

Looking Forward: NILS Distinct Linkage Projects, “Beyond 2011”

Dr David Marshall



Northern Ireland
**Statistics &
Research**
Agency

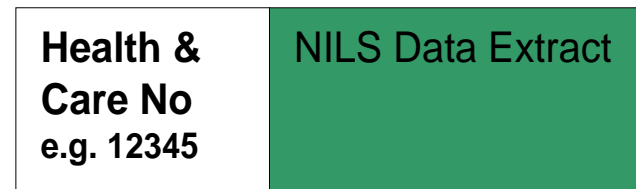
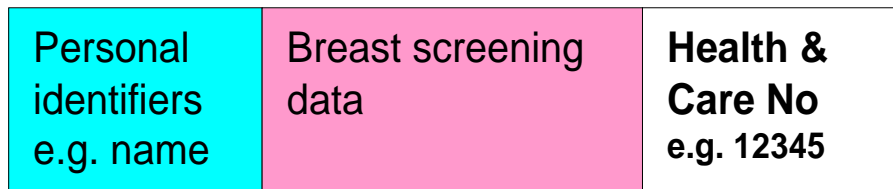
“NILS Distinct Linkage projects”





Breast Cancer Screening Data at (QARC)

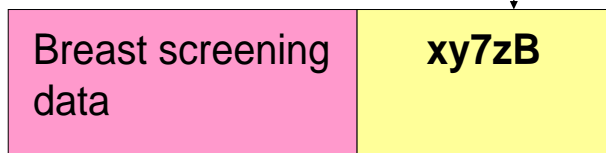
Northern Ireland Longitudinal Study (NILS) Data at NISRA



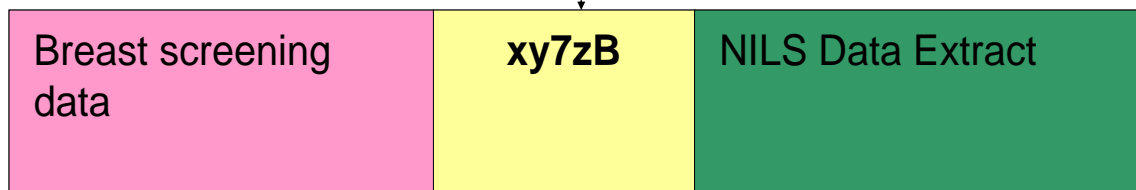
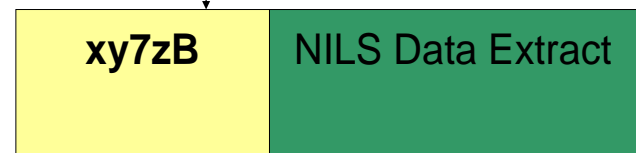
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One-way encryption

One-way encryption



Matching



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Researcher access



- Additional constraints:
- NLS approval subject to
 - Legal gateway to share pseudo-anonymised data
 - Ethical approval for specific project
 - Privacy Advisory Committee consent
- One-way encryption (**cannot go back**)
- Project by project basis

- Dental Health (QUB Dental School)

Socio-economic variations in general dental care among adolescents:

