



Pharmacoepidemiological aspects of the cost of pain in Austria

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The opinions presented here are exclusively those of the authors. They are not necessarily identical with those of the Department, the Main Association of Austrian Social Security Institutions (MASSI), its Advisory Committees or its management.

Conflict of interest:

None of the authors has any conflict of interest to report.



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- Introduction
 - Health Care System and Reimbursement in Austria
 - Social aspects of pain medication in general
 - Timeline
 - Hypothesis
- Methods
- Results
- Diskussion and Interpretation



Drug Approval vs. Reimbursement

- Basic differences between drug approval and reimbursement:
Different questions asked, different requirements have to be met....

Marketing Authorisation

Can it work?

Does it work in practice?

Is it worth it?

Reimbursement

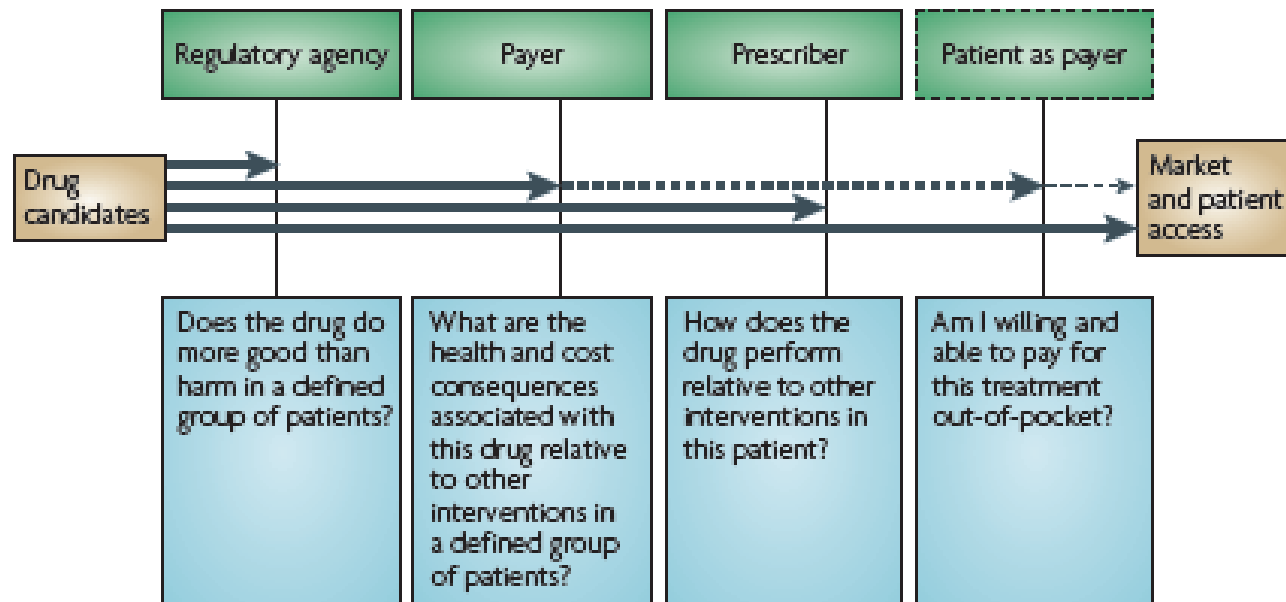
Haynes B. Can it work? Does it work? Is it worth it? BMJ 319(7211):652-3, 1999.



Drug Approval vs. Reimbursement

Relative efficacy of drugs: an emerging issue between regulatory agencies and third-party payers

Hans-Georg Eichler, Brigitte Bloechi-Daum, Eric Abadie, David Barnett, Franz König and Steven Pearson

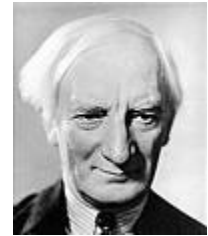




Societal Impact of Reimbursement

- Reimbursement of pharmaceuticals as an important part of „delivering“ health care, because in practice.....
- Reimbursement decisions have to obey legal ethical, social, economic and scientific “rules”.
- Systems of reimbursement:

“Beveridge Systems” government-provided health care



“Bismarck system” by independent, non-profit statutory institutions.

(e.g. van der Zee, J. and M. Kroneman, *Bismarck or Beveridge: a beauty contest between dinosaurs*, *BMC Health Services Research*, 7(1): p. 94, 2007; *Bismarck versus Beveridge: Social Insurance Systems in Europe* CESifo DICE Report 2008 [cited 4/2008; 69-71])





Health care system in Austria

- Compulsory insurance and universal coverage.
- „Bismarck System“, most Austrians insured based on place of work or profession and funded by contributions of employees and employers.
- 98% of patients covered by social (statutory) health insurance based on Austrian Social Insurance Law.
- 22 social insurance institutions, of which 19 are for health, organized into the Federation of Austrian Social Insurance Institutions (HVB), including three social insurance institutions that cover accidents and pensions.

(e.g. Anon. *Healthcare systems in transition, summary Austria*, www.euro.who.int/duocumente/e890201sum.pdf;

Spanninger, Vogler, Habl et al, Pharmaceutical Pricing and Reimbursement Information- Austria, 2007).



