# Cost of exclusion from healthcare – The case of migrants in an irregular situation



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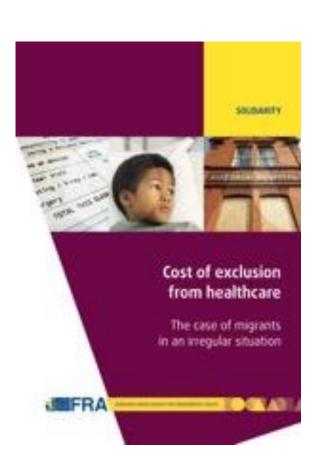
#### **Publications 2011-15**



Migrants in an irregular situation: access to healthcare in 10 European Union Member States



Fundamental rights of migrants in an irregular situation in the European Union





# Why providing access to necessary healthcare to migrants in an irregular situation?

Human rights argument Public health argument argument argument



## Aim of the study

- Compare the costs of providing migrants in an irregular situation with timely access to health screening and treatment, compared to providing medical treatment only in emergency cases
- two medical conditions: hypertension and issues related to lack of prenatal care
- 3 Member States: Germany, Greece and Sweden



# Categories of persons with limited access to healthcare in EU Member States

- Nationals without health insurance
- Certain profiles of EU nationals exercising free movement
- Asylum seekers
- Migrants granted a temporary toleration (Duldung) in Germany
- Migrants in an irregular situation



## Why hypertension and prenatal care?

- the prevalence among the population of migrants in an irregular situation;
- the costs generated to the healthcare system
- the extent to which particularly vulnerable groups are affected
- the availability of data to populate the model

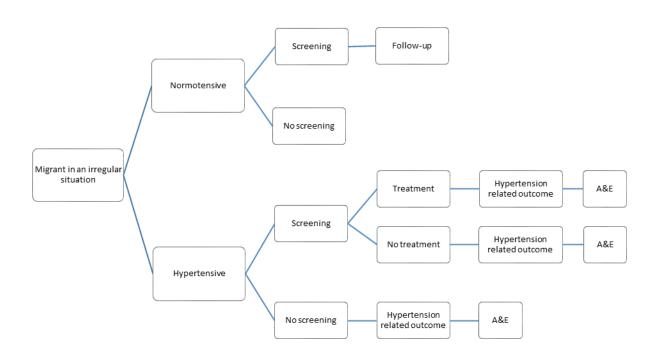


## Why Germany, Greece and Sweden?

- Different ways of handling access to healthcare for migrants in an irregular situation
- Different ways of financing healthcare provision



## Using a 'decision-tree' model





## Assumptions of the model

- It takes a 'healthcare perspective'
- It takes a 'conservative approach'
- 100 % access assumption
- Timeframe: hypertension 3 different timeframes;
   prenatal care 2 years



#### Limitations

- Static model
- Use of national and proxy data



## Hypertension model

- Outcomes of hypertension considered: myocardial infarction and stroke
- Screening and treatment based on on the ESH and the ESC guidelines for the management of hypertension
- Age group: 35-75 years old the model incorporates age-dependent RRs and agedependent treatment options
- Relative risks based on Framingham study



Probability of stroke and MI with and without treatment, weighted by age and by gender

Country	Probability of having a stroke if hypertensive and receiving treatment	Probability of having an MI if hypertensive and receiving treatment	Probability of having a stroke if hypertensive and not receiving treatment	Probability of having an MI if hypertensive and not receiving treatment	
Germany	2.73 %	2.02 %	4.43 %	3.00 %	
Greece	2.70 %	1.99 %	4.36 %	2.95 %	
Sweden	2.73 %	2.02 %	4.44 %	2.99 %	



#### One-year cost-savings in the 100 % access scenario per 1,000 patients

			Germany		Greece		Sweden	
		Irregular resident – 100 % access	Irregular resident – no access	Irregular resident – 100 % access	Irregular resident – no access	Irregular resident – 100 % access	Irregular resident – no access	
	Hypertension screening and managing costs	€124,095	€0	€102,168	€0	€130,374	€0	
<u>_</u>	Hypertension treatment costs	€12,226	€0	€10,132	€0	€12,694	€0	
1 year	Healthcare costs associated with stroke and MI	€686,183	€905,221	€560,785	€739,176	€712,559	€939,478	
	Total cost	€822,504	€905,221	€673,086	€739,176	€855,627	€939,478	
	Difference	-	-€82,717	-	-€66,091	-	-€83,852	



