

Variability in breast cancer clinical practice and economic implications

Josep M Borràs

University of Barcelona and Catalonian Cancer Strategy

Antwerp, February 5, 2015

Variability in Breast Cancer Clinical Practice

- Definition of clinical variability
- Examples of clinical (and screening variability from Spain) and its potential impact
- How to reduce clinical variability : some proposals
- Health economics and clinical variability: final comments

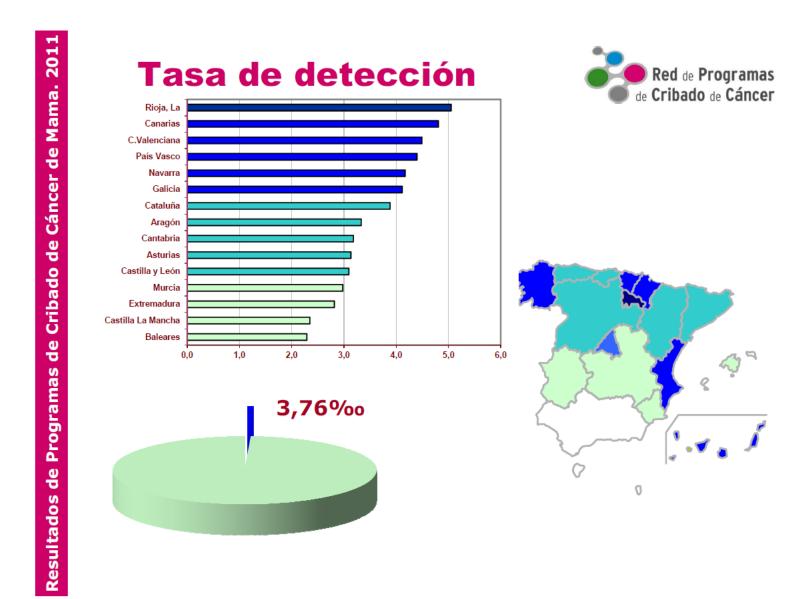
Theories and concepts:

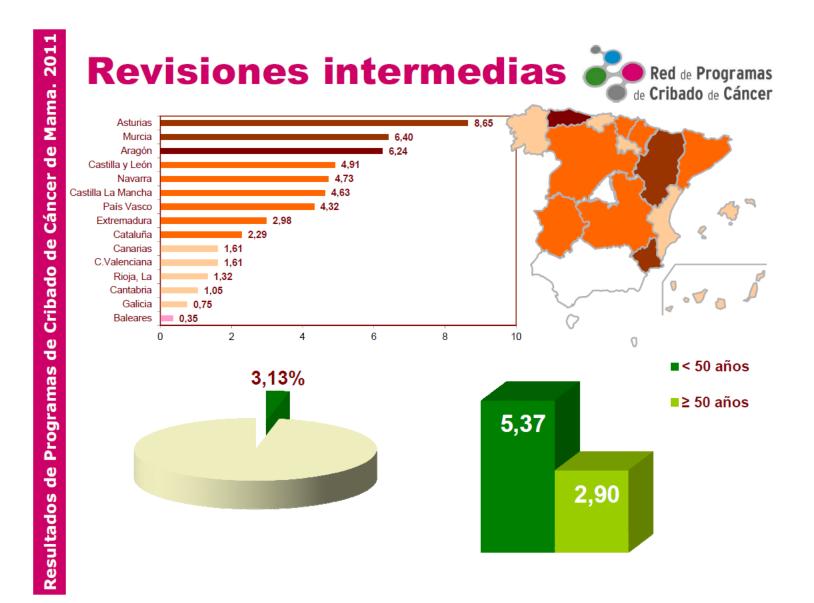
<u>Unwarranted variation</u> is variation that cannot be explained by:

- Patient illness
- Dictates of evidence-based medicine
- Patient preference

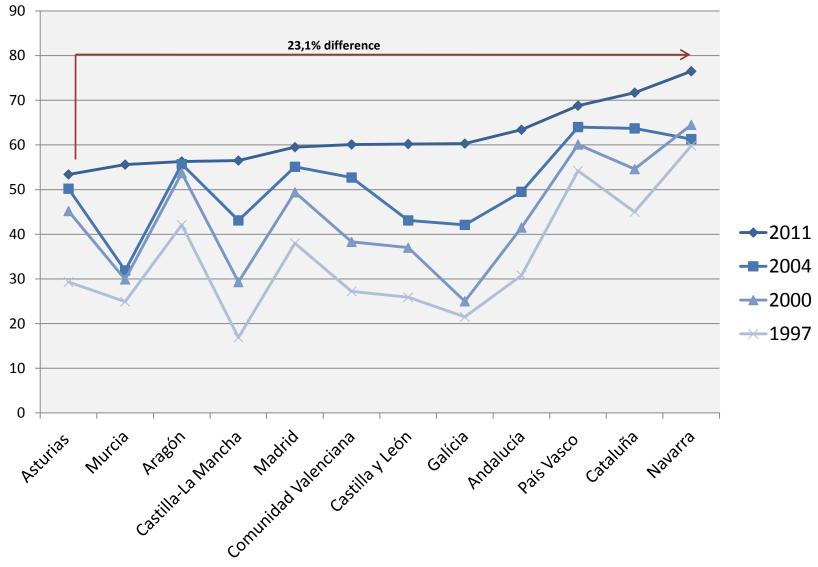
Wennberg JE. Practice variations and health care reform: connecting the dots. Health affairs (Project Hope) 2004:Suppl Web Exclusives: VAR140-4.

