

# Control and assessment of reimbursed dental care in Belgium:

ILLUSTRATION BY 2 STUDIES

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NIHDI : *National Institute for Health and  
Disability Insurance*



# EUMASS 2014 STOCKHOLM



## CONFLICT OF INTEREST

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Maladie Invalidité)

[ **NIHDI** : *National Institute for Health and Disability  
Insurance* ]

*"I have no potential conflict of interest to report"*



# **I. Restorative Dental Care: repeated billing**

for interventions on the same tooth

## **An investigation**

- **conducted by the National Investigation Unit**
- **done by Marc Eisenhuth M.D., Erik Koopmans M.D., Anne-Laure Buisson Stat.**
- **presented by Marc Eisenhuth, M. D.**

# CONTENT

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- 1. What are we talking about? Scope**
- 2. Where do we draw the line? 'Waste'**
- 3. How did we stay in touch? Campaign by mail**
- 4. Was it worth it? The impact**
- 5. What can we learn?**



# 1. What are we talking about? Scope

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- ❑ **studied population: 7,176 dentists  
(2007- 2009)**
- ❑ **conserving dental care**
  - **dental filling**
  - **coronal restoration**
- ❑ **applied on the same tooth**
- ❑ **of insured patients over 15 years old**
- ❑ **ambulatory treatment**
- ❑ **repeated billing in 1 year**



"Are you **SURE** you don't want to upgrade your Dental Insurance Plan?"

## 2. Where do we draw the line? 'Waste'



## 2. Where do we draw the line? 'Waste'

- ❑ investigation: all the Belgian dentists
- ❑ initial period as reference
  - *1 June 2008 – 30 November 2008*
  - *'first intervention' semester*
- ❑ observation period:
  - *1 December 2008 – 30 November 2009*
  - *check: billing repeated?*
- ❑ definition 'repetition rate':
  - *numerator*: number of interventions billed in reference period and repeatedly billed for a same tooth within 1 year later.
  - *denominator*: number of all the interventions billed in the reference period. <sup>8</sup>





## 2. Where do we draw the line? Waste

- ❑ rates in reference period:
  - median repetition rate: **7.4%**
  - average repetition rate: **8.5%**
- ❑ international guidelines and Belgian experts
- ❑ no link with factors
  - ❖ **social**: 88.9% repetitions applied on not socially protected insured patients (without increased refund)
  - ❖ **economic**: the dentist's global activity
    - total amount billed for conserving care
    - total amount billed to the health insurance
  - ❖ **geographic**: negligible differences between provinces



