

Nuffield Data Lab

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STUDIES IN HEALTH SERVICES

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Features of Nuffield Data

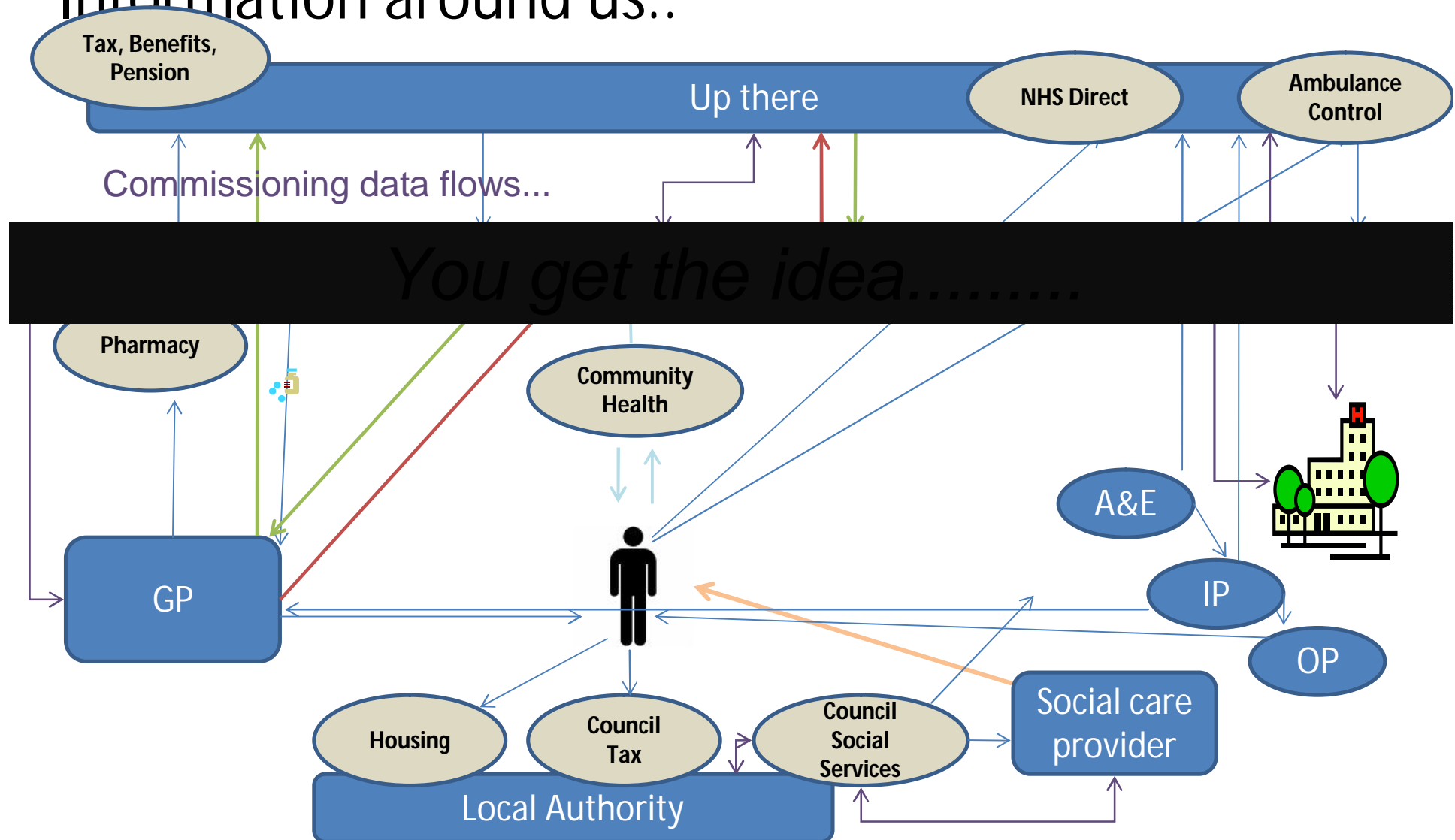
- Making the most of existing information
- Exploiting analytical tools such as predictive modelling
- Structuring information around people not events
- Linking data sets



