

Community pharmacist supply: is there variation between populations with different levels of health needs?

Andrew Wagner, Liz Seston and Karen Hassell
Centre for Pharmacy Workforce Studies, University of Manchester

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<http://www.pharmacy.manchester.ac.uk/cpws/>

Outline

Background

- pharmacist shortage
- inequity?

Method

- Quantitative study
- PCT level analysis

Results

- Community pharmacist distribution

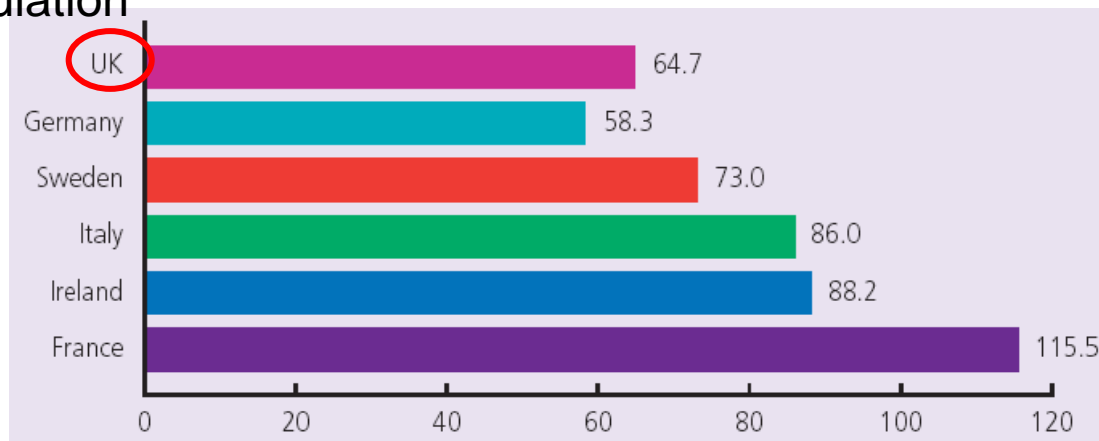
Discussion

- Future work

Background

Pharmacist under-supply – the Home Office Shortage Occupations List ¹

Pharmacists – UK amongst the lower EU rates per head of population



Practising pharmacists per 100k population ²

Pharmacy Workforce Planning & Policy Advisory Group ³

- Estimated increase demand for community pharmacists 2003 – 2013 = 74%

¹ 'Review of National Healthcare Labour Markets to Update the Shortage Occupation List for the Home Office' NHS Workforce Review Team, July 2007.

² Organisation for Economic Co-operation and Development (OECD) Health Data, 2007

³ Future pharmacy workforce requirements; workforce modelling and policy recommendations. RPSGB. 2004.

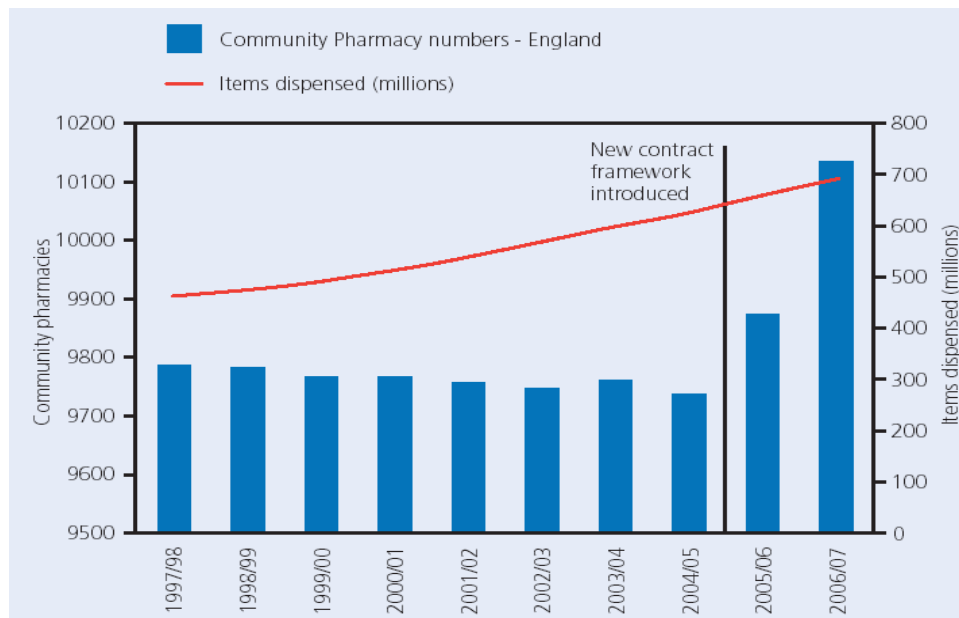
Background

Workload ¹

- Local enhance services - increased by 24% between 2005/6 and 2006/7
- MURs - 148,195 (2005/6) : 559,315 (2006/7)
- Prescription items dispensed – increased by 49% between 1997/8 and 2006/7