Health care system in Austria

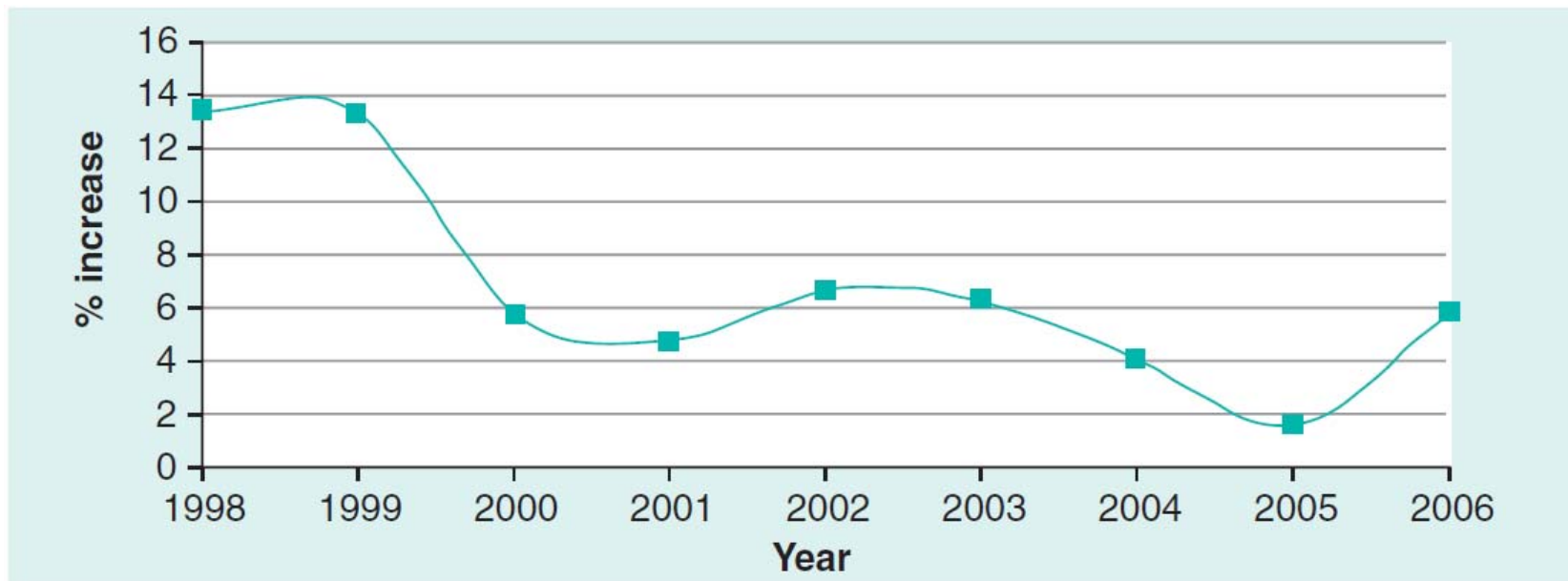
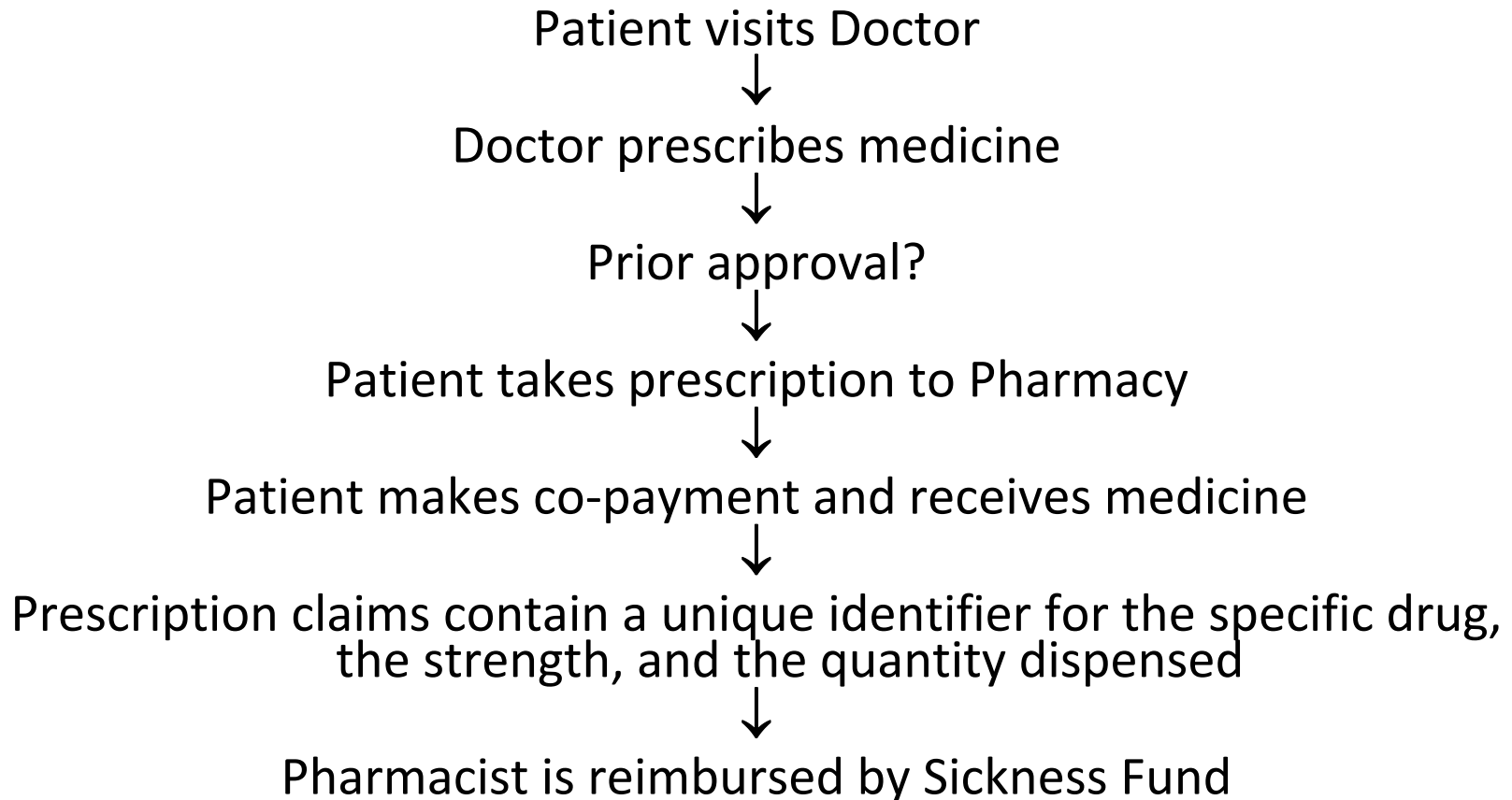


Figure 4, Percentage change in annual social insurance drug expenditure 1998-2007.

Taken from Insight into recent reforms & initiatives in Austria, Implications for stakeholders, Godman et al, Expert Reviews Pharmacoeconomics Outcome Research, 8(4), 357-371, 2008.



How reimbursement works in practice





Reimbursement in Austria the HVB (MASSI)

- HVB (Main Association of Austrian Social Security Institutions) is involved in reimbursement decisions for outpatient medicines.
- The HVB is supported by the HEK (Medicines Evaluation Commission).
- The HEK is comprised of 20 members, including representatives from the social health insurance institutions (10), the social partners and academic scientists.
- The HVB publishes the EKO (Reimbursement Code, positive list).



Reimbursement Conditions

- Freely reimbursed, or if certain conditions are met, e.g. for certain diagnoses (doctor must indicate/document this)
- Reimbursed upon prior approval
- Pharmacological, medical-therapeutical and pharmacoeconomic evaluation (see different requirements for drug prior approval and reimbursement)
- The EKO = “Reimbursement List” is published by the HVB, classification according to the anatomic therapeutic classification system of the World Health Organization [ATC-Code], publication according to § 31 Abs. 3 Z 12 ASVG.





