EPIDEMIOLOGIA DELL'OSTEOPOROSI IN EUROPA

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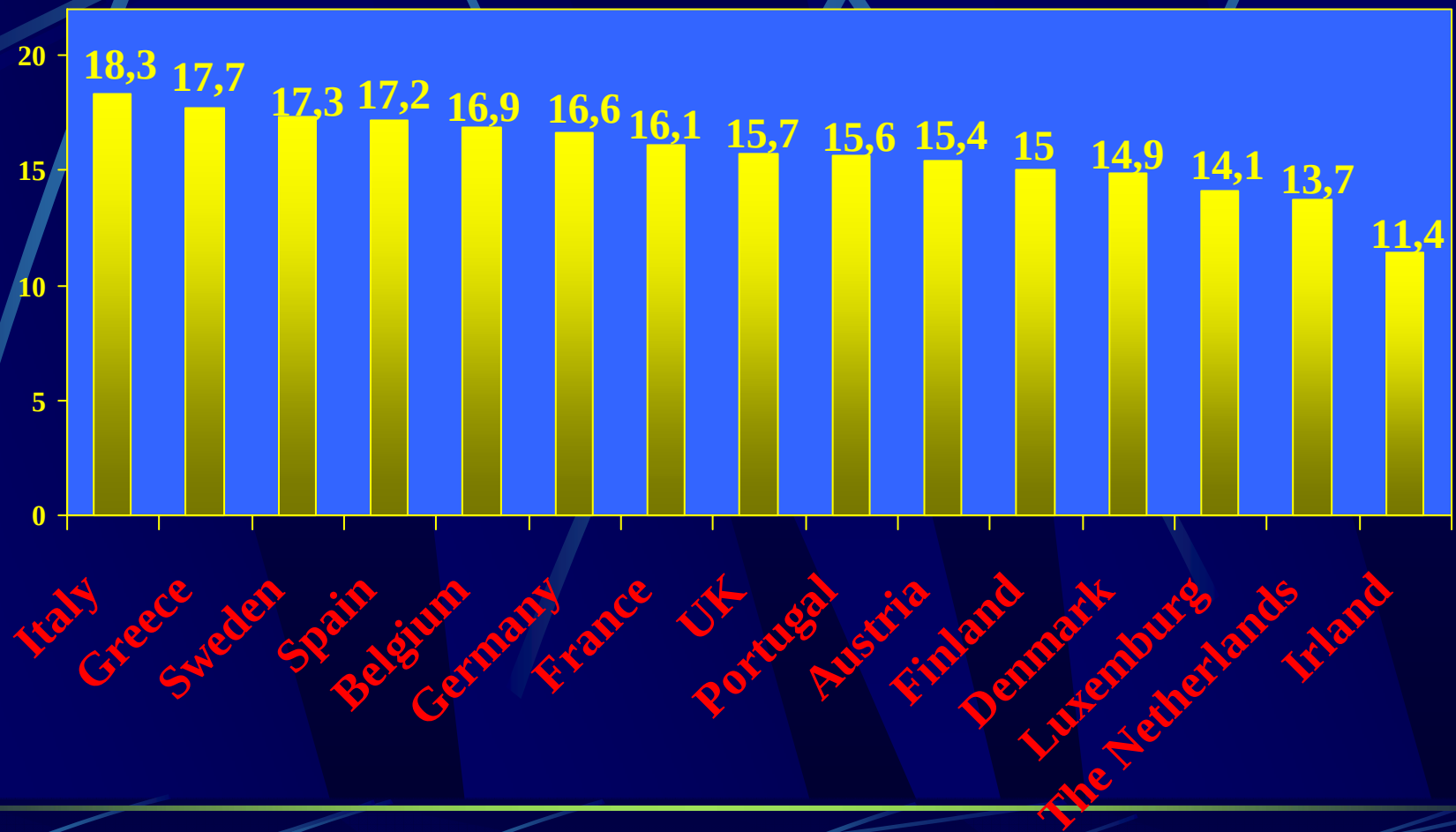
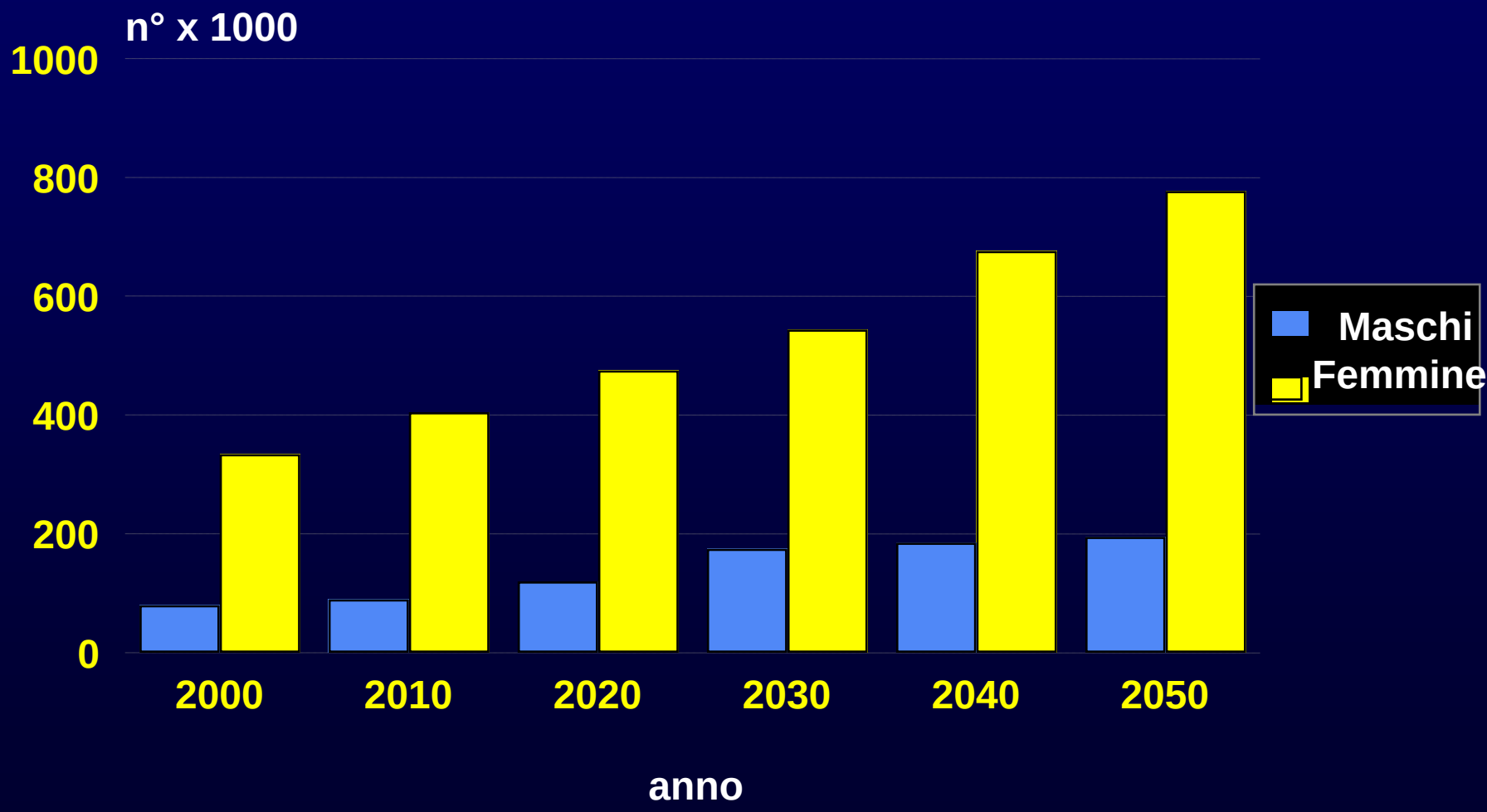
Percentage of aged 65+ in the EU Countries



