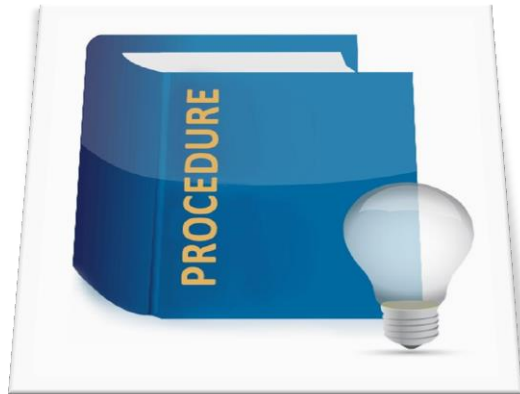




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# Elementi per la definizione e il dimensionamento del personale dei registri tumori



## PARTE 1 - *Inquadramento*

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***Antonio Russo<sup>1</sup>, Ivan Rashid<sup>2</sup>***

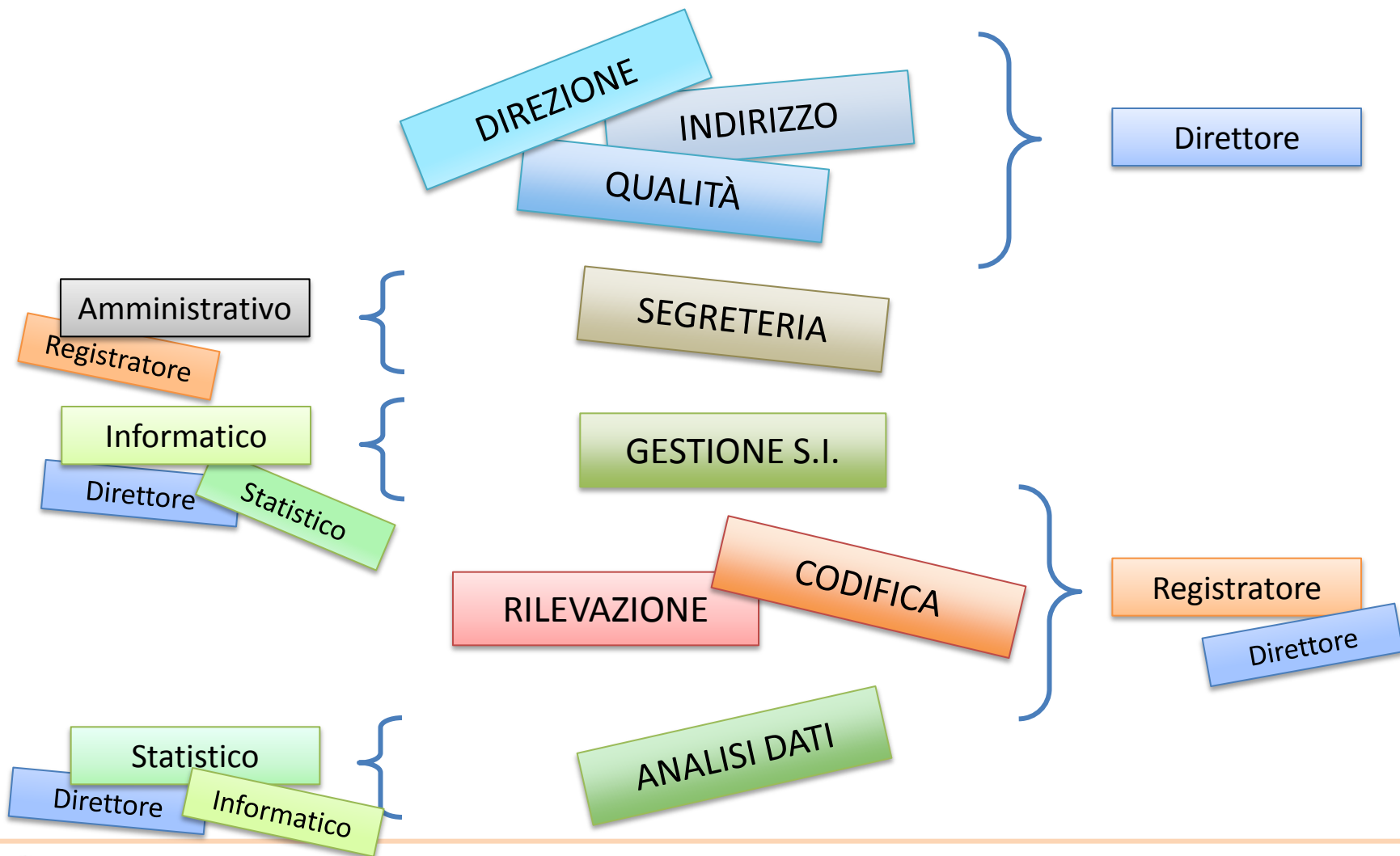
<sup>1</sup>Osservatorio Epidemiologico e Registri Specializzati - ASL Milano 1