The EKO

Principally not reimbursable drugs

(List of not reimbursable categories of drugs)

Exception: In individual cases AND after prior approval by the chief medical officer reimbursable

Code of Reimbursement (Austrian Drug Reimbursement List, Positive list)

Green Box

Drugs qualifying for automatic reimbursement. Inclusion of a drug in this box may be limited to certain criteria such as disease group, age of patient and package size.

Yellow Box

Drugs not qualifying for automatic reimbursement BUT reimbursable after prior approval by the chief medical officer
Inclusion based on certain criteria (disease group, etc ..)

“light yellow“ Box

Prior approval is waived
BUT
Ex-post review of the documentation of fulfilment of reimbursement criteria by the chief medical officer

Red Box

As soon as an application is filed, the corresponding drug is included in this box

Reimbursable after prior approval by the chief medical officer



Why did we study societal aspects of pain in Austria?

- Pain treatment *per se* has an exceptional position in every health care system, because e.g.
 - patients are confronted with disabling severe physical and psychological burdens
 - pain perception includes psychosomatic and mental aspects
 - good and comprehensive medical care can help to avoid social marginalization
 - Pain is a general phenomenon of most diseases, not a specific marker



Main aim:

study the impact of societal factors on prescribing habits and/or patients pain medication in Austria.

- Data provided by the internal data warehouse of the HVB, reimbursement data for ambulatory care from 2001-2009.
- Focus on two „main“ treatment groups being representative for "typical pain medication":
classification according to WHO ATC-Code www.whocc.no/atc_ddd_index
 - NOAs: non-opioid analgetics
 - N02B other analgetics and antipyretics,
 - M01A antiinflammatory and antirheumatic products
 - classical opioids : N02A
 - Others, controls: N02C antimigraine preparations, N05B anxiolytics, M02A topical products for joint and muscular pain, R06A systemic antihistamines



Methods

-> Characteristics of the Study Population:

age distribution *per se*

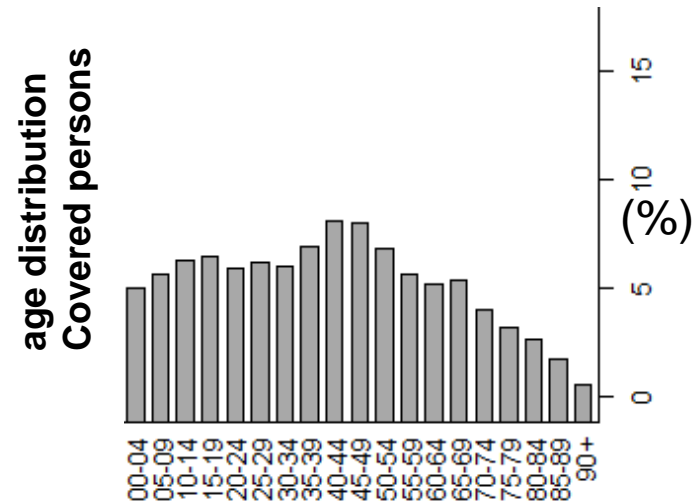
(% covered persons)

-> Focus of interest within the “treatment groups”:

- prescribing habits and differences between pain medication options among age groups, seasonal fluctuation of pain medication?

-> Societal factors expected to exert influence:

- Age (I)
- social reforms (II, greater availability, restrictions? REGO, waiving of prescription fees....)
- Others (III)





Why study age (I) ?

- First, the continuous rise of the aging population puts considerable social pressure on health care resources in Austria, with an estimate of 30% of the population being over 60 in 2030 (e.g. Federal Ministry of Health and Women, Division IV, Public Health in Austria, 2005).
- Pain is very common in the elderly people and treatment is a great challenge (e.g. multimorbidity, polypragmasy and polypharmacy, cognitive deficits, ...).
- In the age group of over 65 year-old Austrians, the estimate of patients suffering from chronic pain and being regarded as insufficiently treated is 80%, whereas in all Austrians suffering from chronic pain this estimate is much lower (30-50%, *Univ.-Prof. Dr. Mag. Eckhard Beubler*, Institut für Experimentelle und Klinische Pharmakologie, Medizinische Universität Graz).



Which reforms to study (II) ?

