

# **Counting the Cost**

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## Content

- The nature of economic cost
- Hospital admission, diagnoses and costs in England 2008/11
- Comparisons with New York and Toronto
- The long term framework for evaluating policy costs



## Introduction

- A policy gives rise to various costs
  - Financial costs
  - Economic costs
- What are the economic costs of a policy towards the homeless?
  - For the individual patient there are gains / losses in the value of:
    - health changes in morbidity and mortality
    - utility of time (in leisure and at work)
    - productive output
  - For others, comprising:
    - cost of NHS and other government services
    - charitable resources
    - cost of direct consequences, including those for other homeless



# A study of hospitalised homeless in England\*

- Data: HES April 2007 March 2011
- The homeless identified as having NFA, but excluding those outside 16-64, relating to pregnancy terminations, obstetrics
- Inexact sample of hospitalised homeless some homeless may provide an address – but sample evidence is broadly consistent with other studies
- A comparator sample, with same exclusions is extracted

<sup>\*</sup> This presentation draws upon a working paper to be published this month on the CHSEO website



## Sample characteristics

NFA admissions, 2008/11 of 35,518:

- 80% male
- Modal age (near mean) of 38 years

Comparator sample of 23.7 million admissions:

- 47% male
- Modal age 63, mean age 45



# Comparative diagnoses of admitted patients

- The pattern of diagnoses amongst admitted English homeless patients is very similar to that found in North American cities, with one exception
- The share of patients with a mental health diagnosis is much lower – 10% as opposed to 26%
- The share of patients admitted with substance misuse was 27.7% in 2010/11 which is almost exactly that found in New York and Toronto in previous studies



# Admission by nature of diagnosis (HRG)

#### Table 1

HRG version 3.5 categories that are common	Homeless		Comparison group	
amongst No Fixed Abode episodes	2007/8	2010/11	2007/8	2010/11
Substance misuse	20.87%	27.74%	2.42%	2.46%
Mental health	10.95%	10.41%	1.48%	1.59%
Sprains, strains or minor open wounds	4.27%	5.50%	0.75%	0.78%
Syncope or collapse	2.12%	2.26%	0.52%	0.53%

HRG version 3.5 categories: Substance misuse T10-T12 and S16; Mental health T01-T09 and T13-T17; Sprains, strains or minor open wounds H41-H42; Syncope or collapse E31-E32; Head injury H63-H64; Major skin infections J41-J42



## NFA hospital admissions 2008/11: some facts

- 1. Total hospital spending on NFA patients fell by about 25%, 2007/8 2010/11, to £18m
- 2. The number of NFA admissions fell by about 20%, to 7,830
- 3. The length of stay for NFA's down by 12%
- 4. Cost per NFA admission down by 11%

Did this happen to the comparator group? No, except for length of stay

# Comparison of cost and activity

### Table 2

	2007/8	2008/9	2009/10	2010/11		
No Fixed Abode group						
Total cost	£24.8m	£22.97m	£18.27m	£18.19m		
Number of admissions	9,551	10,327	7,810	7,830		
Average length of stay per admission	7.71	6.45	6.86	6.86		
Cost per admission	£2,597	£2,224	£2,339	£2,323		
Comparison group						
Total cost	£8,015m	£8,383m	£8,766m	£9,150m		
Number of admissions	5,573,542	5,881,339	6,056,187	6,179,352		
Average length of stay per admission	2.38	2.23	2.20	2.14		
Cost per admission	£1,438	£1,425	£1,447	£1,481		
Ratio of cost per No Fixed Abode admission to cost per comparison group admission	1.81	1.56	1.62	1.57		



# Comparative mental health admission costs

#### Table 3:

Cost per admission 2010/11				Total cost 2010/11		
	Mental Health	Other	Overall	Mental Health	Overall	
NFA	£11,743	£1,367	£2,323	£8.6m	£18.19m	
Non NFA (comparator)	£9,926	£1,387	£1,481	£792m	£9,150m	



# Towards a broader picture of costs

Policies are often evaluated over a short time horizon. Policy decisions taken with young homeless are likely to bring cost – in a broad sense – consequences for many years:

- Published evidence suggests a 15 life-years penalty associated with homelessness
- HES data is consistent with this in hospital mortality rates, age corrected, are 37-145% higher for NFA patients, with highest differentials amongst the young
- Most of the homeless survive for many years after the homeless spell, but mainly with chronic disease, requiring treatment, and with social care needs
- A failure to consider the long term consequences of early policy intervention will overlook the long term cost savings from lower dependency



### The health costs of homelessness

- The hospital costs that I have discussed would to some extent have arisen from illness even in the absence of a homeless spell
- To reduce 'rough sleeping' on economic grounds requires studies of the <u>incremental</u> costs of 'rough sleeping', holding constant preceding illness
- This will sharpen the case for proactive policy towards rough sleeping, especially for the sick
- In certain patient groups it is clear that living rough and uncared for will generate long term health system costs. e.g. mental health patients requiring medication are less likely to become well and independent if unmedicated for a long period. Policy intervention studies should take a very long term perspective
- Each year in England over 700 mental health hospital admissions occur from the homeless population