=> low social class less orthodontic care

=> high social class less fillings and extractions

BBC Newsline lead story 5 December 2011

- **Breast Screening (QUB Medical School)**

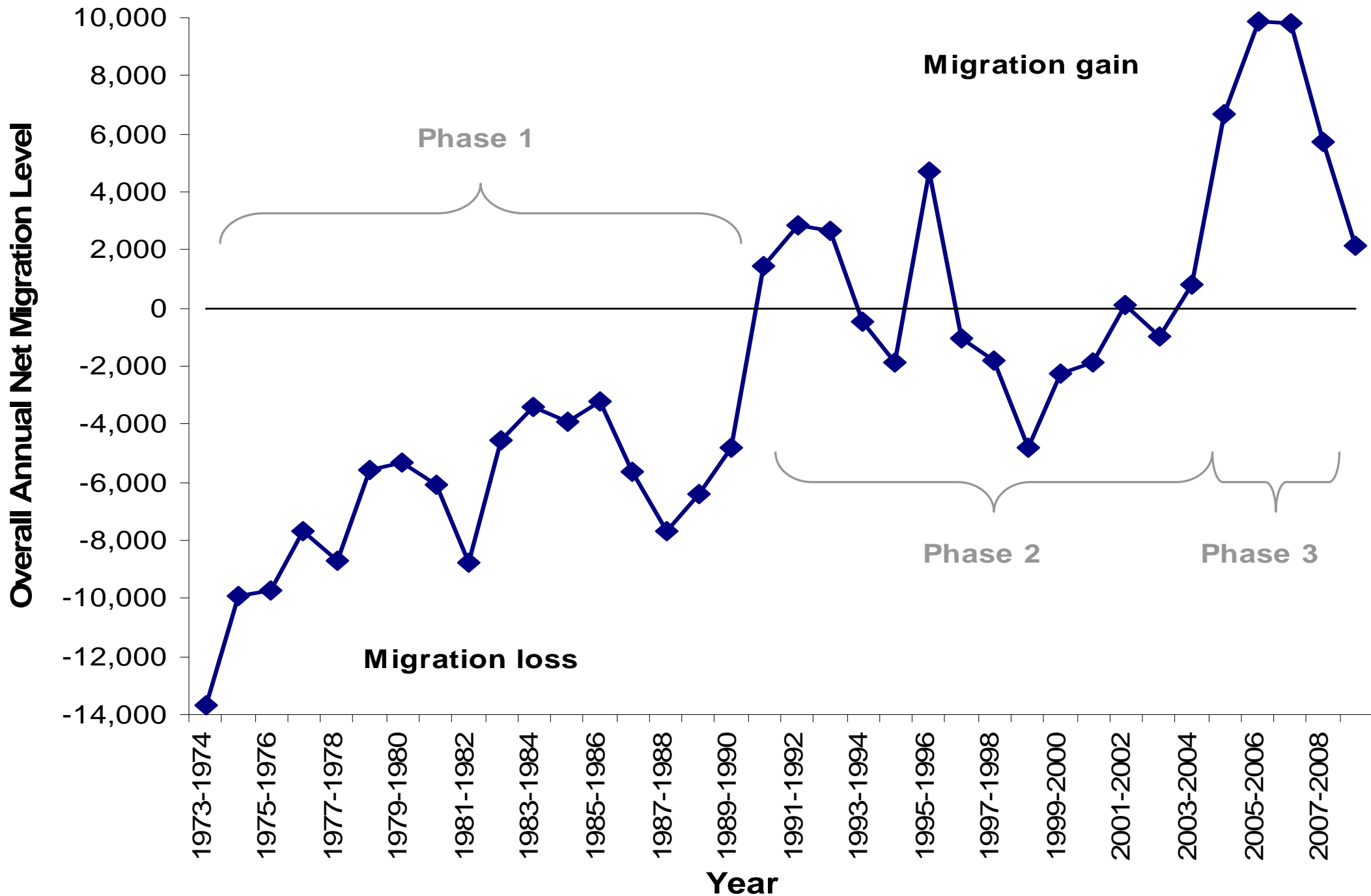
Variation in breast screening across NI:

- low uptake of breast screening in Belfast
- care-giving impact, other factors?