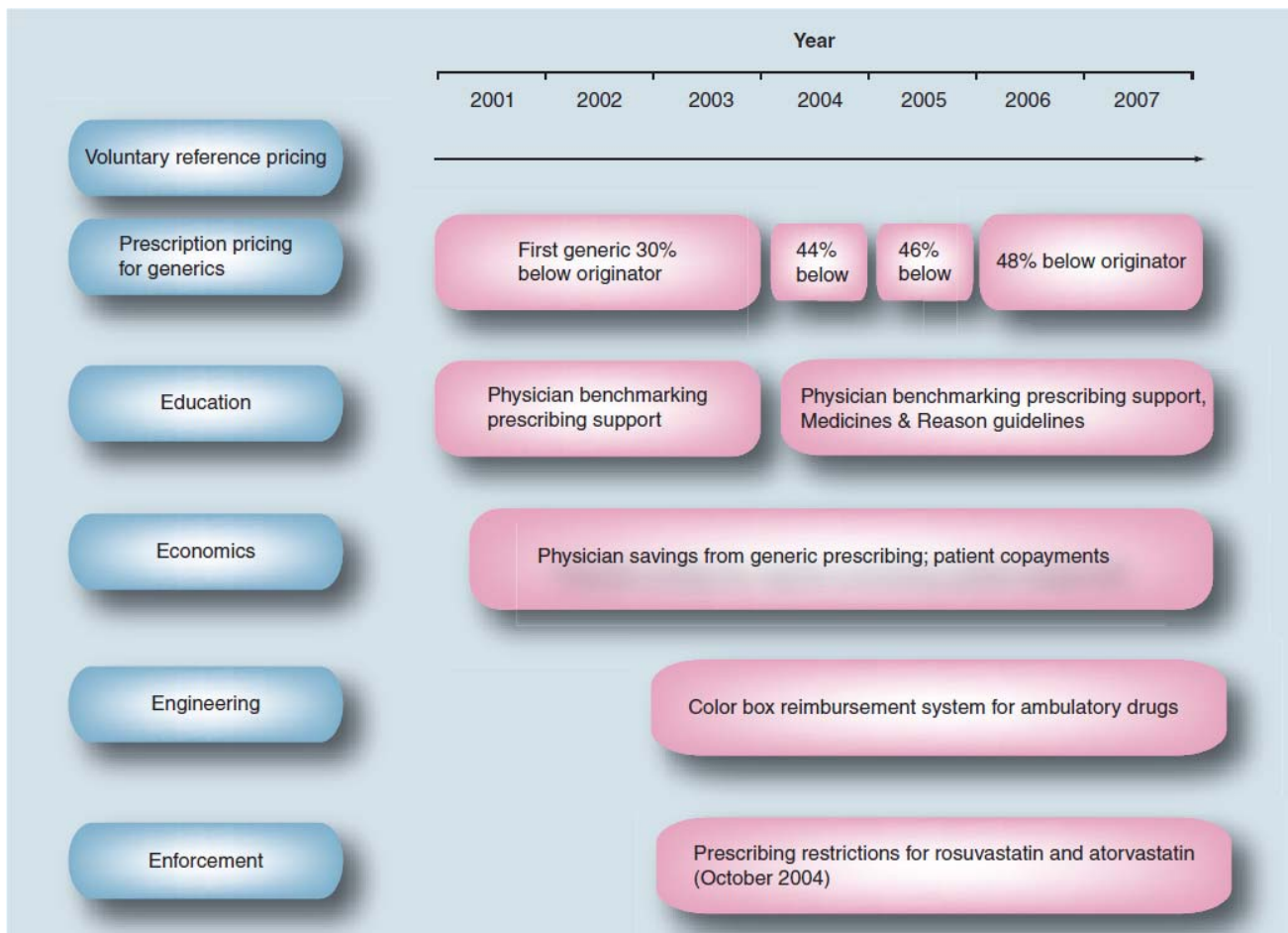


Figure 2: Consolidated supply – demand-side initiatives introduced in Austria in 2001-2007.

Taken from Godman B et al, Impact of recent reforms in Austria on utilization and expenditure of PPIs and lipid-lowering drugs: implications for the future, Expert Reviews Pharmacoeconomics Outcome Research, 9(5), 2009.



„REGO“

- > Basic prescription fees are EUR 5,00 (2010).
- > before „REGO“ **only** persons with low income (after application) or with reportable and transmissible disease did not have to pay prescription fees.



REGO, starting from 1.1. 2008, now offers an additional opportunity and is especially helpful for patients with **high demand on prescriptions** and **low income** to obtain prescription fee-waiver.

In practice:

- > an „account“ of prescription fees payed by each insured person during one legal year is overlooked and documented by an electronic system (e-card).
- > as soon as the sum exerts 2% of the annual net-income, the prescription fee-waiver comes into force during the remaining legal year.
- > if the patient needs a prescription, the prescribing doctor checks the „account“ and if required, the prescription fee-waiver is documented on the prescription.

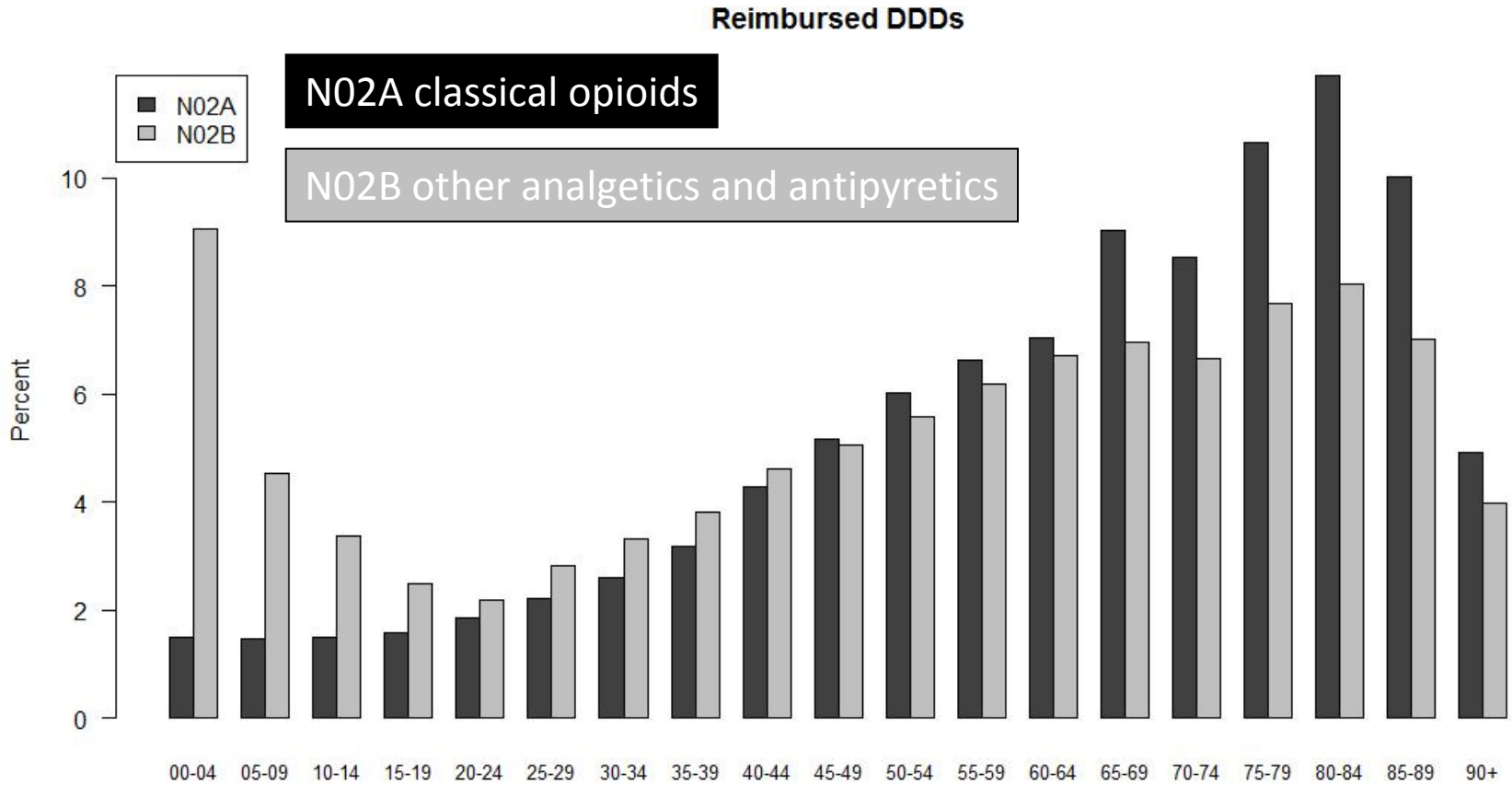


Questions:

- Are there monthly fluctuations or changes at the end of a legal year due to the social reform REGO?
- Is the picture different in our “ATC-groups” of interest?
- Can “seasonal” factors be identified in our two main treatment groups (e.g. use of antipyretics for upper respiratory tract infections vs use of opioids for more severe pain all over the year),
- For positive control systemic antihistamines, negative control use of e.g. topical NSAs.