Community pharmacies

- Numbers increasing since April 2005



Background

Community pharmacist workforce and health equity

- Little available evidence before RPSGB censuses
- Equity of access to community level health services. Core aim is to “...*improve access to, and quality of primary care services in currently under-served areas, for example by making greater use of community settings and services, including community pharmacies*”. ¹

Evidence of primary care workforce inequity in England

- Quantitative: shortages of GPs in materially deprived areas ²
- Qualitative: difficulties with GP recruitment and retention in materially deprived areas ³

Evidence of similar or different patterns with community pharmacists?

- Scoping exercise

1 Tackling Health Inequalities. A Programme for Action. Department of Health. 2003

2 Hann & Gravelle 2004

3 Young & Leese 1999

Method

- Quantitative study
- 2007 RPSGB Register of Pharmacists
 - Practising
- 2005 Pharmacy Workforce Census
 - Community pharmacists - WTEs
 - Work address postcodes (England)

} Linked by RPSGB pharmacist
identifier

Method

- Quantitative study
- 2007 RPSGB Register of Pharmacists
 - n=39,632 (practising)
- 2005 Pharmacy Workforce Census
 - Response rate = 76.6%
 - n=18,243 (community pharmacists)
 - n=10,672 (work address postcodes)

n=8,413 (dataset)

Data limitations

- Combines 2 different years
- Factors in Census response rate
- Changes in work circumstances over the period

Method

Department of Health's "Spearhead" PCTs

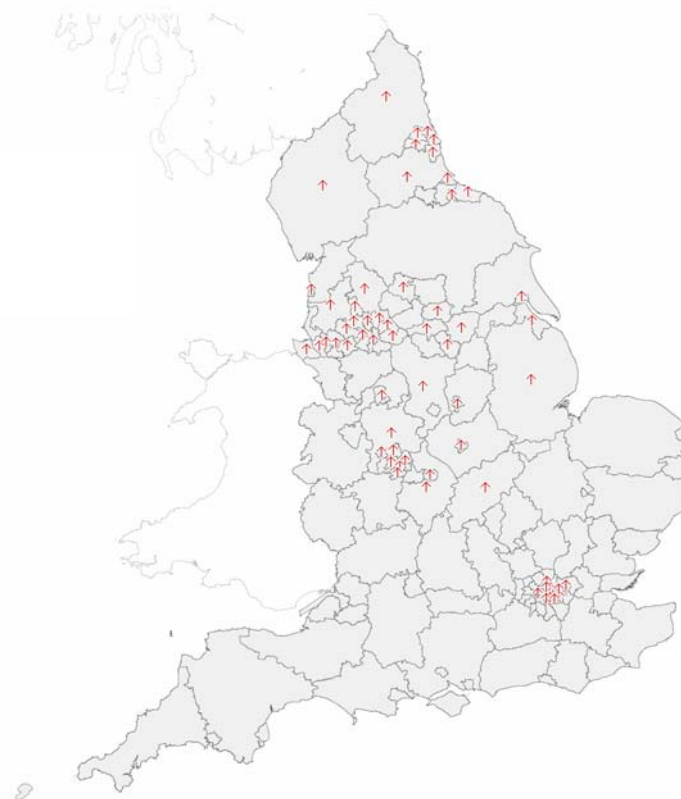
- n=62 (41%)
- Broad dichotomous indicator of population health
- Community pharmacists aggregated to PCT

Spearhead PCTs defined by extent of:

- Deprivation
- Cancer mortality
- Heart disease
- Lower life expectancy

Mainly clustered in major conurbations

Spearhead PCTs



Results

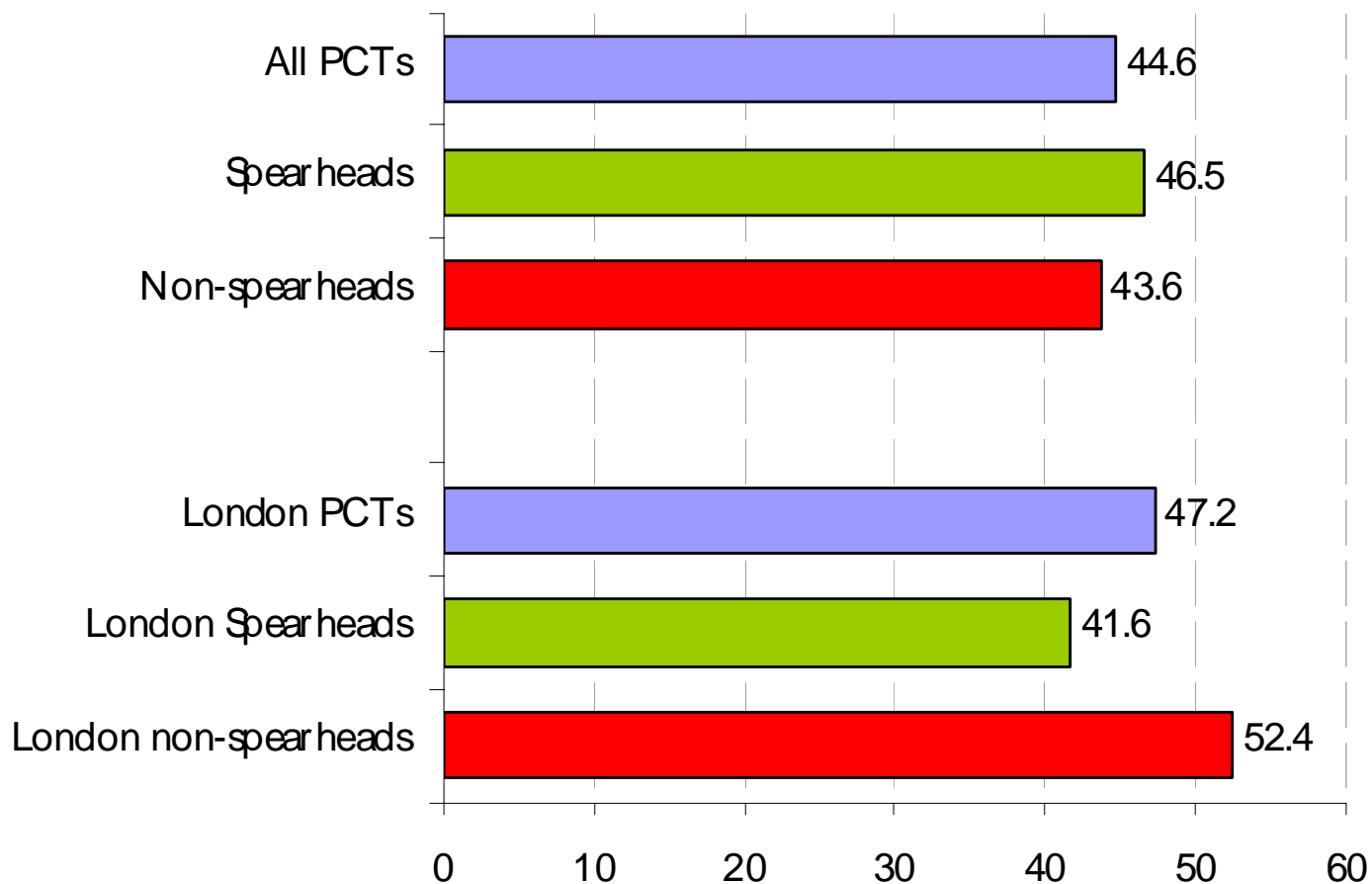
Community pharmacists per 100,000 PCT population

	Number	Rate per 100k PCT population	Rate per 100k PCT population. Pro-rated up to estimated CP total (n=22,495)	T-test for equality of means
England				
All PCTs	152	16.7	→ 44.6	} T= -1.17 P=0.24
Spearhead PCTs	62 (41%)	17.4	→ 46.5	
Non-spearhead PCTs	90 (59%)	16.3	→ 43.6	
London				
All PCTs	31	18.1	→ 47.2	} T= 2.78 P=<0.01
Spearhead PCTs	11 (36%)	15.5	→ 41.6	
Non-spearhead PCTs	20 (64%)	19.6	→ 52.4	