Screening services review of invitation process

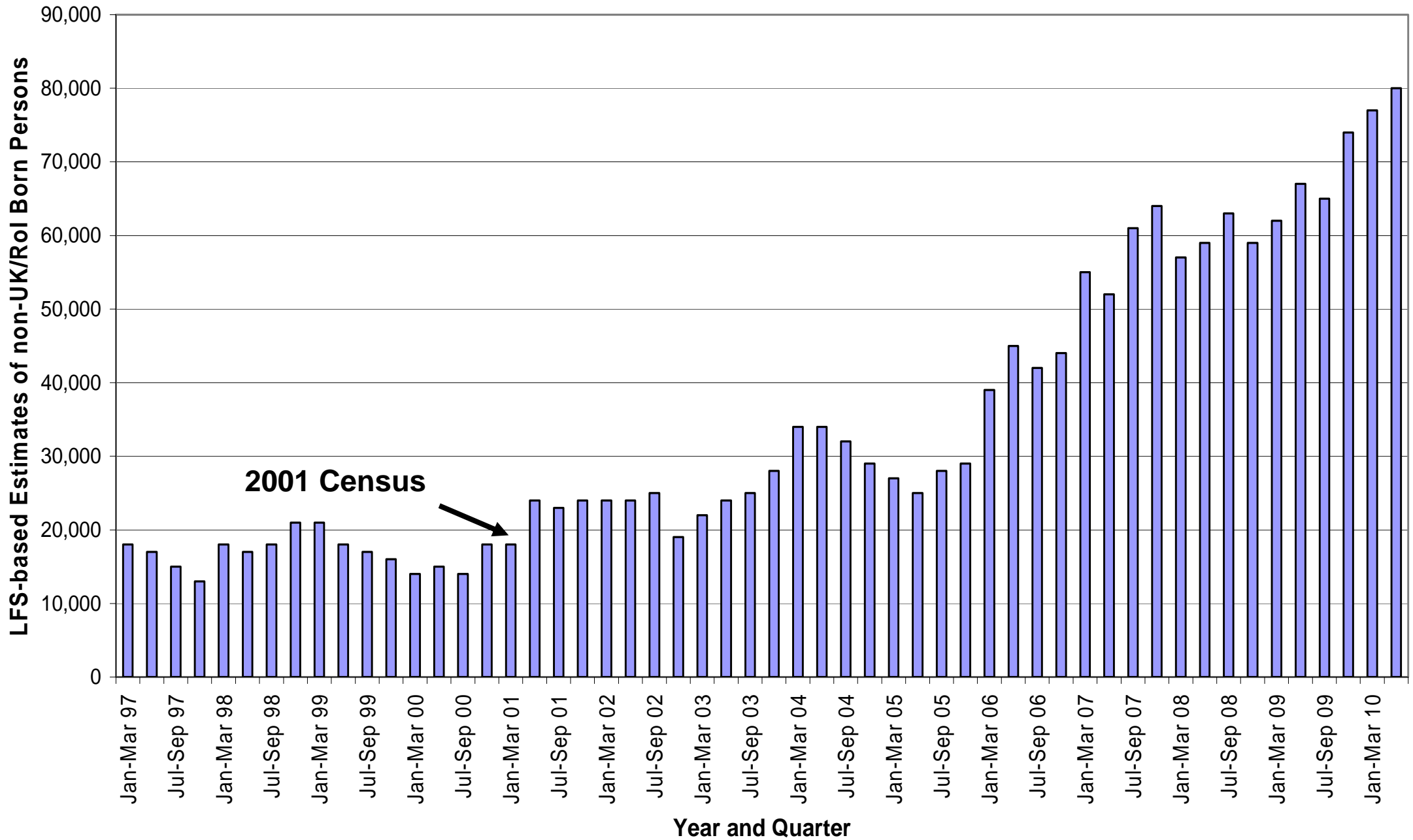
“Beyond 2011”

NI Net Migration (1973/74-2008/09)