<sup>2</sup>Registro Tumori Puglia - UO Statistica ed Epidemiologia – IRCCS Oncologico, Bari

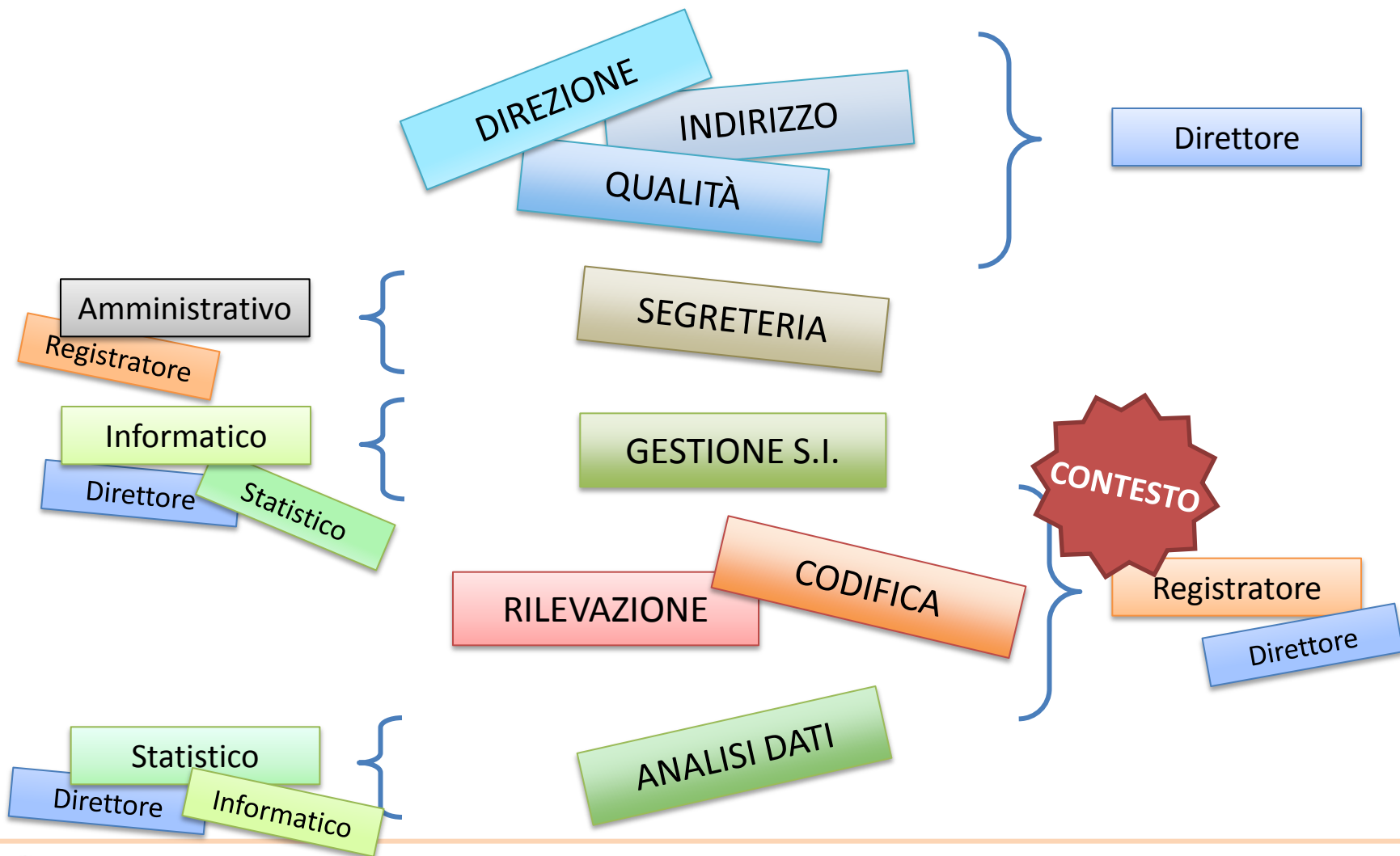
# Le mansioni all'interno di un RT (1)