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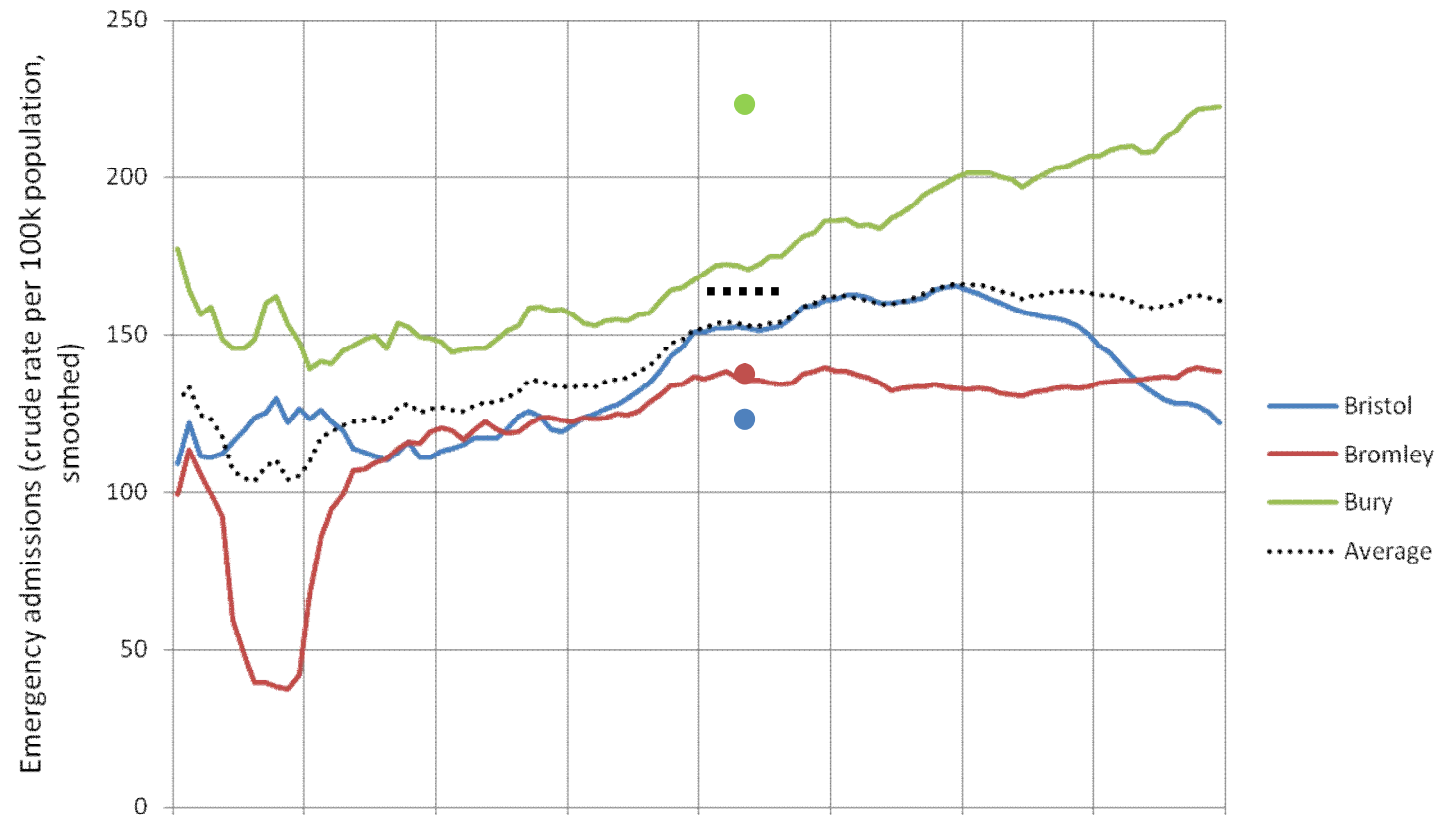
Information around us..