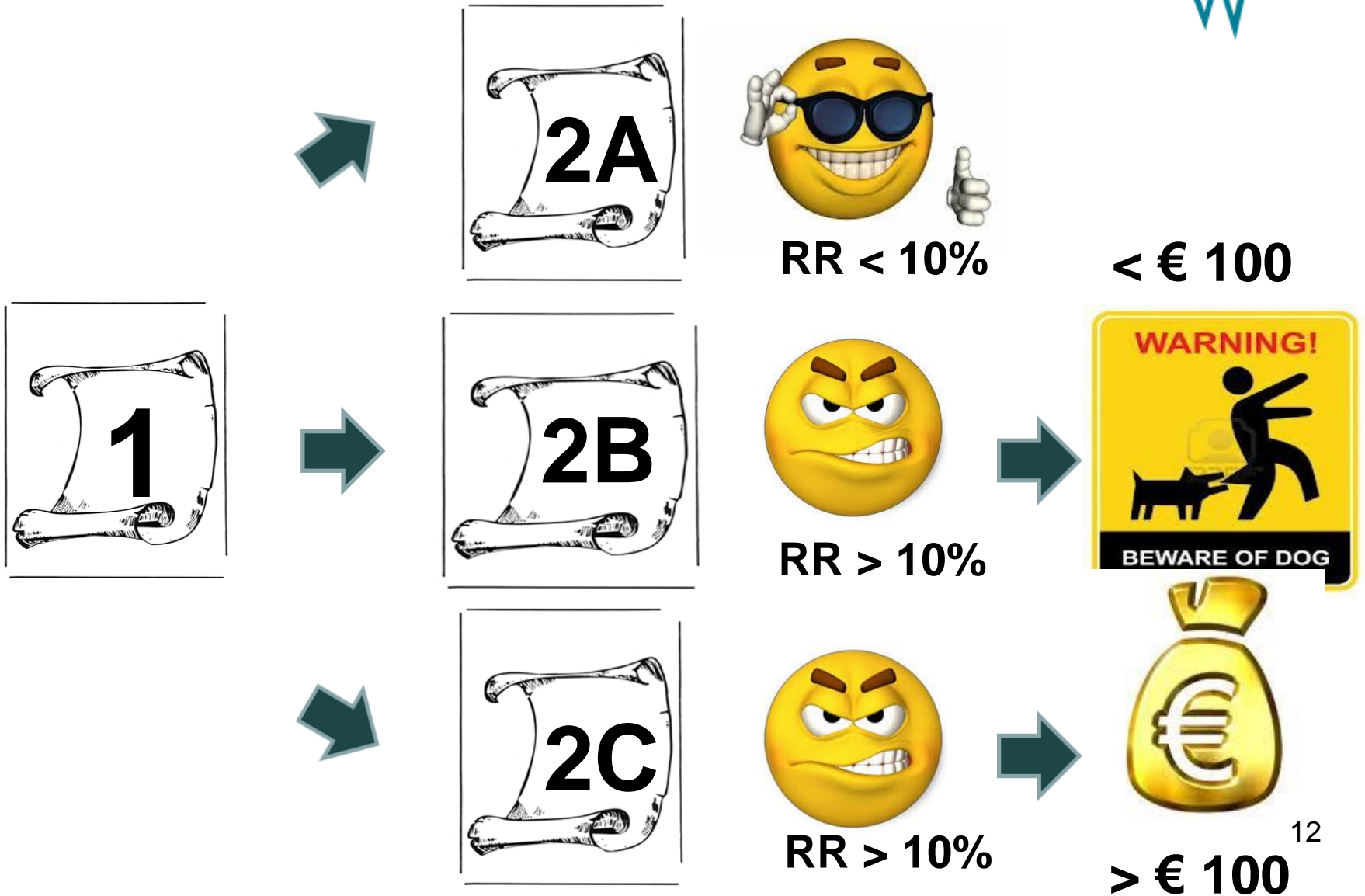
## 2. Where do we draw the line? Waste

- **conclusion:**  
**repetition rate > 10%**  
**is unacceptable :**
  - **incorrect billing (dental care not administered)**
  - **low quality care**



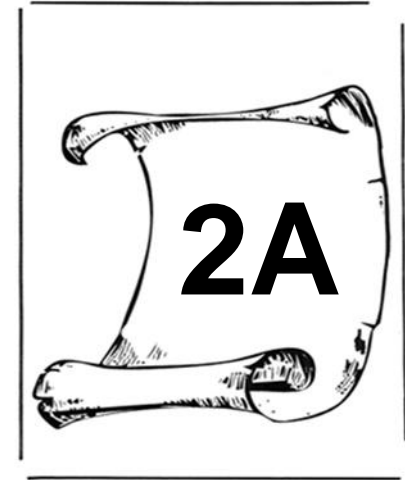
### **3. How did we stay in touch? Campaign by mail**

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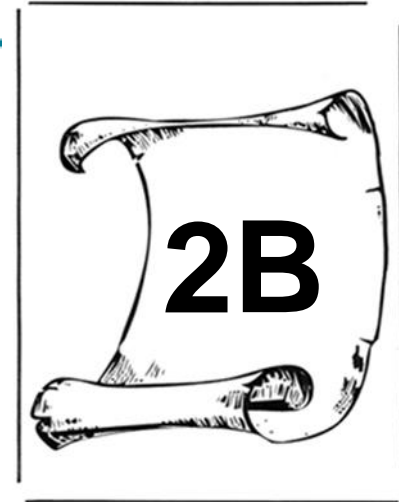
### 3. How did we stay in touch? Campaign by mail

- ❑ sent in September 2013
- ❑ to 760 dentists
- ❑ studied period: 01/10/2011 – 31/ 03 /2013
- ❑ content:
  - your RR is OK: **X.X % (< 10%)**
  - we keep following this issue



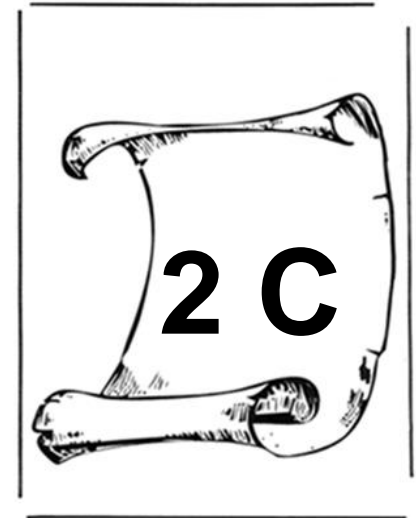
### 3. How did we stay in touch? Campaign by mail