# Le mansioni all'interno di un RT (2)



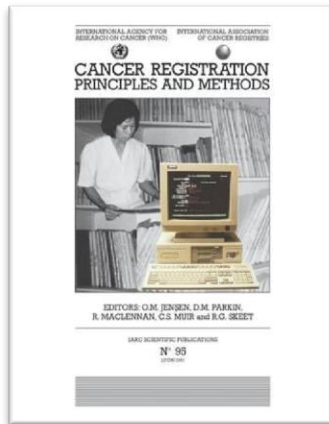
# Le mansioni all'interno di un RT (3)



## Chapter 4. Planning a cancer registry

O.M. Jensen and S. Whelan

### International Agency for Research on Cancer



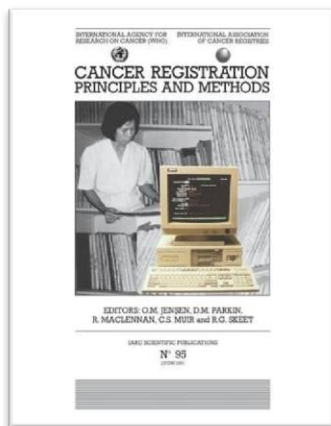
Jensen et al (1991)

### Personnel

#### *Numbers*

Each system thus involves differing requirements in the number and type of registry personnel, and it may be very difficult to generalize. Nonetheless, in a survey of 61 cancer registries which supplied data for Volume IV of the monograph series Cancer Incidence in Five Continents, it was found that **one staff member** was necessary **for each 1000 or so new cases** occurring annually in the population covered by the registry (Menck & Parkin, 1986).

## International Agency for Research on Cancer



Jensen et al (1991)

## Chapter 4. Planning a cancer registry

O.M. Jensen and S. Whelan

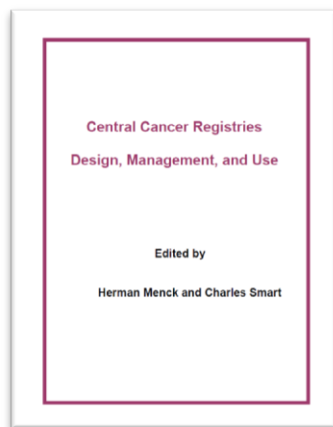
### Personnel

#### *Numbers*

Each system thus involves differing requirements in the number and type of registry personnel, and it may be very difficult to generalize. Nonetheless, in a survey of 61 cancer registries which supplied data for Volume IV of the monograph series Cancer Incidence in Five Continents, it was found that **one staff member** was necessary **for each 1000 or so new cases** occurring annually in the population covered by the registry (Menck & Parkin, 1986).

Stima alternativa:  
1 unità di personale ogni 200-250.000 casi

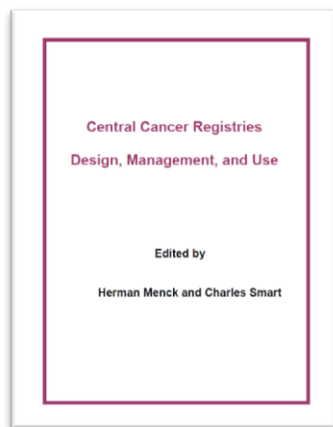
## *American Association of Central Cancer Registries*



Wenck et al (1994)

<b>Registry</b>	<b>Total personnel</b>	<b>Population million</b>	<b>Annual cases</b>
Connecticut	30.00	3.3	15,300
Florida	21.30	12,0	52,000
Maryland	15.00	4.5	28,000
New York	24.65	17.9	83,000
Pennsylvania	16.50	12.0	57,000
New Jersey	44.20	7,5	37,000
North Carolina	7.00	6.5	18,500

## *American Association of Central Cancer Registries*



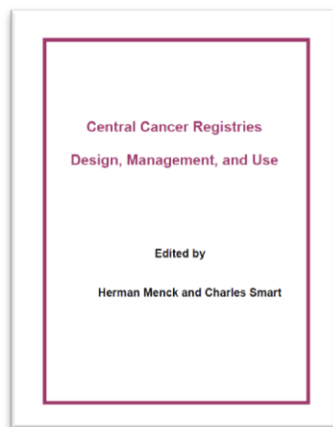
Cases/staff
510
2,441
1,866
3,367
3,454
837
2,642