Numero di fratture del femore previsto in Europa



Change in the sex-specific age-standardized incidence rates of hip fracture in aged 50+

Center	Dates	Increase in risk (%) Men	Women
UK	**1956-83**	**2.2**	**2.6**
Finland	**1970-91**	**3.0**	**2.0**
Malmo	**1950-91**	**2.5**	**1.4**
Norway	**1979-89**	**2.3**	**1.4**
Netherlands	**1972-87**	**3.0**	**2.0**
Scotland	**1982-98**	**1.5**	**1.0**

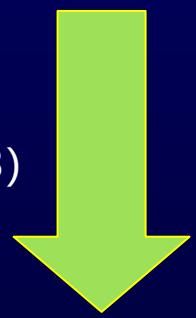
Methodological problems in cross-national comparisons

- Differences in:
  - definition of fracture
    - *ICD code, trauma leading to fracture*
  - selection of population
    - *Representative vs selected sample*
  - period of ascertainment
    - *Secular trend*

Recommendations from the 1998 report on osteoporosis in the European Community

1. Osteoporosis is to be adopted as a major healthcare target by the EU and governments on the 15 member states

Osteoporosis in the European Community:
a call to action
(an audit of policy development since 1998)



Osteoporosis is not a priority among policy makers in any of the 15 member states

Recommendations from the 1998 report on osteoporosis in the European Community

2. More information is required about the incidence and prevalence rates of osteoporotic fractures

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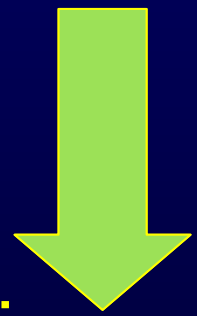
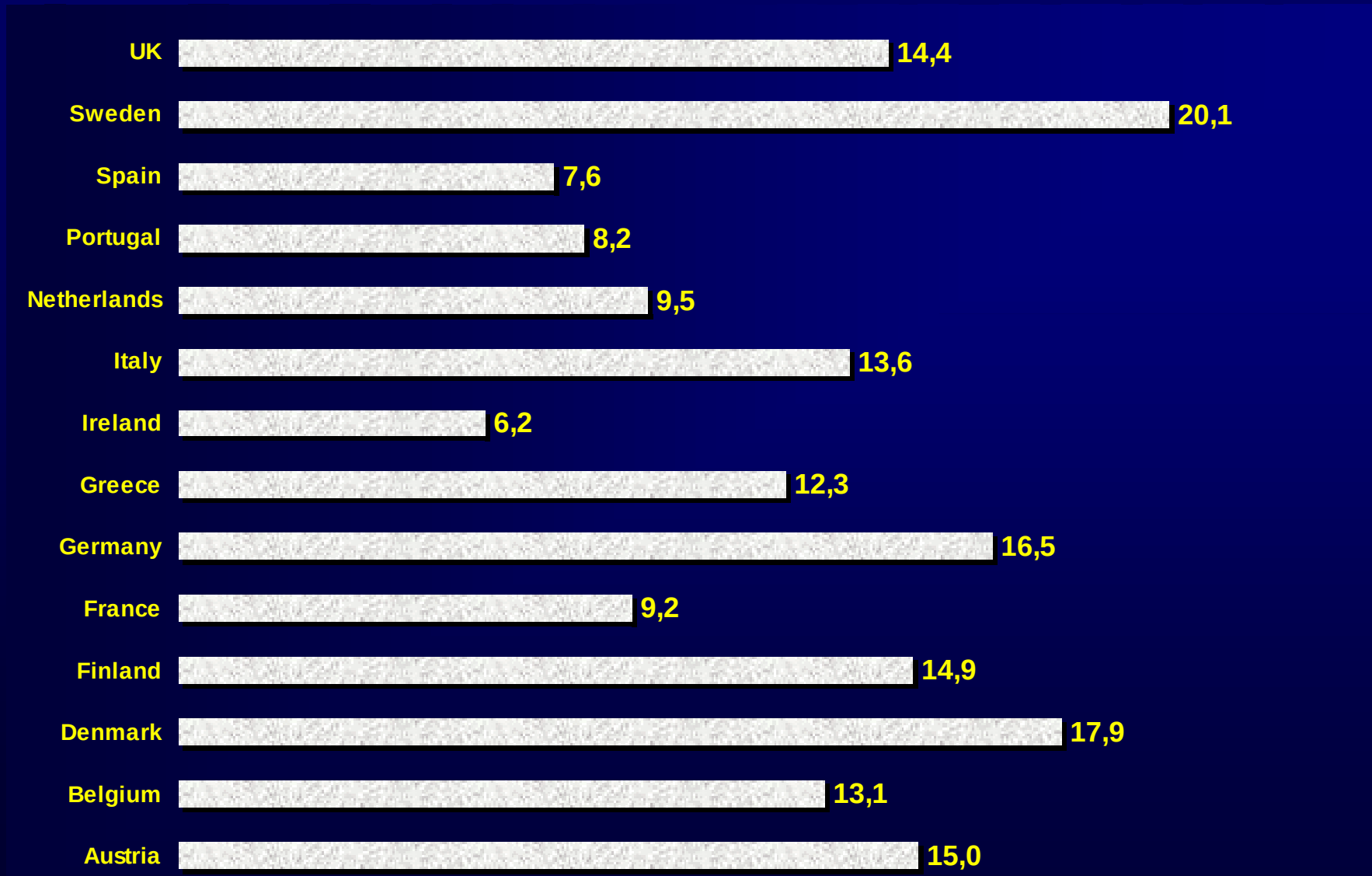