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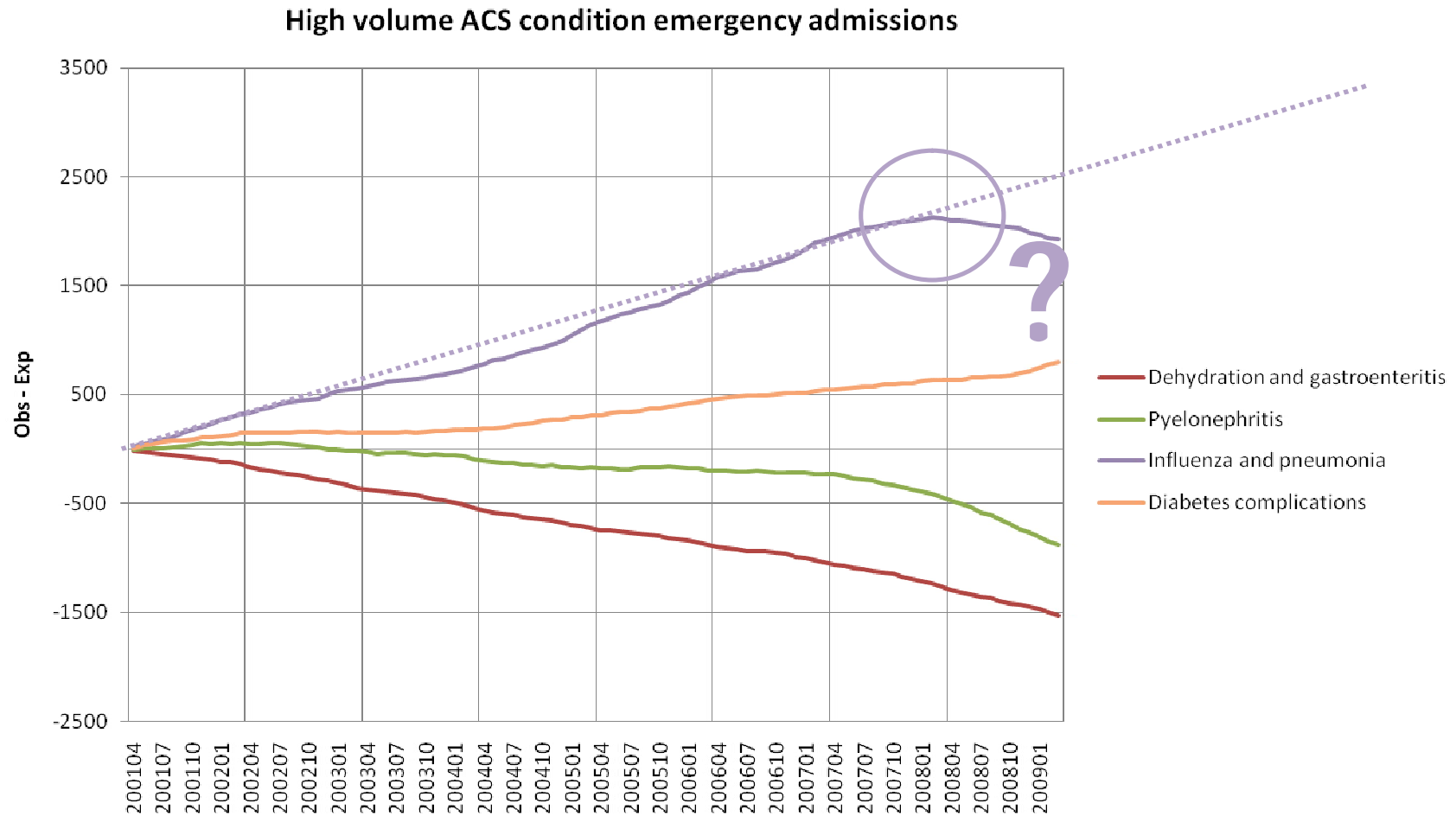
From cross-sectional to time series



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Standardised to identify unexplained changes



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Recently focus on advances in being able to construct individual histories by:

- **Linking data over time to look at what happens to people – not just events**
- **Linking data sets across care providers to build broader picture**



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Looking at people not events

	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D4
person 1																								
person 2		2			2	2	2			2	2	2		2	2									.
person 3	.	.	.	.	.	.				0	0	0	0	0	0	0	0	0	0			.	.	.
person 4							.		.									.		.
person 5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			.	2	2	2	2
person 6										.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
person 7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	8	8	8	8	8
person 8	.	.	.	.	.	.												
person 9	0	0			.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
person 10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5			5	5	0	0	0	0	0
person 11	.	.	.	3	3									.	.	.	.	.	.	.	.	.	.	.
person 12	.	.	.	.	2	2	2	2	2	2	2		.	.	.	.	.	.	.	.	.	.	.	.
person 13	.			.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
person 14										.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
person 15	.	.	.	.	.	.	.	.	.	.	.	.	.	6	.									

	1 Residential/nursing care		4 Day care only
	2 Home care only		5 Home care and day care
	3 Equipment only		6 Meals only



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Using Individual Histories

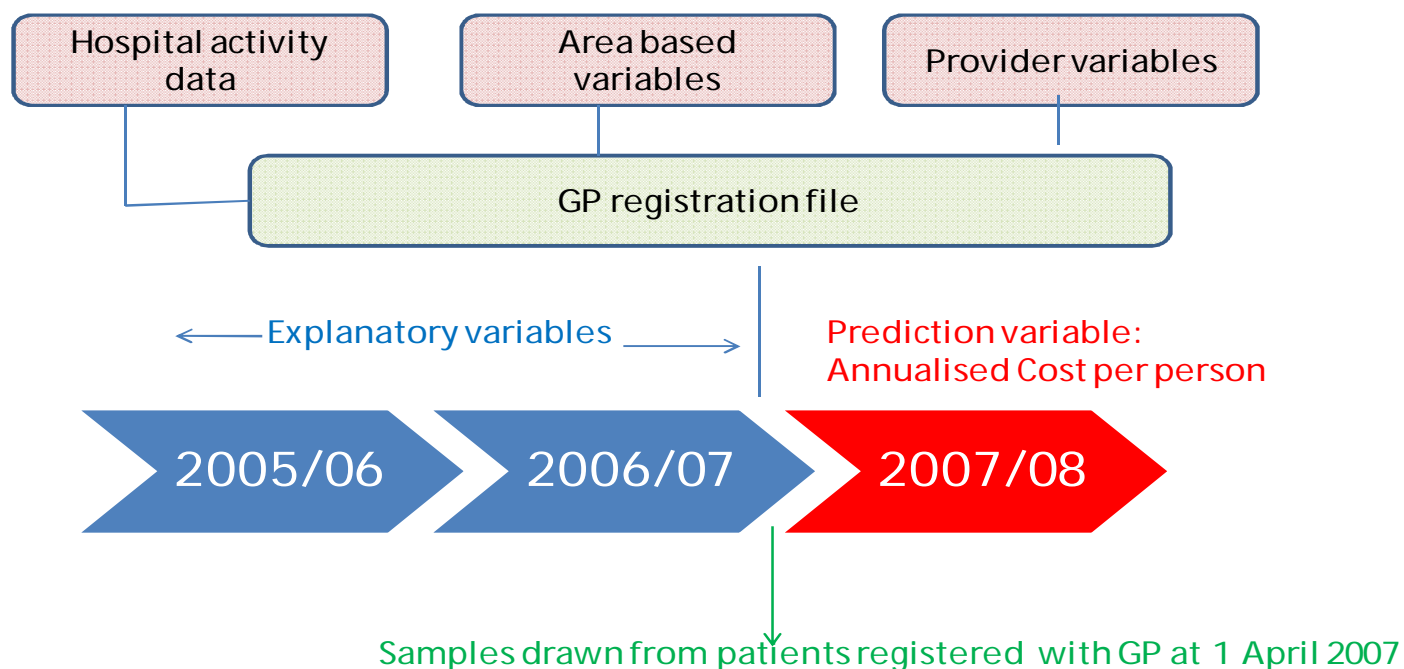
- Predicting Future Costs
- Assess impact across sectors eg health and social care
- Evaluation of the impact of innovation and service change e.g. Whole Systems Demonstrators
- Case finding: identifying a people at risk