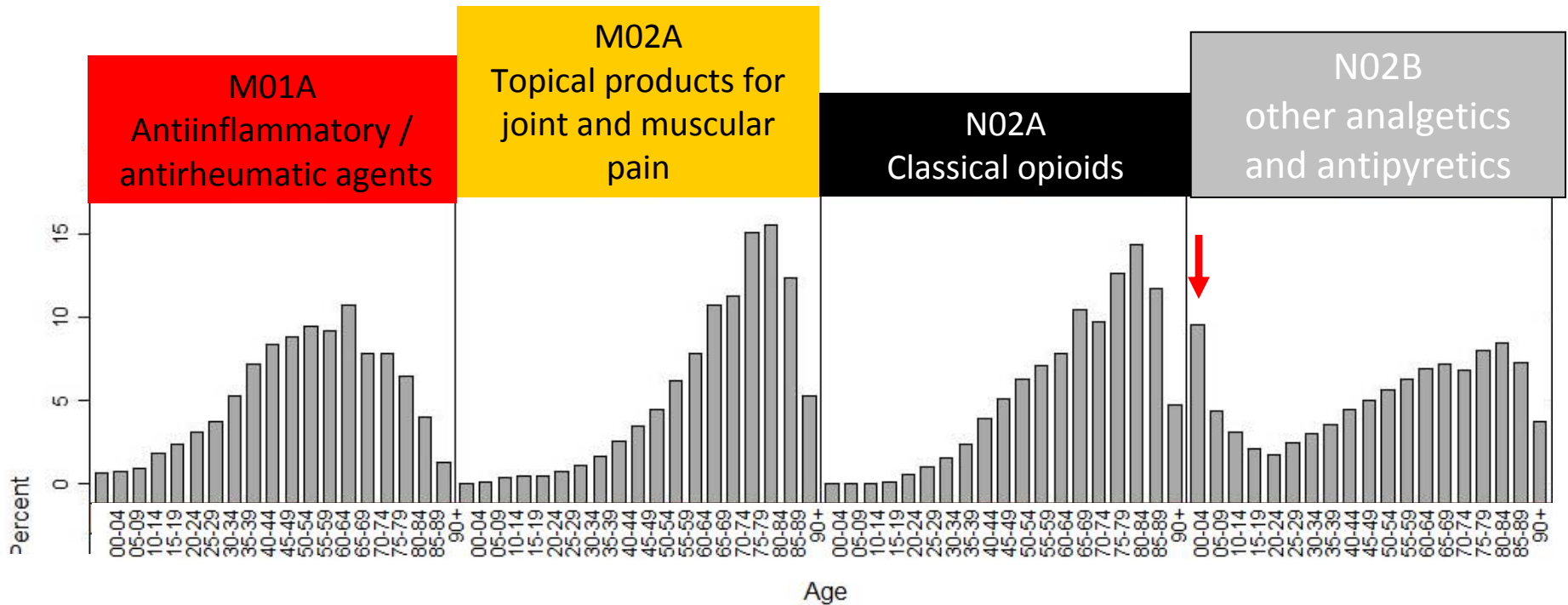
Societal factor age“





Reimbursed prescriptions/covered Persons age distribution

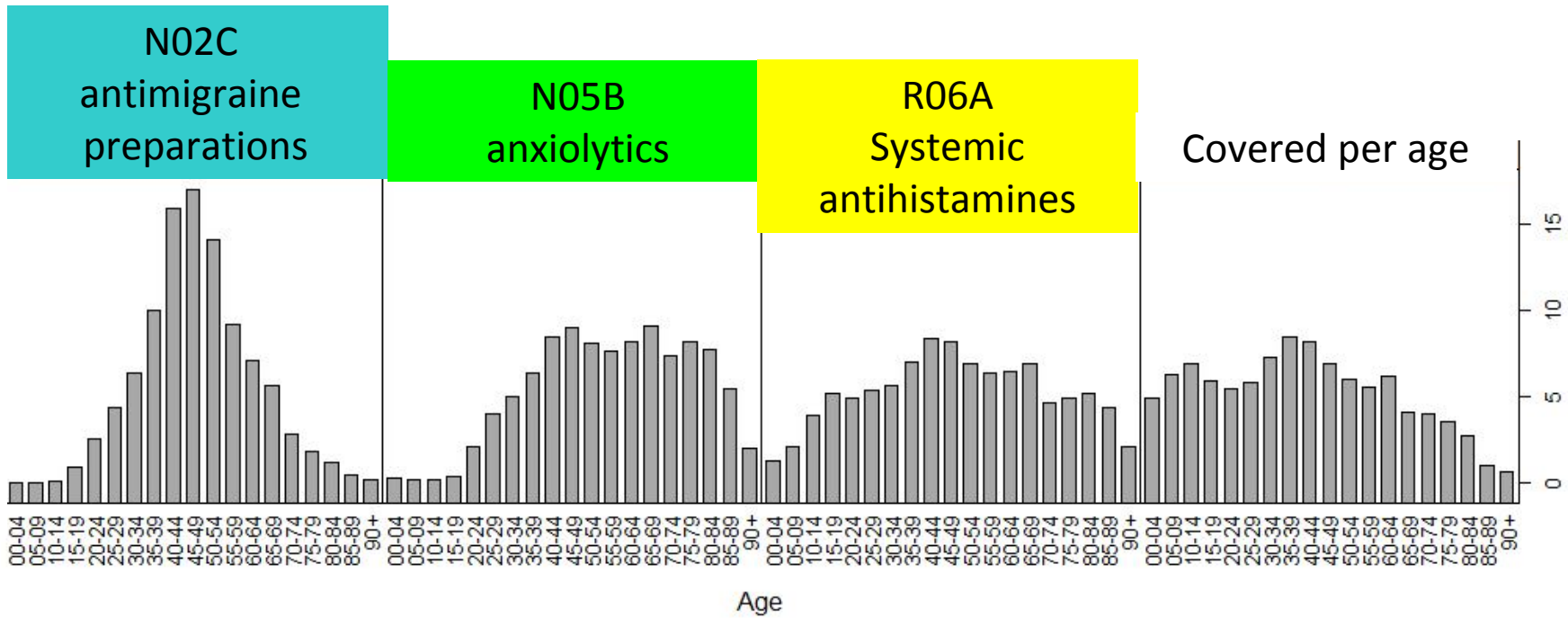
pain related.....