#### Five-year cost-savings in the 100 % access scenario per 1,000 patients

		Germany		Greece		Sweden	
I		Irregular resident – 100% access	Irregular resident - no access	Irregular resident - 100% access	Irregular resident - no access	Irregular resident - 100% access	Irregular resident - no access
5 years	Hypertension screening and managing costs	€ 404,842	€0	€ 334,278.59	€0	€ 423,169.64	€0
	Hypertension treatment costs	€ 49,582	€0	€ 40,711	€0	€ 51,389	€0
	Health care costs associated with stroke and MI	€ 2,530,972	€ 3,433,402	€ 2,026,190	€ 2,753,508	€ 2,620,183	€ 3,553,382
	Total cost	€ 2,985,396	€ 3,433,402	€ 2,401,179	€ 2,753,508	€ 3,094,742	€ 3,553,382
	Difference	-	-€ 448,007	-	-€ 352,329	-	-€ 458,640



#### Life-time cost-savings in the 100 % access scenario per 1,000 patients

		Germany		Greece		Sweden	
		Irregular resident – 100 % access	Irregular resident – no access	Irregular resident – 100 % access	Irregular resident – no access	Irregular resident – 100 % access	Irregular resident – no access
	Hypertension screening and managing costs	€974,258	€0	€811,804	€0	€1,013,934	€0
əc	Hypertension treatment costs	€169,755	€0	€141,347	€0	€176,058	€0
Lifetime	Healthcare costs associated with stroke and MI	€9,916,144	€13,252,686	€8,128,745	€10,881,002	€10,273,973	€13,727,663
	Total cost	€11,060,157	€13,252,686	€9,081,896	€10,881,002	€11,463,965	€13,727,663
	Difference	-	-€2,192,529	-	-€1,799,106	-	-€2,263,698



#### Results

- Cost-savings increase with time of stay
- -> cost-savings of one year around 9 %, 13 % after five years and 16 % over a lifetime
- when 70 % of migrants in an irregular situation access healthcare services, it is still cost-effective but costsavings are lower
- providing access to care for hypertensive patients can help prevent strokes and Mls (for instance, in Germany 344 prevented strokes and 239 Mls for 1,000 people over a lifetime)



#### Prenatal care model

- Outcome of lack of prenatal care considered: low birth weight
- no European guidelines available on prenatal care standard treatment -> national estimates used to determine the frequency with which prenatal resources are used, based on expert opinion.
- Assumption: LBW is almost five times more likely to occur in cases where prenatal care was not received (Heaman et al. 2008)
- LBW cost estimated using the 2001 Nation-wide Inpatient Sample (NIS) dataset, largest publicly available inpatient health care database



## Two-year cost-savings in the 100 % access scenario per 1,000 population

	Germany		Gı	reece	Sweden		
	Irregular resident – 100 % access	Irregular resident – no access	Irregular resident – 100 % access	Irregular resident – no access	Irregular resident – 100 % access	Irregular resident – no access	
Prenatal care cost	€35,038	€0	€32,627	€0	€23,380	€0	
Cost of LBW	€24,801	€116,257	€22,952	€107,588	€54,470	€255,328	
Total cost	€59,840	€116,257	€55,579	€107,588	€77,850	€255,328	
Difference	-	-€56,417	-	-€52,009	-	-€177,478	



#### Results

- providing access to prenatal care services to migrants in an irregular situation saves costs in all three Member States
- Germany, Greece present lower cost-savings than Sweden
- Providing 100 % access to prenatal care in Germany, Greece and Sweden generates savings of up to 48 % in Germany and Greece and up to 69 %in Sweden over two years
- these results are for a period of two years, which implies that the model does not capture all the potential complications of LBW that can take place in the future life of the child



#### Sensitivity analysis parameters

Hypertension	Prenatal care
Prevalence of hypertension	Level of access
Age distribution	Birth rates
Cost of stroke and MI	Cost of prenatal care
Probability of stroke and MI	Cost of low birth weight
	Probability of low birth weight



#### Conclusions

- The results are a conservative but powerful indication that governments would save money by providing access to primary healthcare to migrants in an irregular situation in the case of hypertension and prenatal care
- The model holds under different scenarios and assumptions
- The results leave out many external and wider social benefits and costs that point to higher likely cost-savings

### Thank you for your attention!



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