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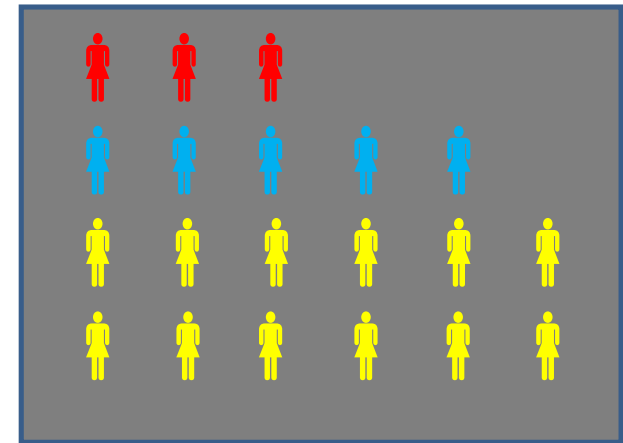
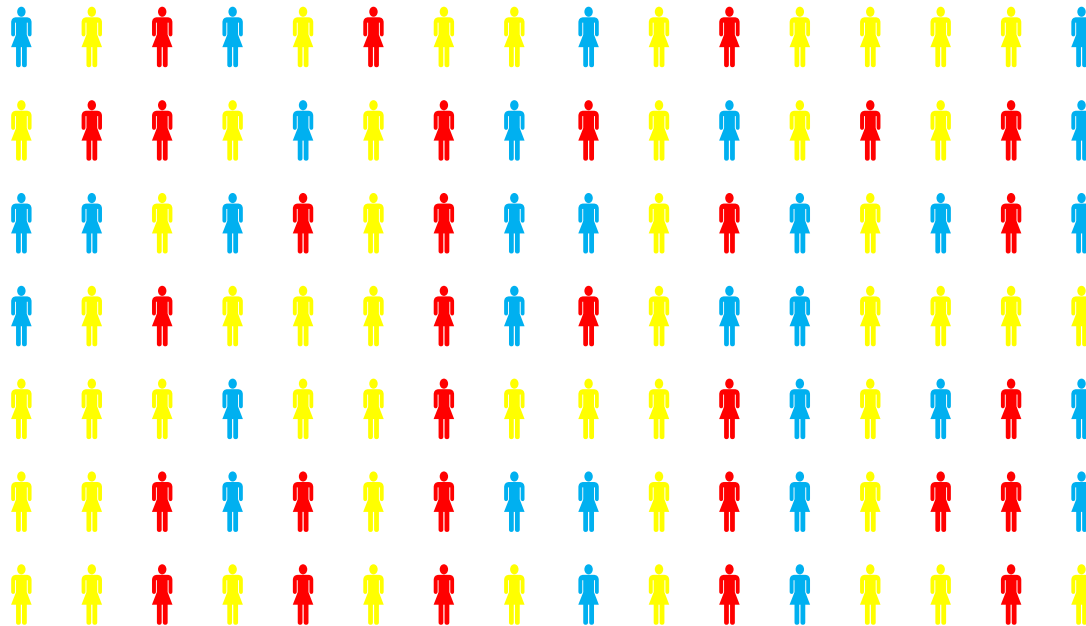
Using individual histories? Predicting Future Costs



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Person based resource allocation