Based on a presentation by D Goodman, International Wennberg Collaboration, London 2010.





Porcentaje de cirugía conservadora en cáncer de mama – España Período 1997 - 2011



50,0 45,9 44,1 45,0 40,0 35,0 30,0 24,2 **%** 25,0 18,5 18,1 20,0 14,9 15,0 10,0 8,1 7,7 5,6 3,6 3,0 5,0 1,7 0,0 H10 Η1 H2 Н9 Η4 H11 Н3 H5 Η8 H7 CAT H6 Hospital

HYPOFRACTIONATION RADIOTHERAPY TREATMENT FOR BREAST CANCER PATIENTS

Catalan reimbursement database 2012

(Fraction ≥ 2.5 Gy)

Why does variation occur?

- Differences in disease incidence and prevalence
- Inequalities in supply of services and in the incentives in the health services
- Differential value assigned by a particular physician to a specific procedure

Medical practice implies uncertainty, but... there is:

- Uncertainty due to the differences in knowledge of physicians (insufficient knowledge of the physician)
- There is uncertainty due to the state of the art of scientific knowledge (insufficient scientific knowledge)
- There is uncertainty due to the characteristics of the patient (clinical case uncertainty)

Are the differences observed relevant? And what are the possible causes?

Breast screening

- Problems of quality of the procedure and interpretation
- Differences in underlying epidemiology/screening

Variation in BC conservative treatment

- Disease management
- Quality of cancer care
- Patient preferences?
- Economic impact, provided reimbursement makes a difference between clinical options

Hypo-fractionation in BC radiotherapy

- Diffusion of innovations (early adopters vs late adopters + differences in the interpretation of the evidence
- Resources available

Clinical practice variation: how to reduce or limit it

- Health policy (Macrolevel):
 - Control of the supply of services
 - Capitative payment systems
 - Promote evidence based medicine
 - Cost-effectiveness analysis
- Health management (Mesolevel):
 - Practice Profiling of health professionals
 - Utilization review
 - Clinical pathways
 - Disease management

Clinical practice variation: how to reduce or limit it

- Clinical Practice (Microlevel):
 - Dissemination of clinical evidence
 - Audit of clinical practice and outcomes
 - Clinical guidelines
 - Shared decision making

Could health economics/policy play a role in modifying this situation of high clinical variability?

- Budgetary impact of clinical variability:
 - If the health care system is based on budget per hospital, limited potential impact on the professional behavior, only through control of supply

Cost-effectiveness

- High potential to define the societal value for an innovation but limited value at clinical level.
- Methodological aspects difficult to understand for clinicians
- Always the problem of the cut-off

Professional behavior

- Difficult to modify, but a combination of reimbursement system aimed at paying for quality of care and audit of clinical data could be an option
- The most difficult point is to understand the differences between population or group level data and individual clinical criteria to be applied for an individual patient

RECOMMENDATIONS 💮 SEPTEMBER 2012

INSTITUTE OF MEDICINE

OF THE NATIONAL ACADEMIES

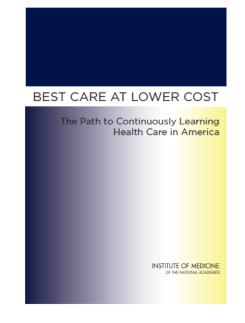
Advising the nation • Improving health

For more information visit www.iom.edu/bestcare

Best Care at Lower Cost

The Path to Continuously Learning Health Care in America

Recommendations



Supportive Policy Environment

Recommendation 8: Financial Incentives

Structure payment to reward continuous learning and improvement in the provision of best care at lower cost. Payers should structure payment models, contracting policies, and benefit designs to reward care that is effective and efficient and continuously learns and improves.

Strategies for progress toward this goal:

- Public and private payers should reward continuous learning and improvement through outcomeand value-oriented payment models, contracting policies, and benefit designs. Payment models should adequately incentivize and support highquality team-based care focused on the needs and goals of patients and families.
- Health care delivery organizations should reward continuous learning and improvement through the use of internal practice incentives.
- Health economists, health service researchers, professional specialty societies, and measure development organizations should partner with public and private payers to develop and evaluate metrics, payment models, contracting policies, and benefit designs that reward high-value care that improves health outcomes.

Could health economics/policy play a role in modifying this situation of high clinical variability?

Reimbursement systems:

- How to pay for high quality cancer care?
- We need to pay for valuable care, but what is value in health care?
- Value: a basic representation of the efficient use of individual and societal resources (time and money) for individual and societal benefit.
- It is a balance between cost with the clinical results of the clinical care
- Information required about cost and quality of care: measurement of cost and quality could be in itself part of the improvement process.

Could health economics/policy play a role in modifying this situation of high clinical variability?

- Reimbursement systems are part of the story but the culture of the hospital mattersi
- Curry et al (Ann Inter Med 2011) assessed the top 5 best and worst hospitals in heart attack outcomes in the US:
- Resources, protocols and structural aspects did not tell the whole story
- The difference was due to strong clinical leadership and governance, commitment to improvement, good communication and coordination, open communication among the staff, shared values and experience in problem solving and learning.

Could health economics/policy play a role in modifying this situation of high clinical variability?: Concluding comments

- In order to reduce unwarranted clinical variability, actions should be implemented at macro, meso and micro level
 - We need to combine better information systems aimed at improved outcome and quality of care measurement
 - And reimbursement methods aimed at incentive high value care
- But... We should not forget, that all of this is very difficult in the context of:
 - budgetary constrains,
 - (ever) increasing health care costs, especially focused on the advanced disease
 - And the increasing complexity of cancer care