Only hospital-based registries in most countries, with no indications of the cause of the fracture (accident, major trauma, bone fragility)

Incidence of hip fractures *(per 10,000)*

(based on the latest available annual data, ranging from 1996 to 2000)



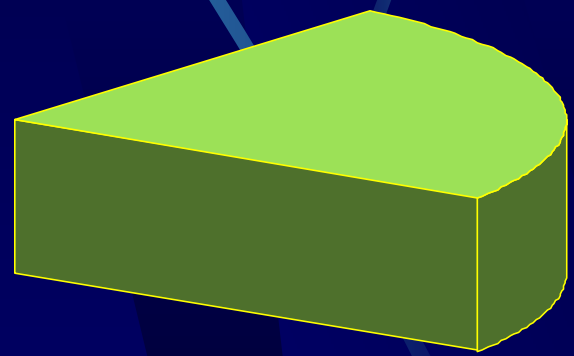
Number of hip fractures In Europe

	Latest available data from 1996-2000	1995 as reported in the EU report
Austria	12,000	10,160
Belgium	13,120	11,930
Denmark	9,595	8,310
Finland	7,698	5,730
France	55,000	46,310
Germany	135,000	108,900
Greece	13,500	9,450
Irland	2,777	2,678
Italy	78,478	38,130
Luxembourg	No info available	No info available
The Netherlands	15,268	15,110
Portugal	8,500	6,040
Spain	30,460	30,460
Sweden	17,926	18,980
UK	86408	69,600

Total annual direct hospital costs of hip fractures

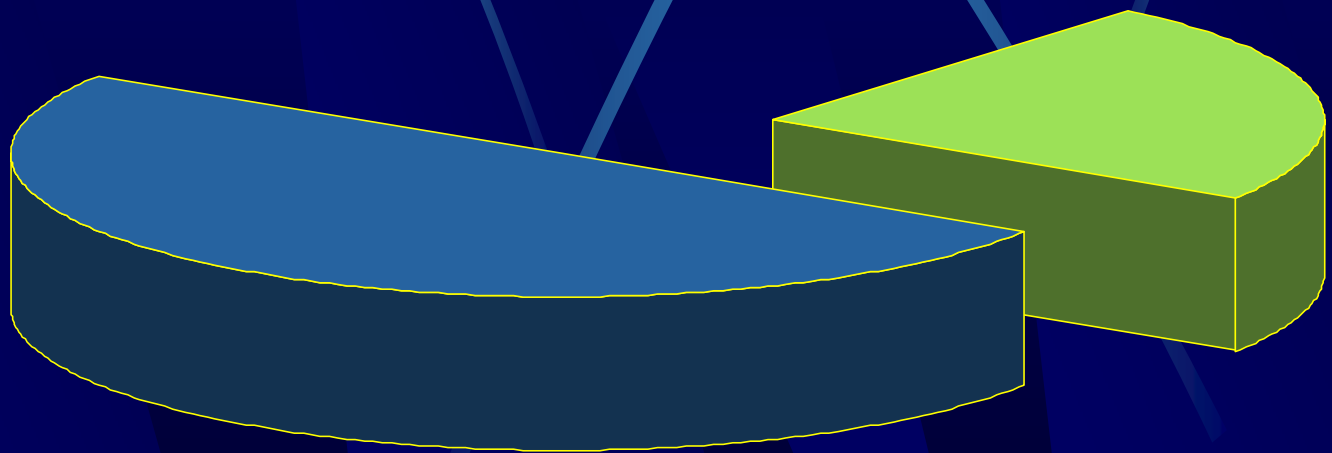
	Latest available data from 1996-2000 (In Euro)	1995 as reported in the EU report
Austria	156,000,000	146,324,320
Belgium	160,000,000	113,836,060
Denmark	47,975,000	47,975,000
Finland	150,000,000	22,685,070
France	600,000,000	560,860,410
Germany	1.462,240,000	1.401,978,600
Greece	44,550,000	47,817,000
Irland	8,298,000	3,979,508
Italy	555,863,000	204,910,620
Luxembourg	No info available	No info available
The Netherlands	180,375,000	180,375,000
Portugal	51,320,000	27,451,800
Spain	220,000,000	216,052,780
Sweden	300,000,000	101,030,540
UK	847,284,600	530,212,800