Registry	Total personnel	Population million	Annual cases
Connecticut	30.00	3.3	15,300
Florida	21.30	12,0	52,000
Maryland	15.00	4.5	28,000
New York	24.65	17.9	83,000
Pennsylvania	16.50	12.0	57,000
New Jersey	44.20	7,5	37,000
North Carolina	7.00	6.5	18,500

Wenck et al (1994)



## *American Association of Central Cancer Registries*



Pop. /staff	Registry	Total personnel	Population million	Annual cases
110,000	Connecticut	30.00	3.3	15,300
563,000	Florida	21.30	12,0	52,000
300,000	Maryland	15.00	4.5	28,000
726,000	New York	24.65	17.9	83,000
727,000	Pennsylvania	16.50	12.0	57,000
170,000	New Jersey	44.20	7,5	37,000
929,000	North Carolina	7.00	6.5	18,500

Wenck et al (1994)

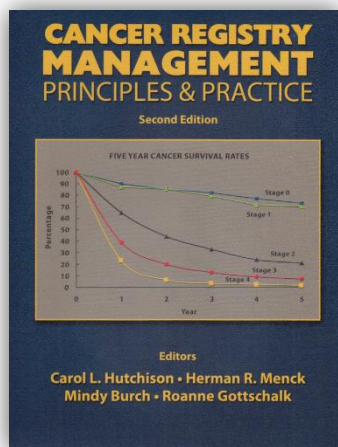


## CANCER REGISTRY PERSONNEL, OFFICE SPACE AND EQUIPMENT

B. MDe Coe, S. W. Ward

### ESTABLISHING THE CASELOAD

The national average are 40 minutes per abstract and 604 abstract per year, or approximately 4 abstract per working day



Hutchinson et al (2004)



Chapman et al (2012)

	<i>Mean hours</i>	<i>Median hours</i>
Case finding, manual	939.1	312.0
Case finding, electronic	972.7	52.0
Abstracting, at hospital	679.1	0.0
Abstracting, at central registry	3,604.8	2,756.0
Follow-up, active	45.9	0.0
Follow-up, passive	331.9	104.0
Visual editing	2,881.4	1,560.0
Case consolidation, manual	1,505.7	780.0
Case consolidation, electronic	3,071.1	780.0
Resolving edit report	1,625.8	520.0
Resolving quality issues	1,546.6	520.0
Audits, case finding	1,222.8	1,080.0
Audit, re-abstracting	418.6	276.0
Database management	1,252.1	960.0
Training, registry staff	753.4	396.0
Training, reporting facility staff	563.4	266.5
Travel, operations	200.2	80.0
Travel, conferences	332.3	170.0
Death clearance, matching	209.3	140.0
Death clearance, follow-back	462.8	320.0
<b>Total activities</b>	<b>22,618.8</b>	<b>16,710.2</b>
	<b>Mean FTE</b>	<b>Median FTE</b>
Estimated FTE (total activities/2034)	12.4	9.2

FTE=full-time equivalent.



Analysis of funding and research of cancer registries in Europe

Deliverable 1.3  
January 2013



EUROCOURSE  
Integral Knowledge Unit (IKU)  
October 2012  
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E-mail: eurocourse@uni-bielefeld.de  
www.eurocourse.eu  
January 2013

EU 7th Framework Programme - LSI-CT-080010

Eurocourse D1.3 (2013)

Table 2a Registry personnel (Full Time Equivalent, FTE) for population-based and specialised cancer registries separately					
		Population based CRs		Specialised CRs	
Number of Cancer Registries (CRs)		102		19	
		Mean (SD) %	Range %	Mean (SD) %	Range %
<b>FTE per 1000 cancer cases</b>					
Registrar		1.1 (2.1)	0-17	9.7 (14)	0.3-55
Programmer		0.4 (1.9)	0-17	5.7 (15)	0-62
Statistician/epidemiologist		0.5 (1.9)	0-16	7.8 (13)	0-48
Medical		0.4 (1.3)	0-11	1.6 (2.4)	0-9
Administration		0.2 (0.3)	0-2	3.3 (7.0)	0-27
Management		0.3 (1.0)	0-8	2.1 (2.9)	0-9
No data supplied (number of CRs)		25		2	