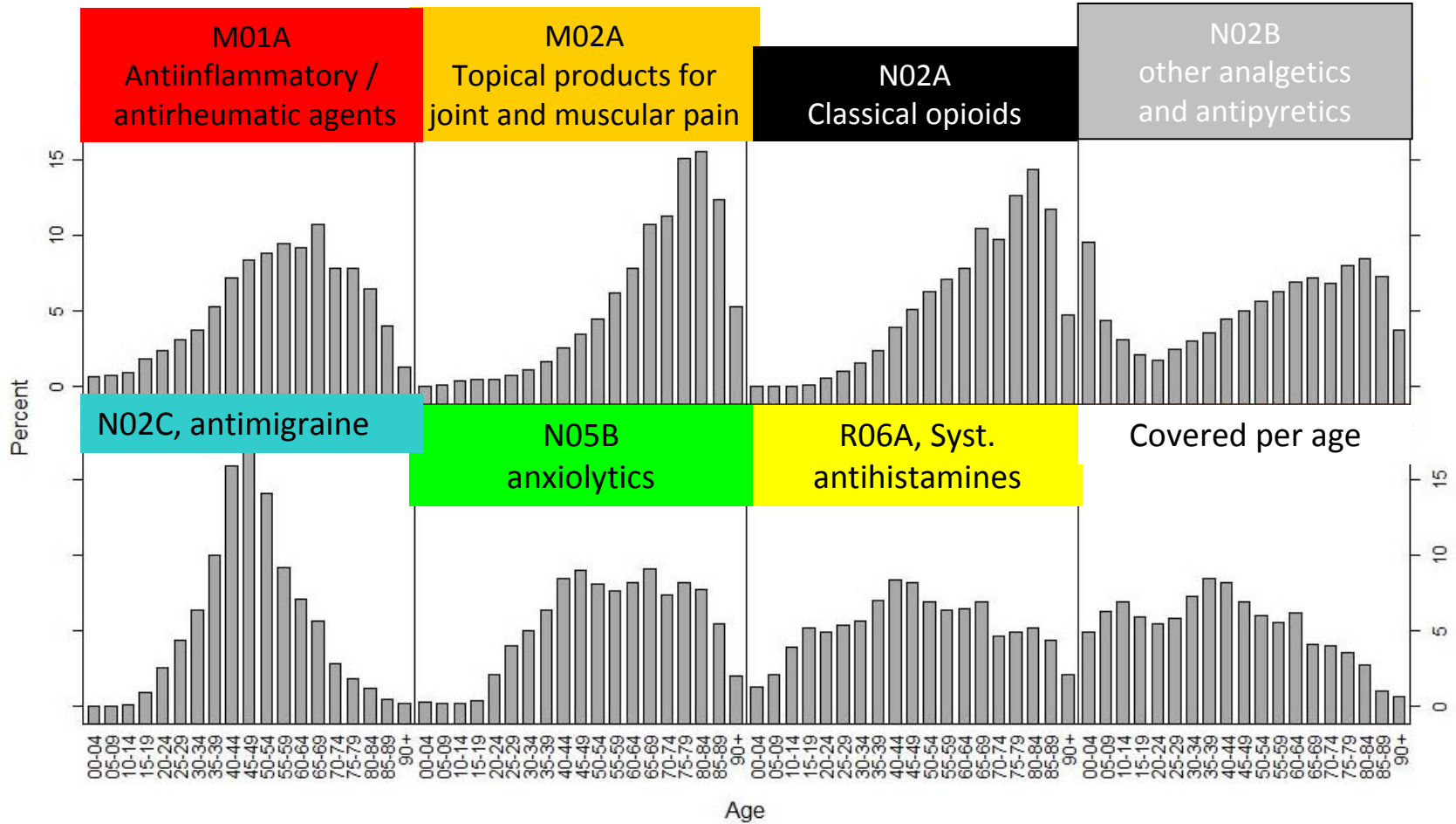




Reimbursed prescriptions/covered persons age distribution

Not pain related „control“ groups....