Practice population

General population: Mix of predicted future costs



@ £10,000 per person per year



@ £1,000 per person per year



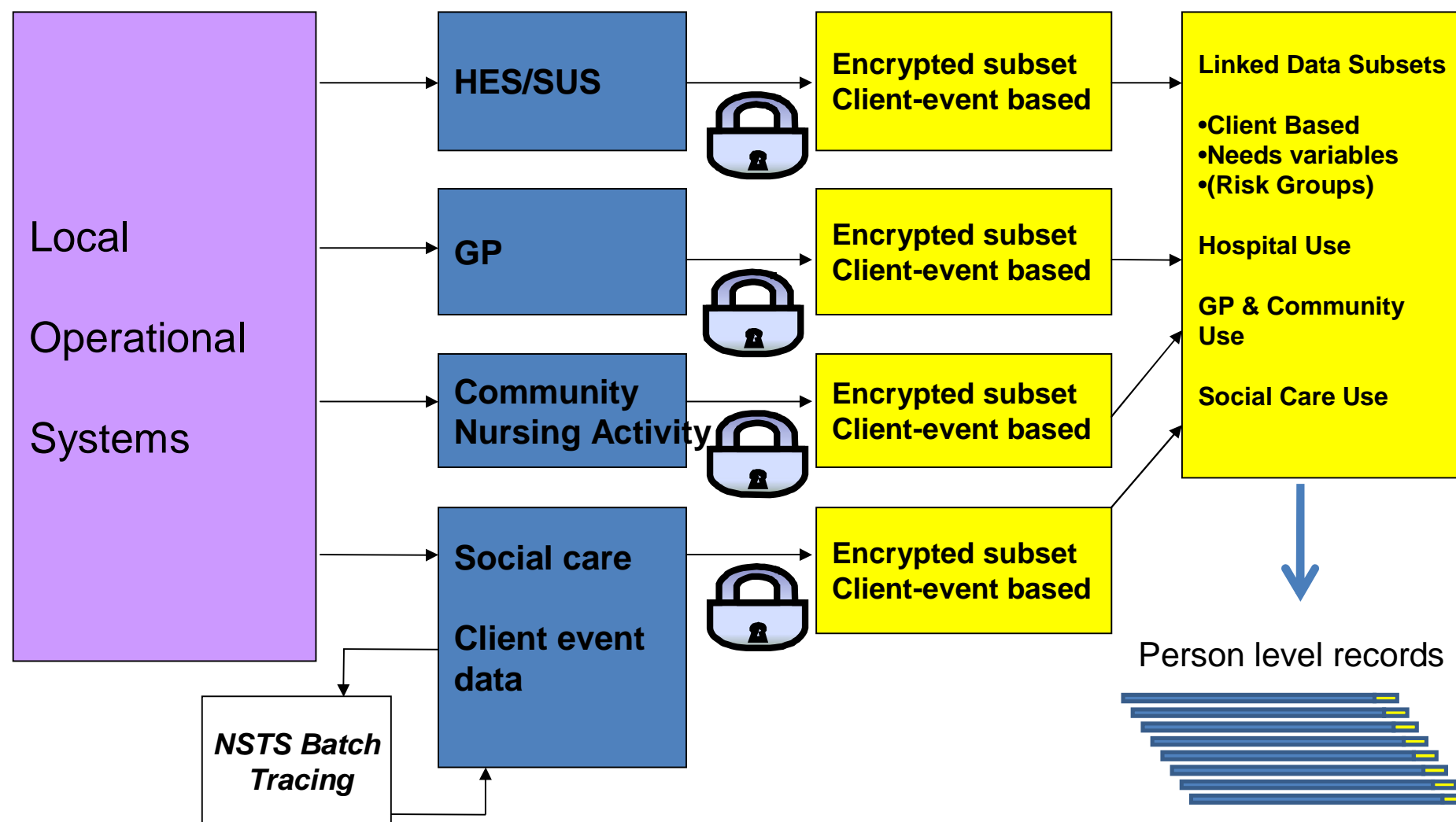
@ £100 per person per year



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