Results

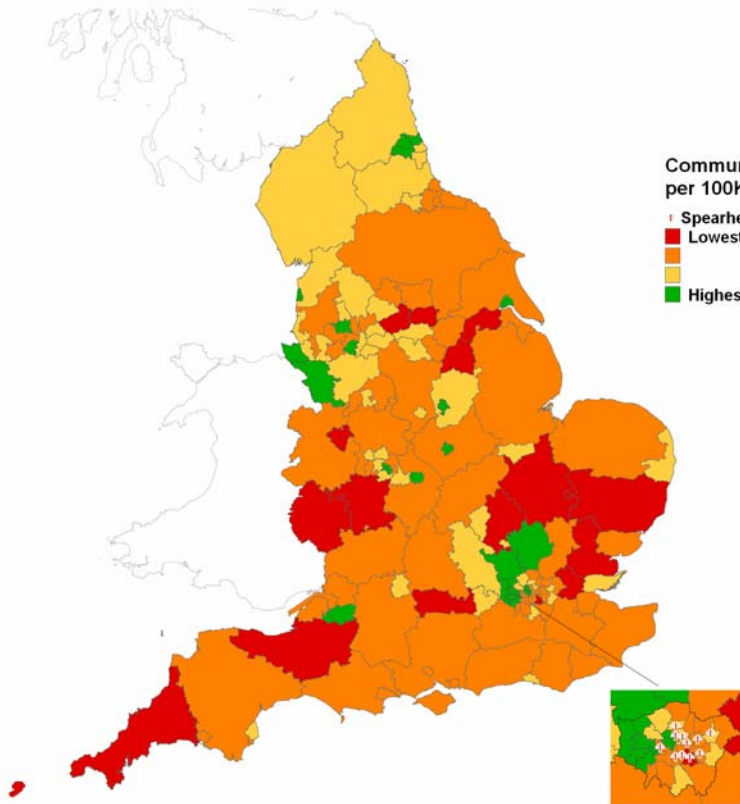
Community pharmacists per 100,000 PCT

pc



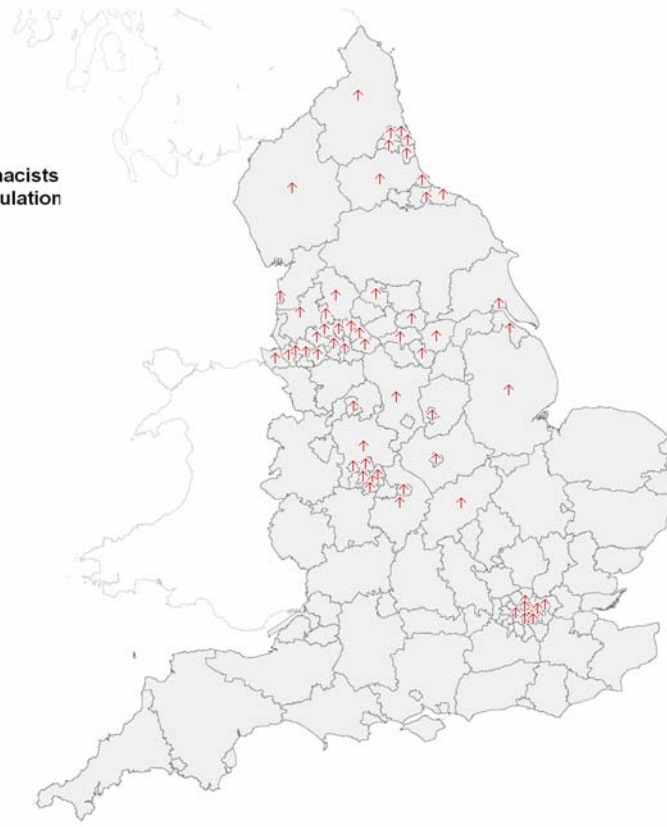
Results

Community pharmacists per 100,000 PCT populations (estimate)



Spearhead PCTs

Community pharmacists per 100K PCT population
↑ Spearhead PCT
■ Lowest rate
■ Highest rate



Results

Lowest quartile rate <35 community pharmacists per 100k PCT population

- n=16 PCTs
- 2 spearheads (13%)
- 1 London PCT

Highest quartile rate > 55 community pharmacists per 100k population

- n=23
- 11 spearheads (48%)
- 7 London PCTs (none were spearheads)

Locums

- Follow the same distribution pattern as community pharmacists in England and London

Discussion

Distribution is not uniform

- First attempt at quantifying community pharmacist distribution
- Possible unequal access to community pharmacists
- Suggestion of inverse care law in London
- But what about patient-focused services?

Further work

- Longitudinal tracking of distribution via Census/Register
- Finer grained study of variation (ward/output area level)
 - Community pharmacy distribution
 - Neighbourhood characteristics
 - Community pharmacist demographics
 - Locums

Acknowledgement

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andrew.wagner@manchester.ac.uk