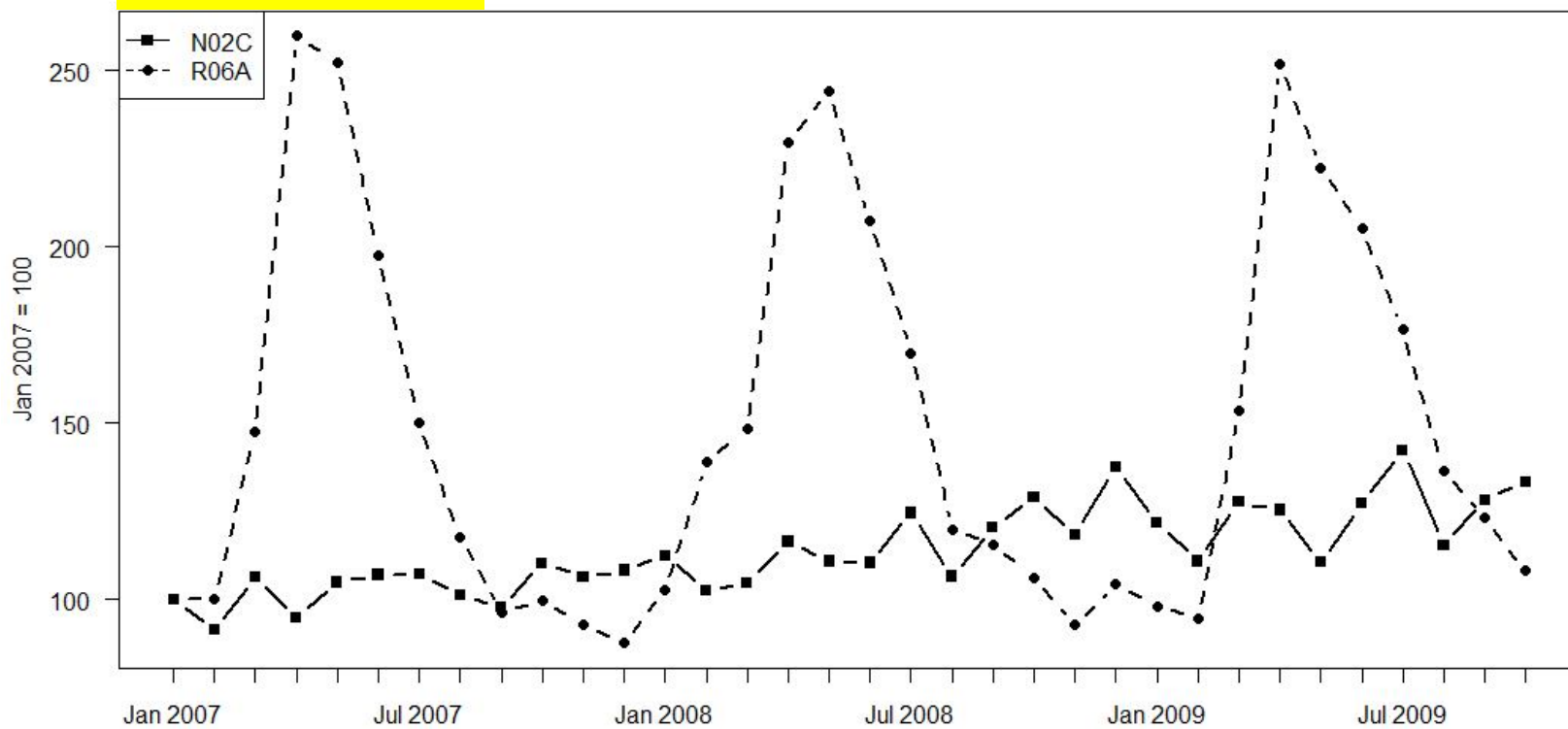


New read-out: annual fluctuations of reimbursed DDD Positive control and negative control

N02C, antimigraine

R06A, Syst.
antihistamines

Reimbursed DDDs > Erstattungsgrenze





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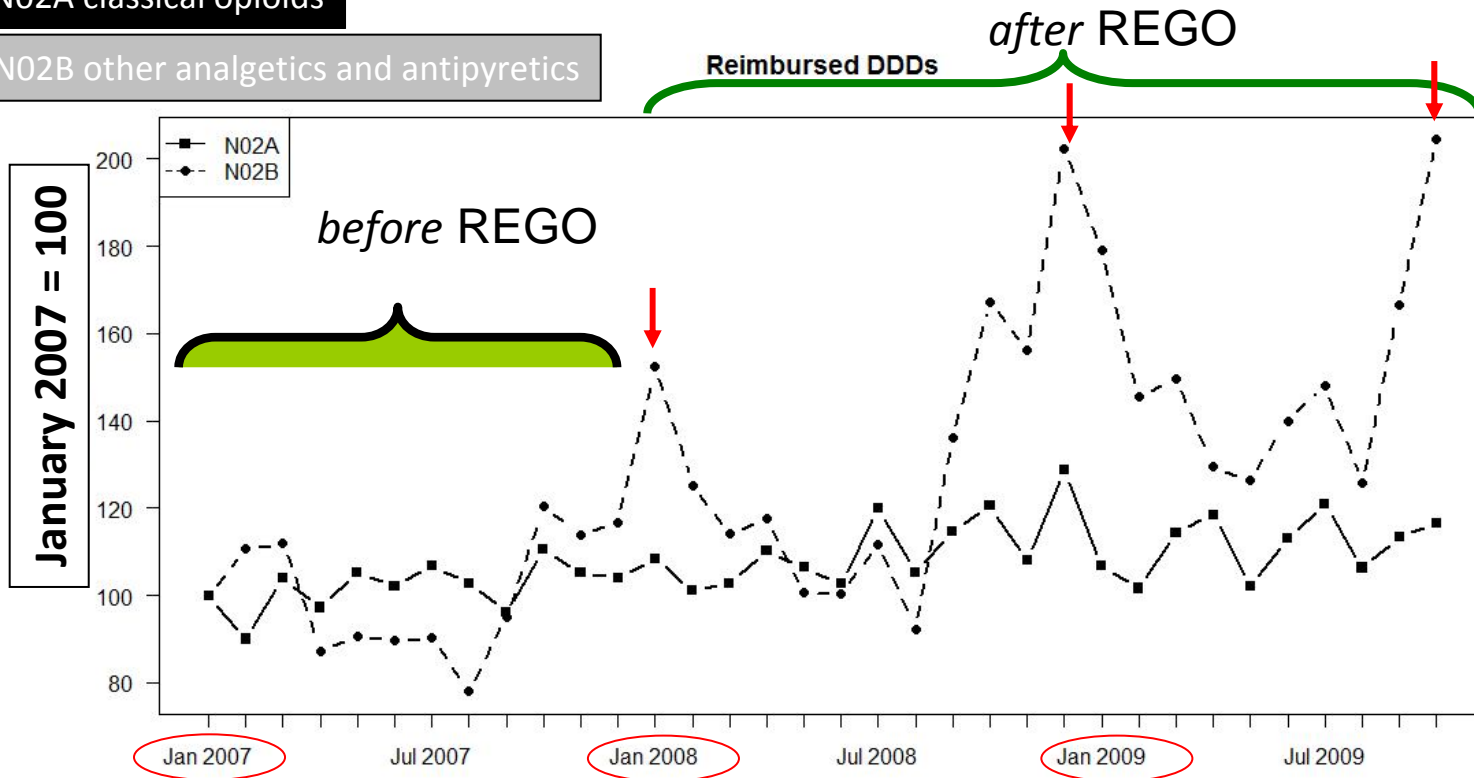
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„Societal impact of REGO“