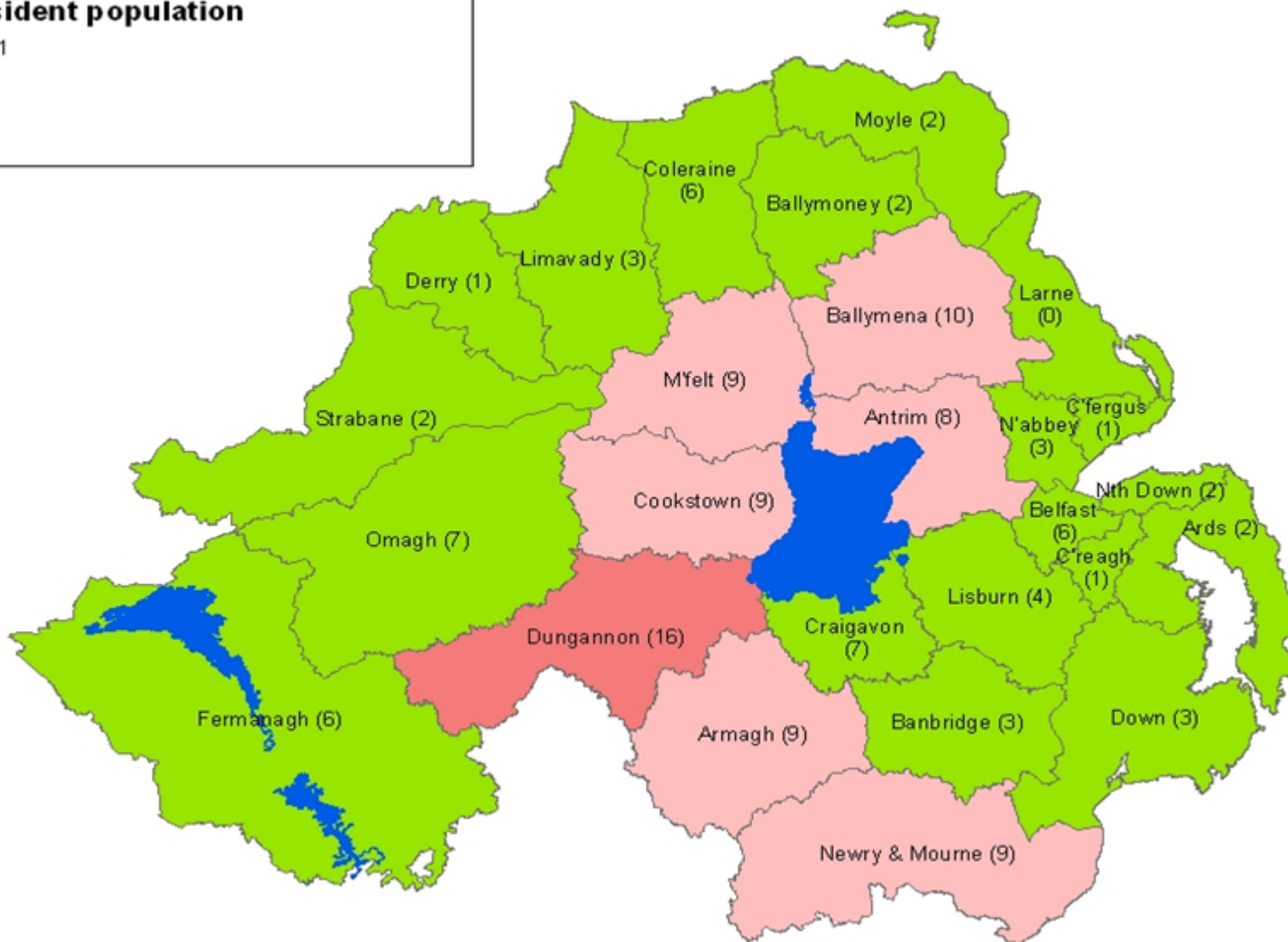
LFS based estimate of non-UK/RoI born persons



NI WRS Registrations by local authority of employment per 1,000 resident population (April 2006 – March 2007)

WRS Registrations (April 2006 - March 2007) per 1,000 resident population

- More than 11
- 8 - 11
- Less than 8





Cabinet Office

The Rt Hon Francis Maude MP

Minister for the Cabinet Office and Paymaster General



2011 Census

Despite my initial concerns about cost and scope, I am now convinced that the 2011 Census must go ahead. It will provide unique information necessary to meet essential UK and EU requirements and the sunk costs mean that any other option would be more costly. Going forward, my colleagues and I will continue to promote the importance of the public engaging with the 2011 Census.

The future of the Census

Your letter recognises the increasing costs and difficulties of carrying out a Census. I therefore welcome the urgent work on considering alternatives that the Board has instructed ONS to carry out with the intention that the 2011 Census will be the last of its kind. I ask you to consult widely across Government on this work.