- ❑ sent in September 2013
- ❑ to 22 dentists
- ❑ studied period: 01/10/2011 – 31/ 03 /2013
- ❑ content:
  - your RR: **XX.X % (> 10%)**
  - legal consequence:
    - *estimated damages for Compulsory Healthcare Insurance : < 100 €*
    - *we warn you*
  - we keep following your billing behaviour



### 3. How did we stay in touch? Campaign by mail

- ❑ sent in September 2013
- ❑ to 174 dentists
- ❑ studied period: 01/10/2011 – 31/03/2013
- ❑ content:
  - your RR: **XX.X % (> 10%)**
  - legal consequence:
    - *estimated damages for CHI:*  
**> 100 €**
    - repayment request





## 4. Was it worth it? The impact



## 4. Was it worth it? The impact

- AS A RESULT OF FIRST LETTER :
  - 79.6% of all dentists initially  $> 10\%$  :  
now  $< 10\%$  ...
  - impact on budget: € 8.5 mio reduction  
in conserving dental care (4.7%)
  - general impact on behaviour

## 4. Was it worth it? The impact

- ❑ AS A RESULT OF SECOND LETTER :
  - 174 affidavits with repayment request for a total amount of **€ 274,152.92**
  - from € 100.96 to € 15,444 per dentist (RR >10%)
  - if no repayment: legal administrative procedure for imposed repayment (via Committee and Chamber of First Instance)

to reduce the recession costs  
we use no pain killer



## 5. What can we learn?

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- ❑ data supply by health insurance funds
  - *quick*
  - *reliable*
- ❑ data mining tools
- ❑ well thought-out investigation design
- ❑ information
- ❑ effective legal instruments to cope with waste



## **II. Assessment report on the use of panoramic radiography by graduates in dental sciences**

### **An investigation**

- **conducted by the Department of medical assessment at the NIHDI**
- **done by Marc De Naegel, M.D.**
- **presented by Marc Eisenhuth, M. D.**

# 1. BACKGROUND

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**Between 2002 and 2008 the number of OPGs (panoramic radiographs) made by dentists (graduates in dental health) increased**