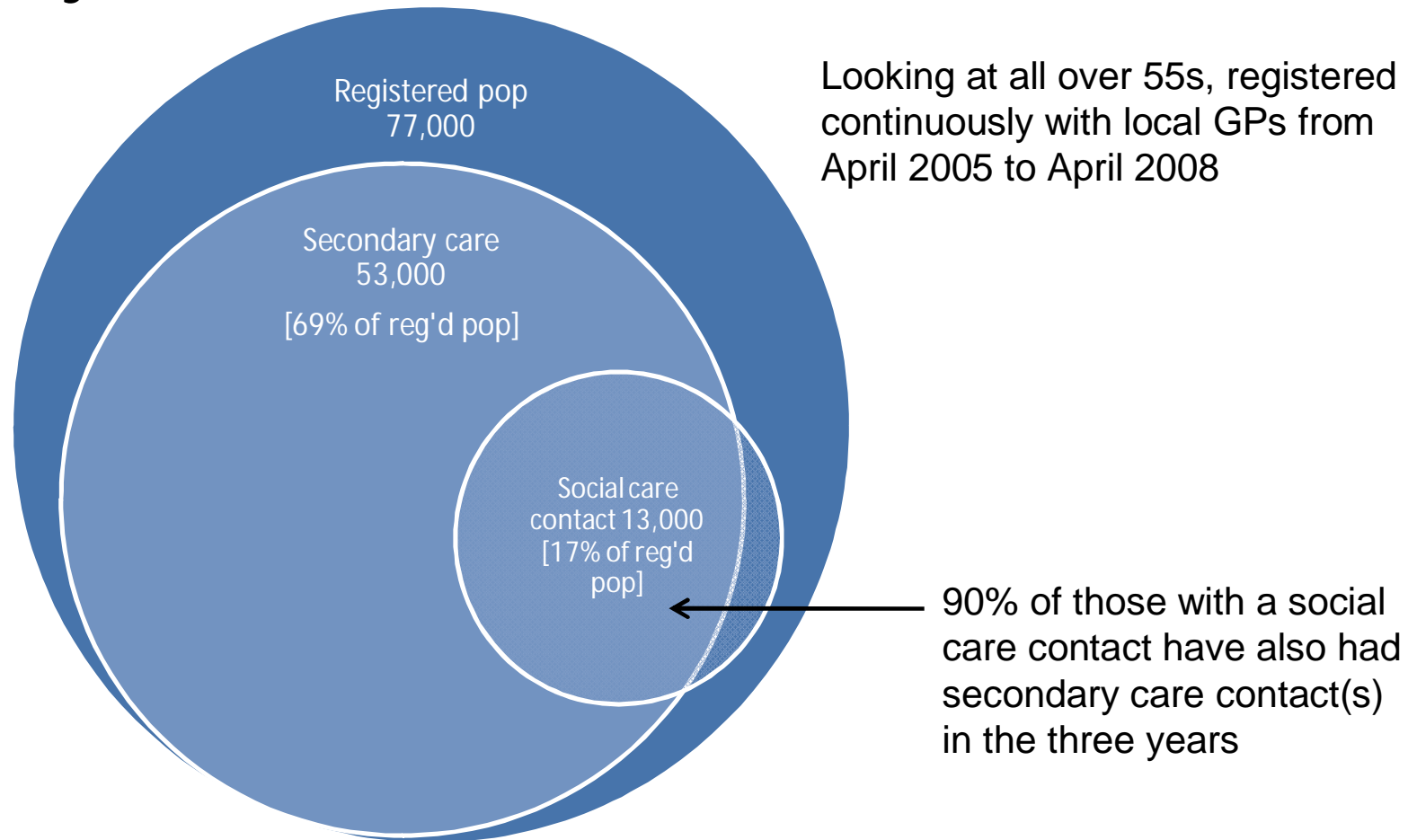
Linking Information Flows for Evaluation



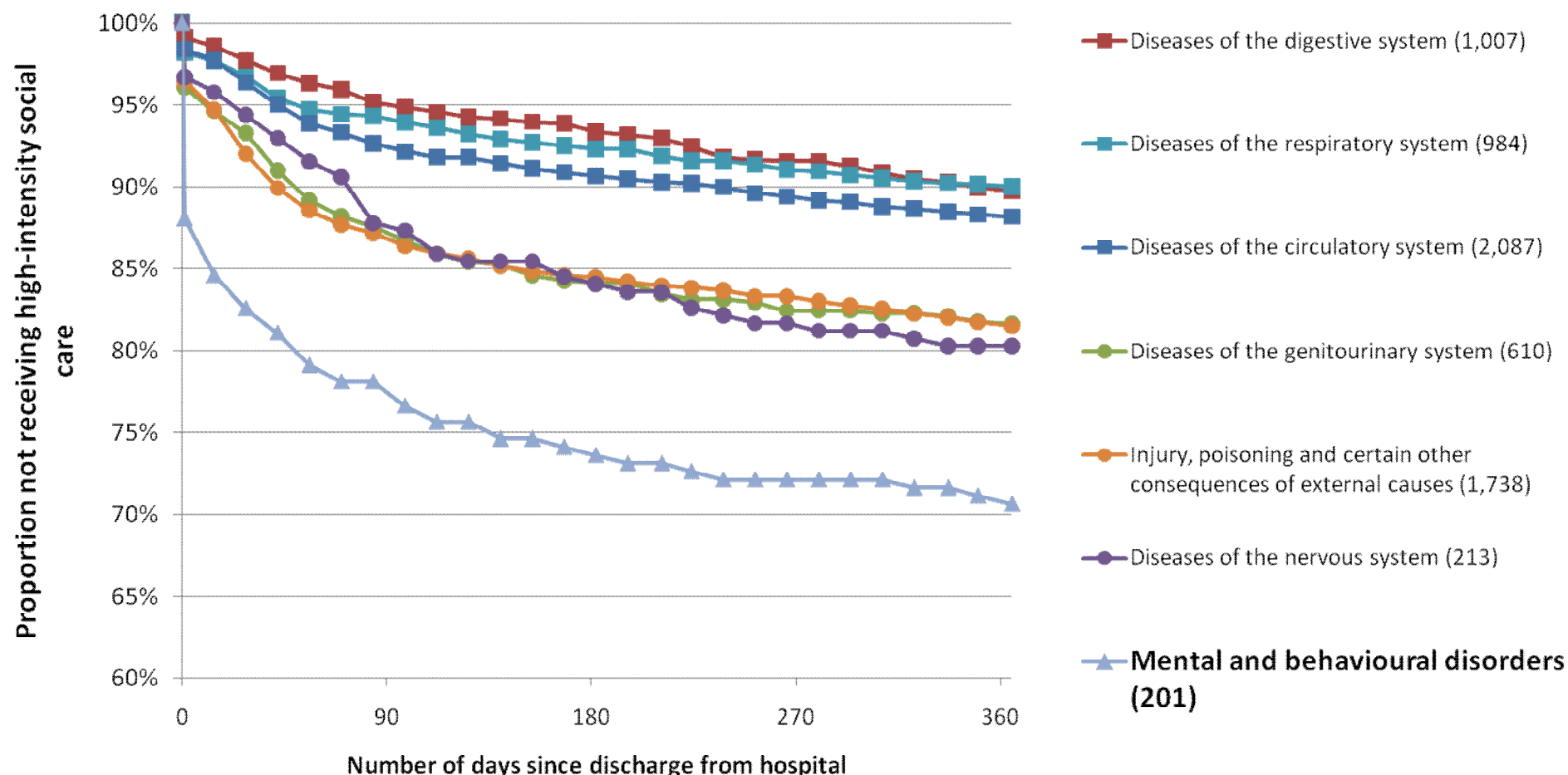
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Area 1 social and secondary care interface over three years