Costs of hip fractures in Sweden



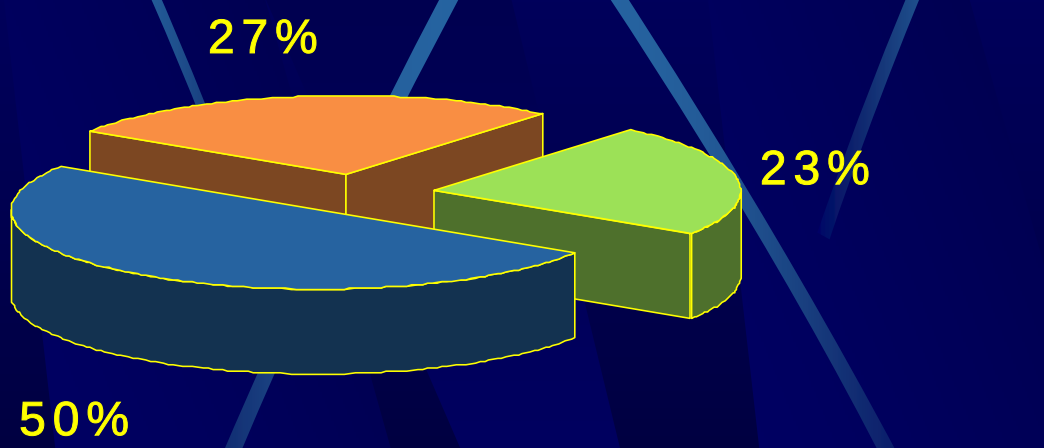
Hospital costs: 23% of total cost

Costs of hip fractures in Sweden



Rehabilitation costs: 50% of total costs

Costs of hip fractures in Sweden



Recommendations from the 1998 report on osteoporosis in the European Community

3. Co-ordinate national systems throughout the EU to plan effectively for increase in demand for healthcare and to institute appropriate resource allocation

Osteoporosis in the European Community: a call to action
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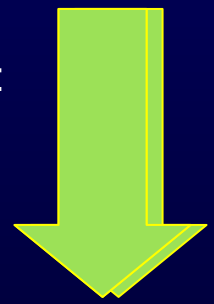

No coordinated actions, no budget-no change in the Member States (except in Austria, Finland)

Recommendations from the 1998 report on osteoporosis in the European Community

4. Develop and implement policies to advice the general public and health professional about calcium and vitamin D nutrition