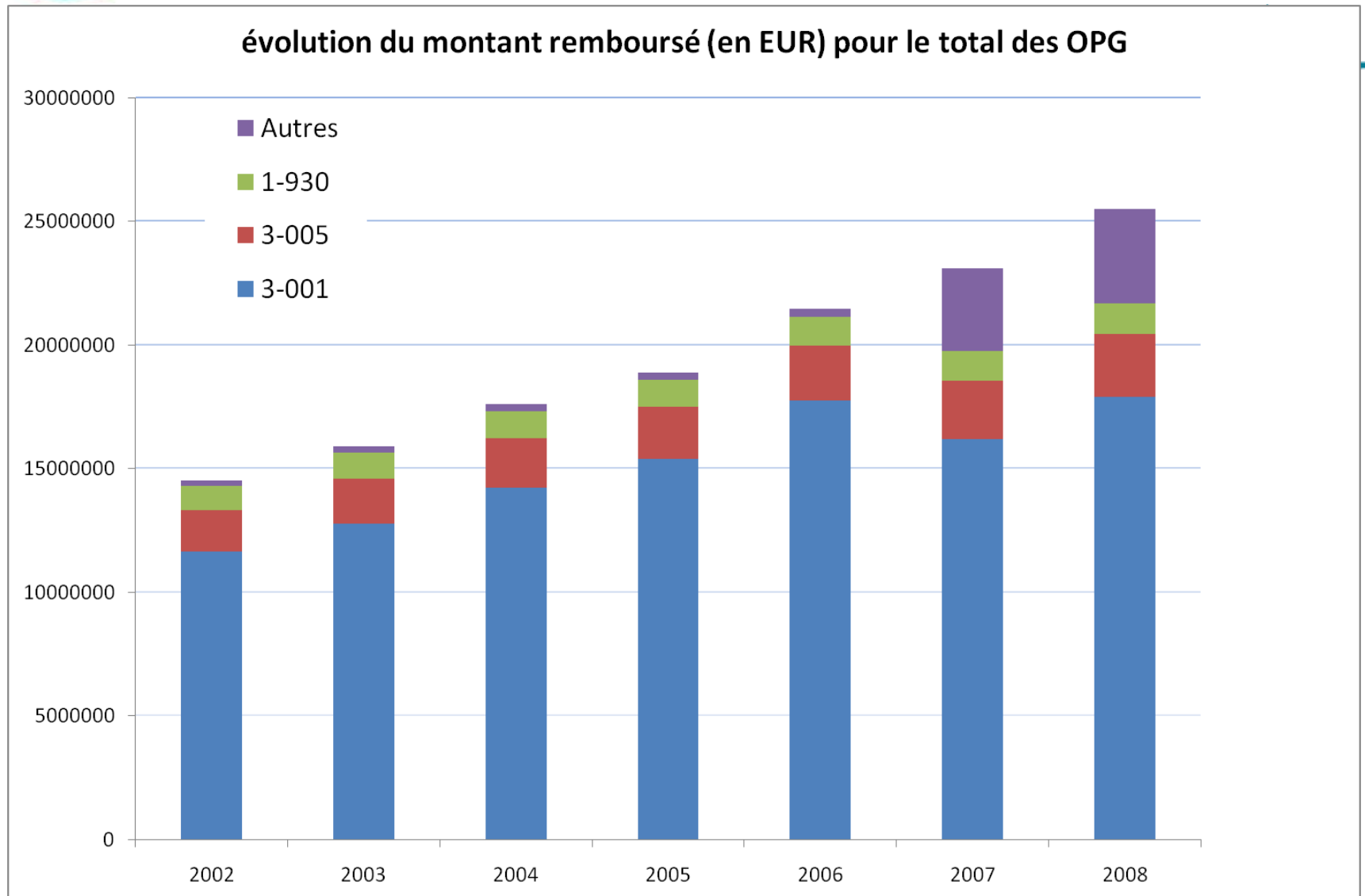
**- by 42.18%**

**while the reimbursed amounts increased**

**- by 75.53% (i.e. EUR 10,969.163)**



# 1. BACKGROUND



## 2. OBJECTIVE



**The project is aimed at finding an explanation for:**

- the strong increase in the provision of OPGs (*“orthopantomographs”*)
- the uneven number of OPGs depending on the dental care providers

**The project is focused on two aspects:**

- dental care providers who made several OPGs with respect to a given patient;
- the medical indications used by the providers



### 3. METHODOLOGY

The study consists of two parts:

- 1 : first, we studied the indications proposed in the literature dealing with the provision of OPGs.
- 2 : on the other hand, with regard to certain providers, we examined those indications with respect to which the provision of OPGs was actually acknowledged.

*The study was limited to the provision of OPGs acknowledged by dental care providers who graduated in dental sciences*

### 3. METHODOLOGY

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**To question dental care providers, we worked in two steps:**

**1 : we started a preliminary investigation to assess the questionnaire used and then we checked if there was a difference between the responses to the written survey and those of the oral inquiry;**

**2 : we then sent a written questionnaire to 275 graduates in dental sciences (5,500 OPGs) with respect to their indications in the final survey.**

## 4. RESULTS

- It is impossible to explain why the number of OPGs increases every year.
- After analyzing the indication(s) as well as the circumstances in which OPGs are made, we demonstrated in the discussion that 56.20% of the OPGs made could be considered "non-compliant".

## 4. RESULTS

- **The main indications and circumstances considered as non-compliant are the following:**
- **CARIES**: they are mentioned by 95.62% of the dentists for 46.34% of the OPGs
  - **detection of occult disease and examination of the condition of the MOUTH**: they are mentioned by 97.81% of the dentists for 68.10% of the OPGs;
  - **THE FIRST CONTACT with the patient**: this is mentioned by 97.81% of the dentists for 36.28% of the OPGs.

## 4. RESULTS

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- If we extrapolate the 2009 data to all the dentists who meet the criteria applied to the sample (i.e. at least 50 OPGs and less than 10% of radiographs for orthodontics):
  - 318,814 OPGs totaling EUR 9,934,411 were wrongly acknowledged in 2009 and
  - 118,305 OPGs totaling EUR 3,686,434 are doubtful in terms of indications.

## 5. CONCLUSIONS

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- **Information campaign for dentists regarding the proper use of OPGs**
- **Limitation of the authorized indications with respect to the provision of OPGs**
- **Repeated OPGs within 2 years should be subject to authorization by a medical officer. The costs of repeated OPGs after 1 year can be assessed at EUR 1.5 MILLION; in this respect the costs of the repeated OPGs sharing the same indication may be assessed at EUR 0.5 MILLION.**

## 5. CONCLUSIONS

- **Establishment of criteria to the attention of medical officers in order for them to be able to refuse or allow repeated OPGs within a 1-year or 2-year period : 87.69% of the repeated OPGs were repeated on the basis of “non-compliant” indications.**

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**A letter was sent in late 2013 to about 3,000 dentists selected on the basis of the following criteria: more than 50 OPGs and less than 10% of radiographs for orthodontics in 2011.**

**An impact assessment is scheduled for 2015.**



**Thank you for your attention!**

Stockholm - September 11, 2014

32