> Sammon, Jesse D., et al. "Contemporary nationwide patterns of self-reported prostate-specific antigen screening." *JAMA internal medicine* 174.11 (2014): 1839-1841.



<sup>&</sup>lt;sup>1</sup> Pace, Lydia E., Yulei He, and Nancy L. Keating. "Trends in mammography screening rates after publication of the 2009 US Preventive Services Task Force recommendations." *Cancer* 119.14 (2013): 2518-2523.

<sup>&</sup>lt;sup>2</sup> Howard, David H. "Declines in prostate cancer incidence after changes in screening recommendations." *Archives of internal medicine* 172.16 (2012): 1267-1268.

### **Impact Evaluation internationally**

#### HEALTH TECHNOLOGY ASSESSMENT

VOLUME 19 ISSUE 67 AUGUST 2015 ISSN 1366-5278

# The impact of the National Institute for Health Research Health Technology Assessment programme, 2003–13: a multimethod evaluation

Susan Guthrie,\* Teresa Bienkowska-Gibbs, Catriona Manville, Alexandra Pollitt, Anne Kirtley and Steven Wooding

RAND Europe, Cambridge, UK

#### **Main conclusions:**

Impact on patients exists....(e.g. via change in practice)

Areas of improvement are clearly stated... (e.g. support dissemination; good relationship with researchers; continued monitoring)



### **Impact Evaluations**

### What could be the "impact of impact evaluations"?

- -Increased awareness to evaluate the impact in real world settings
- Evidence-based information about the impact
- Possible sources for improvements of recommendations
- Contribution to increase value and reduce waste in health care

But this has to be shown.....



#### **Swiss Medical Board: Impact Evaluation**

### Thank you for your attention!

Do you have any questions / comments...?

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