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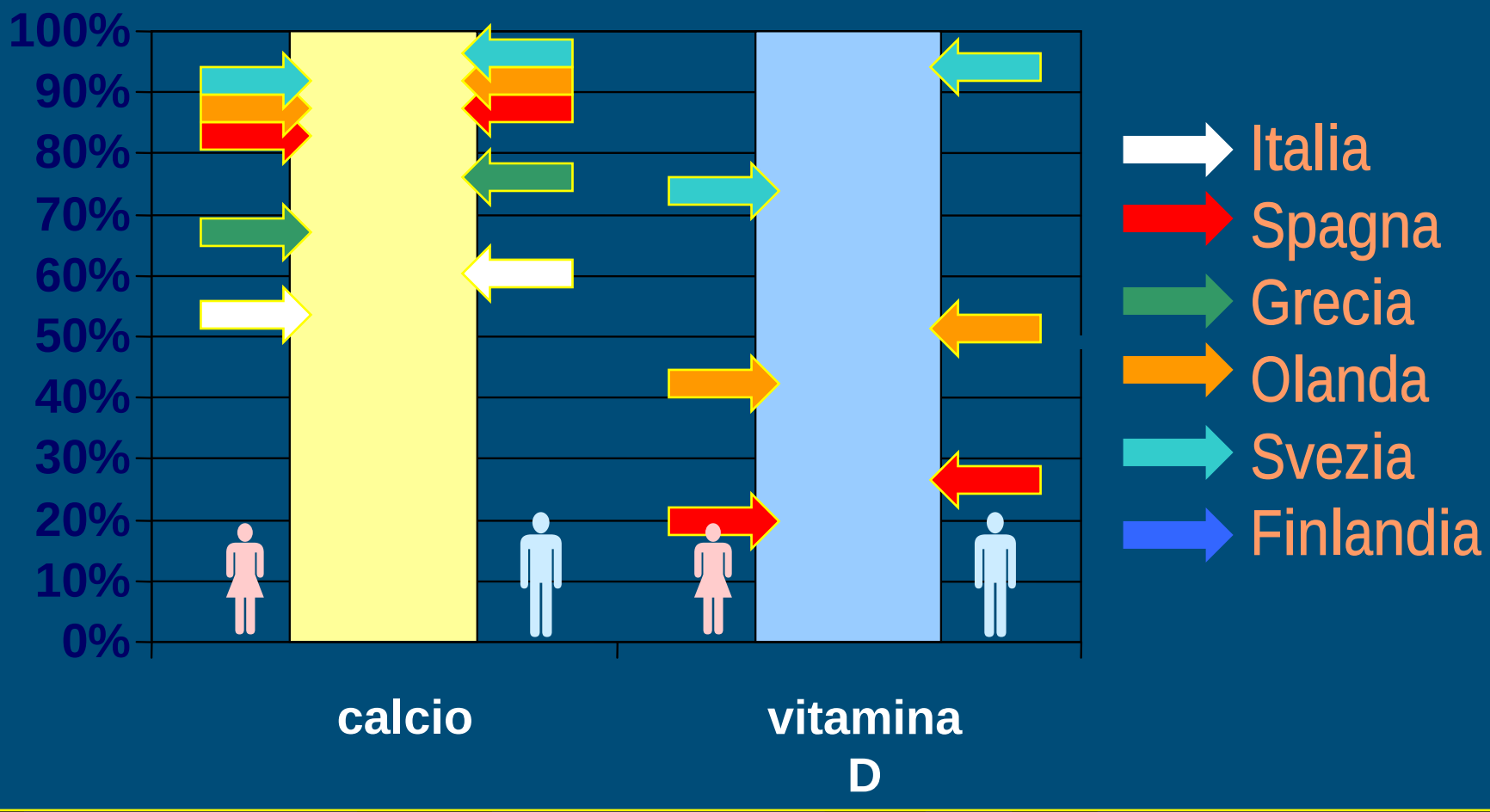
No government-backed public health campaigns to promote increased calcium and vitamin D intake (except in Austria, Finland, Greece, Luxembourg, Spain, Sweden)

Introito di Calcio e vitamina D in alcuni Paesi Europei: Studio *Nutrage*



Recommendations from the 1998 report on osteoporosis in the European Community

5. Access to bone densitometry systems should be universal for people with accepted clinical indications and reimbursement should be available for such individuals

Number of hip and spine DXA units per million population

	2000	1997
Austria	11	8,5
Belgium	20	18,5
Denmark	7,4	4,5
Finland	8	5,8
France	17	11
Germany	10	8,5
Greece	25,6	17
Irland	5,3	3
Italy	10,5	5,8
Luxembourg	2,3 (1/ 0.44 million)	0
The Netherlands	7,2	5,8
Portugal	25	13
Spain	8	7
Sweden	4,8	3,8
UK	4,2	3,5

Access to bone densitometry systems

	Waiting time	Costs/Reimbursement
Austria	4-12 weeks	Free Pub, E.70 private
Belgium	No waiting time	E 25
Denmark	2-3 months	E 45 Pub, 100 private
Finland	1-3 mo in pub, 1 we priv.	Free Pub, 80-115 private
France	4 months	E 18-136
Germany	1- few weeks	45-55 pub, 45-80 private
Greece	No info available	
Irland	Up to 6 months, 1 we priv	E 76-102
Italy	3-5 mo, 10 days private	E 78 pub, 156-260 private Free to all 65+
Luxembourg	1-4 weeks	E50-70 , 90% reimbursed if criteria fulfilled
The Netherlands	3-4 weeks	E 150
Portugal	1- mo public, 1 week priv.	E15 public, 100 private
Spain	6-12 months	Free pub, E 90 provate
Sweden	2 we-3 mo pub	E 70
UK	2-3 mo pub, 2-3 we priv.	E 87 pub, 160-42 priv.