Linked Administrative Option

- increased use of admin data inevitable
- not cheap, test accuracy, understand issues
- data standards, recording, linkage, archiving
- privacy issues?
- *underpinned by an address register*



- Hypothetical “Administrative Data Based System”

- Demographic Details (Age, Sex, Household, Location)
- Activity Indicator(s)

No direct personal details
(held separately)

Individuals accessing Family Practitioner Services in 2008-09

All	Medical	Pharmacy	Dental	Ophthalmic	FPS
This column represents the population of NI – 1.86m 1 st Apr 09	242,594				Had an I N T E R A C T I O N 1,560,475
		1,239,698	848,766	295,757	
					No recorded 296,958

“Other Census based Options”

- 5 year rolling Census



- one page Census & household survey



- mixed Census (long and short)



Does NOT mean 2011 is the last Census

NISRA are likely to integrate data sources – in a more radical change than before

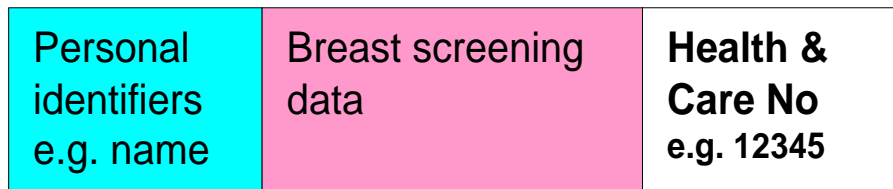
Public “UK” Beyond 2011 consultation ongoing

“The Future”



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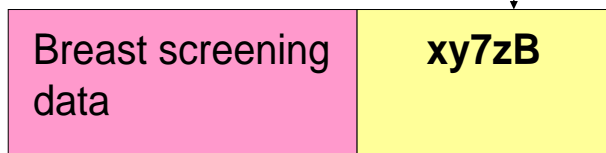
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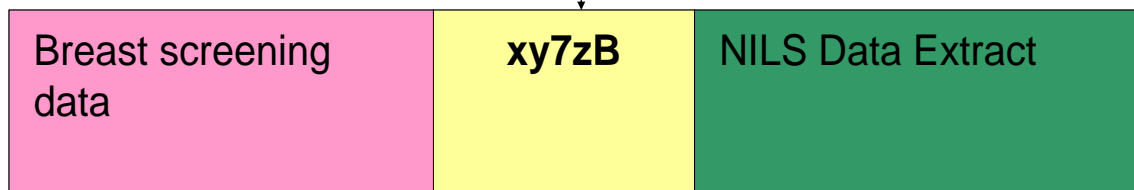
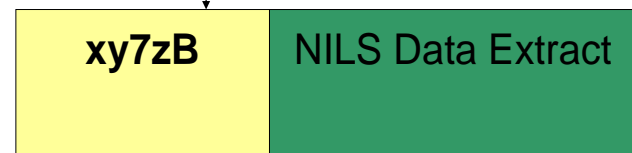
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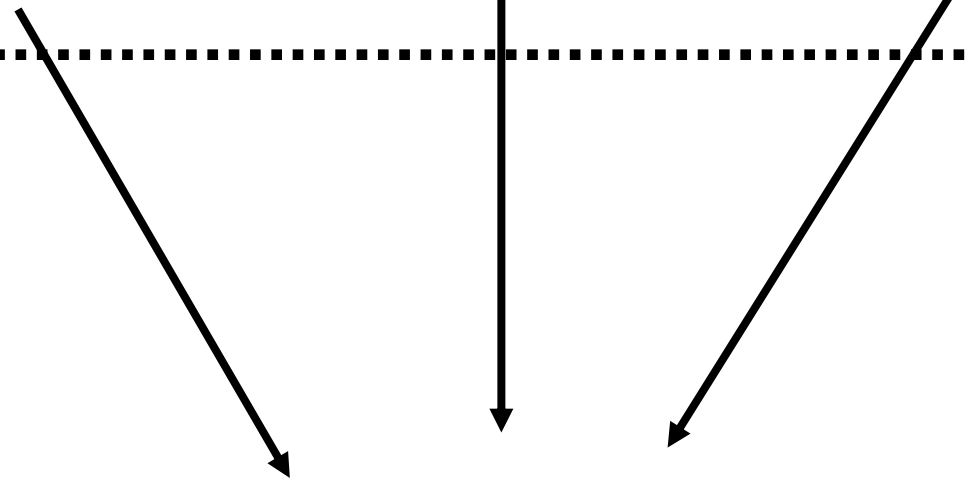


The future for NLS type research? (initial thinking)



Beyond 2011 dataset

Personal data



Linkage & anonymisation processes

Pseudo-anonymised data



Research on fully anonymised linked data (in a safe setting)

e.g. Social Welfare and School Attendance?

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