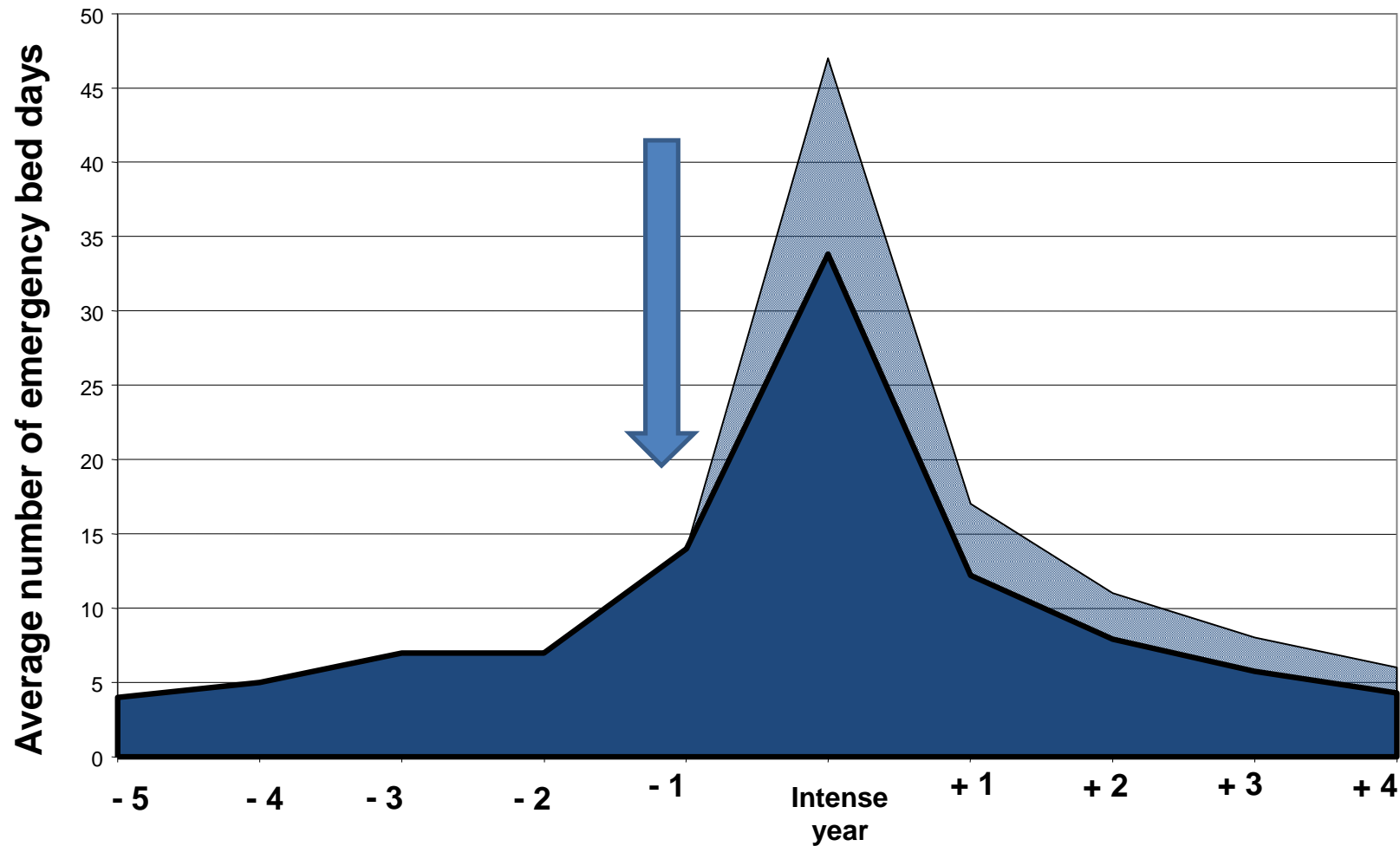
Social care use for people aged 75+ following an emergency hospital admission, by diagnosis on admission