Recommendations from the 1998 report on osteoporosis in the European Community

6. Member states to use an evidence-based approach to determine which treatment should be advised. Reimbursement should be available for all patients receiving treatment according to accepted indications

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Proven therapy must be reimbursed before the first fracture

Evidence-based guidelines on diagnosis and therapy

	Guidelines	Limitations for therapy
Austria	+	-
Belgium	+	After SCAN or FX
Denmark	+	Individual analysis
Finland	+	-
France	+ (endorsed by Gov)	After FX
Germany	+	After FX
Greece	-	NA
Irland	+	After FX
Italy	+	After FX
Luxembourg	-	-
The Netherlands	+	-
Portugal	+	-
Spain	+	-
Sweden	+ (endorsed by Gov)	-
UK	+ (endorsed by Gov)	-

Recommendations from the 1998 report on osteoporosis in the European Community

7. Government should actively promote national patient and scientific societies, providing financial support and helping to publicise their cause.

   Appropriate training for healthcare professional involved in the management of osteoporosis should also be an important priority

Osteoporosis in the European Community:
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Mainly nothing done in Denmark, France, Greece, Ireland, Italy, Portugal, Spain, Sweden, UK

Recommendations from the 1998 report on osteoporosis in the European Community

8. *Further research is urgent in the following areas:*

Modifiable determinants of PBM

Risk and protective factors for falls

Evaluation in different age groups of approaches to identify individuals at risk from fracture

Assessment of the cost/utility ratio of screening in older women

Causes and treatment of osteoporosis in men

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Mainly nothing done in Luxembourg, Portugal, Greece

Registri prospettici: SAHFE

EU Concerted-action Project includes centers in:

Sweden, Finland,

The Netherlands, England, Scotland, Spain, Greece, Italy and Hungary.

The Swedish National Registry serves as the base for the European comparisons

Registro Italiano
- Centri Partecipanti -

- Disponibilità di ricercatori interessati al progetto
- Partecipazione al progetto sulla creazione del registro retrospettivo

OBIETTIVI

- *Sanità Pubblica*: valutare la distribuzione e l'impatto delle fratture del femore in Italia

- *Ricerca sui servizi:* valutare i differenti profili di cura in alcune regioni

Piani generali

- *Registro retrospettivo*: basato sulle dimissioni ospedaliere in un determinato periodo di tempo

- *Registro prospettico*: tutti i nuovi casi sono identificati e immessi nel registro

Giornate di degenza media per frattura del femore.

Progetto ministeriale "Registro fratture del femore"

Padova	14.5
Parma	11.7
Genova	18.4
Napoli	11.3
Matera	13.6

Numero medio di giorni di attesa dall'ingresso in ospedale all'intervento.

Progetto ministeriale "Registro fratture del femore"

Padova	4.4
Parma	2.2
Genova	3.2
Napoli	6.2
Matera	5.7

Percentuale di interventi chirurgici per centro

Progetto ministeriale “Registro fratture del femore”

Padova	88
Parma	86
Genova	80
Napoli	62
Matera	41

Registro prospettico

- Tutti i casi ospedalizzati per frattura del femore vengono inclusi e valutati con un modulo standardizzato all'ammissione e alla dimissione (informazioni demografiche, stato funzionale prima della frattura, comorbidita', tipo di frattura e intervento, stato alla dimissione)
- Tutti i casi vengono ricontattati 4 mesi dopo per valutare i maggiori outcome (istituzionalizzazione, disabilità, riammissioni ospedaliere, mortalità)
- Tutti i casi ri-operati verranno rivalutati

CONCLUSIONI

- **I pazienti con frattura del femore sono tra i piu' costosi e difficili da seguire ed il loro numero sta rapidamente crescendo**
- **Il profilo di cura differisce da un paese all'altro nella regione europea e anche all'interno di ogni paese**
- **L'obiettivo del registro e' quello di ottenere dati affidabili sui tassi di incidenza delle fratture del femore e misurare gli outcome del trattamento, al fine di fornire livelli elevati di qualita' della cura**
- **E' necessario migliorare la comunicazione ricerca-politica sanitaria**