# ENCR (2)



## Eurocourse D1.3 (2013)

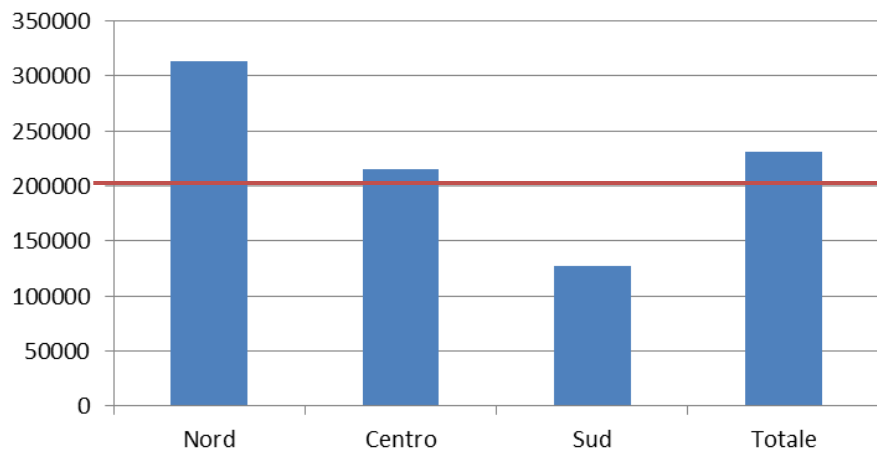
**Table 2b Registry personnel (Full Time Equivalent, FTE) according to European sub-regions**

	Part of Europe*	I	II	III	IV	V
Number of Cancer Registries (CRs)	14	38	11	43	15	
Average Population served (in millions)	4.8	3.5	4.3	1.0	6.7	
<b>FTE per 1000 cancer cases</b>	<b>mean</b>	<b>mean</b>	<b>mean</b>	<b>mean</b>	<b>mean</b>	
Registrar	1.1	1.9	5.9	3.3	1.4	
Programmer	0.3	0.4	2.1	2.6	0.4	
Statistician/epidemiologist	0.3	1.8	3.0	2.0	1.8	
Medical	0.1	0.5	1.7	0.7	0.5	
Administration	0.4	0.4	2.0	0.9	0.4	
Management	0.1	0.5	1.4	0.7	0.7	
No data supplied (number of CRs)	5	7	3	8	4	

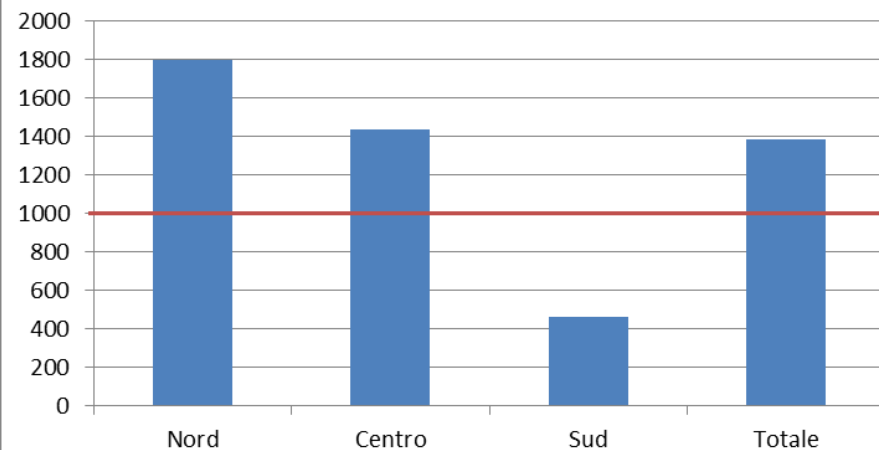
- I) Nord (Scandinavia, Gran Bretagna, Olanda)
- II) Centro (Francia, Belgio, Germania, ...)
- III) Sud-Est (Croazia, Grecia, Turchia, ...)
- IV) Sud-Ovest (Italia, Spagna, Portogallo,...)
- V) Est (Polonia, Russia, Rep. Ceca, ...)

# Personale, pool di 24 registri (2011)

## Popol./Codificatore+Rilevatore (FTE)



## Casi/Codificatore+Rilevatore (FTE)



# Conclusioni

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- La progettazione e il dimensionamento del personale è un aspetto ancora poco esplorato
- Fanno eccezione i registri Nord-Americani che hanno esplorato più di tutti il concetto di carico di lavoro e di efficienza (il modello è però solo in parte confrontabile)
- Rimane come riferimento la proporzione (1986):

1 unità di personale ogni 1000 casi

Quando non è desumibile il numero casi è utilizzabile (meno appropriata):

1 unità di personale ogni 200.000 abitanti

**ATTENZIONE:** le stime riguardano la totalità dello staff (escluso il direttore)