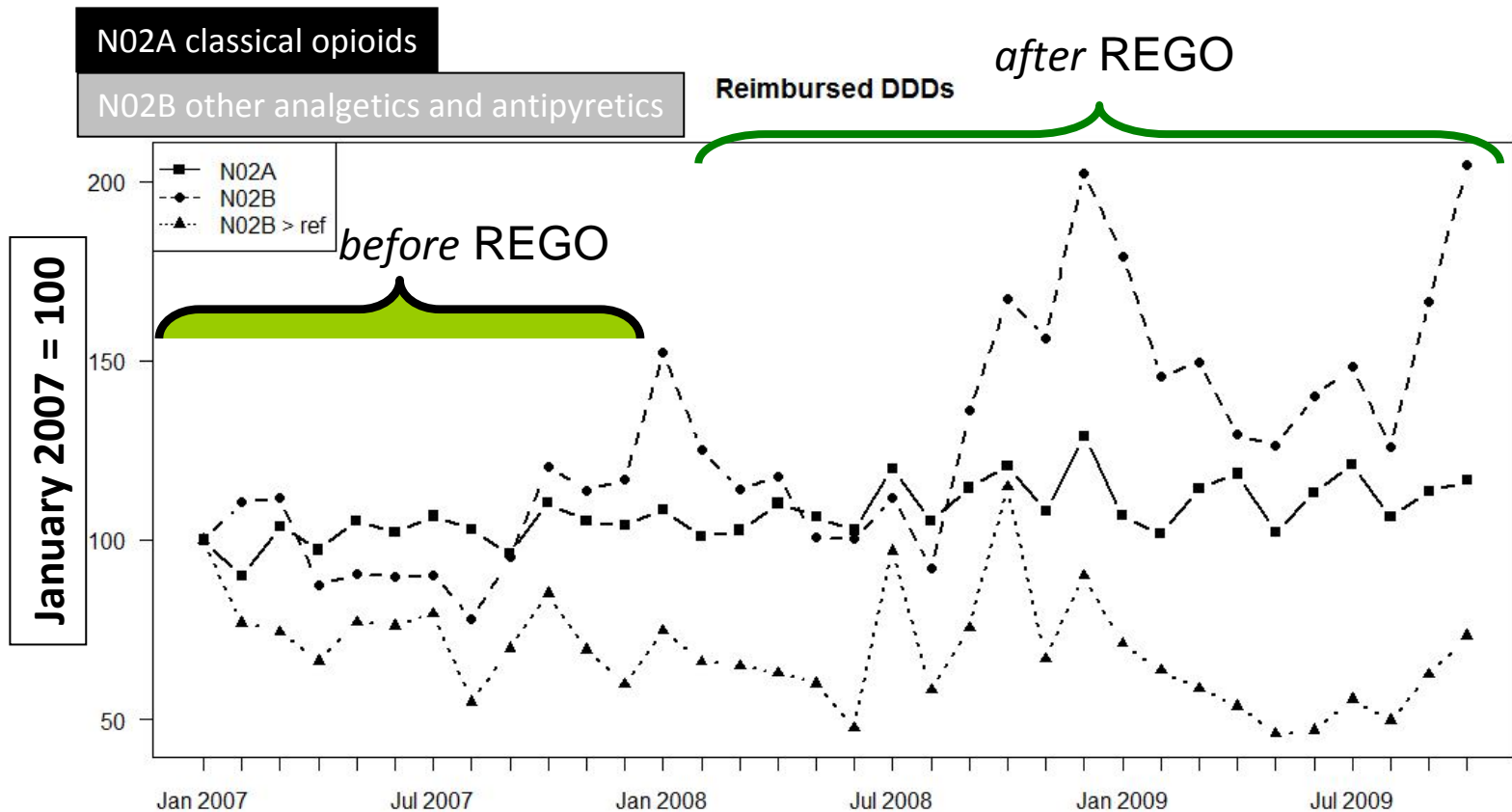
N02A classical opioids

N02B other analgetics and antipyretics





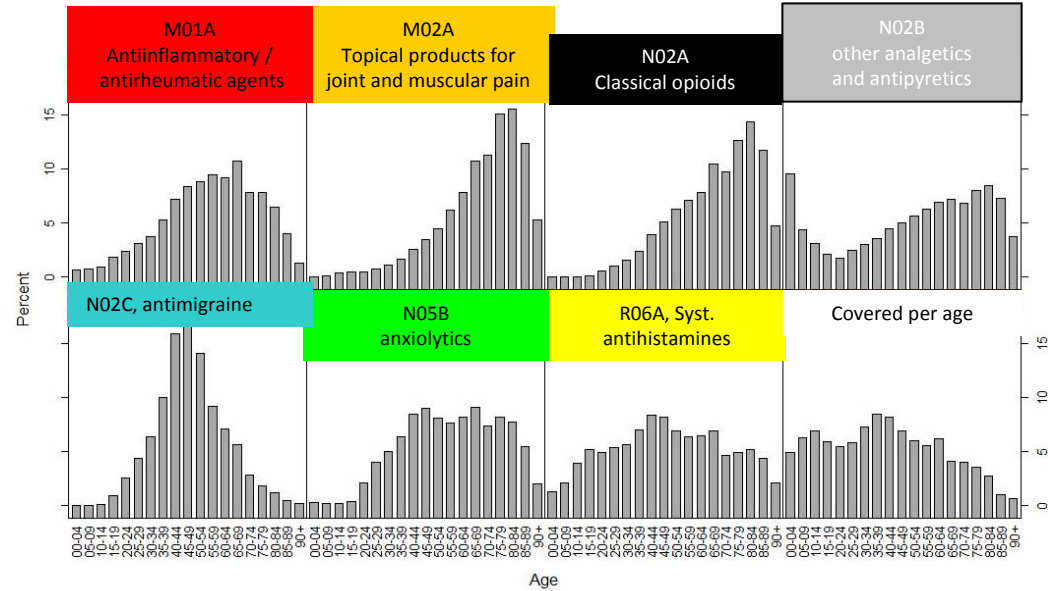
„Societal impact of REGO“



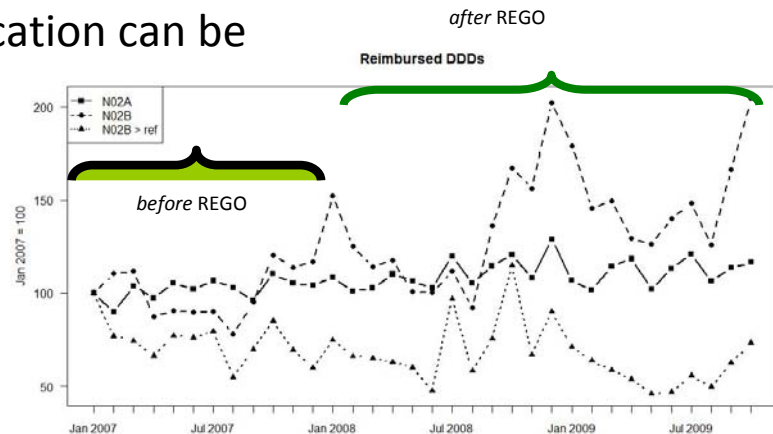
Impact of REGO on N02B > and not N02A -> „smoothing“ of peaks at the end of the legal year
->-> -> REGO WORKS!!!



- Differences in the affects of the social factor AGE between our „treatment“ groups.



- The impact of social reforms on pain medication can be visualized by our analysis based on prescribing habits in Austria.
- REGO works.





Thank You