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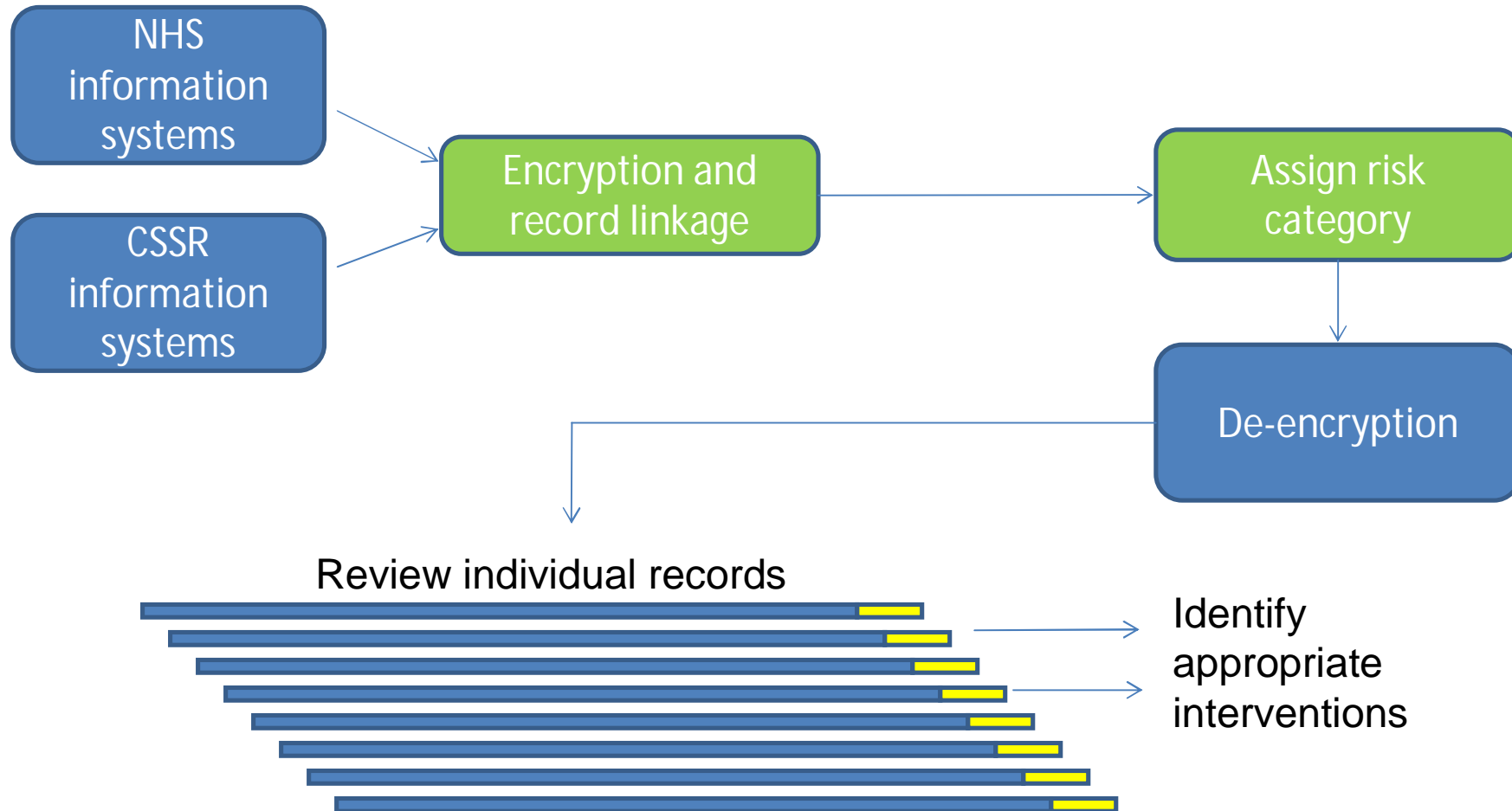
Finding People at Risk



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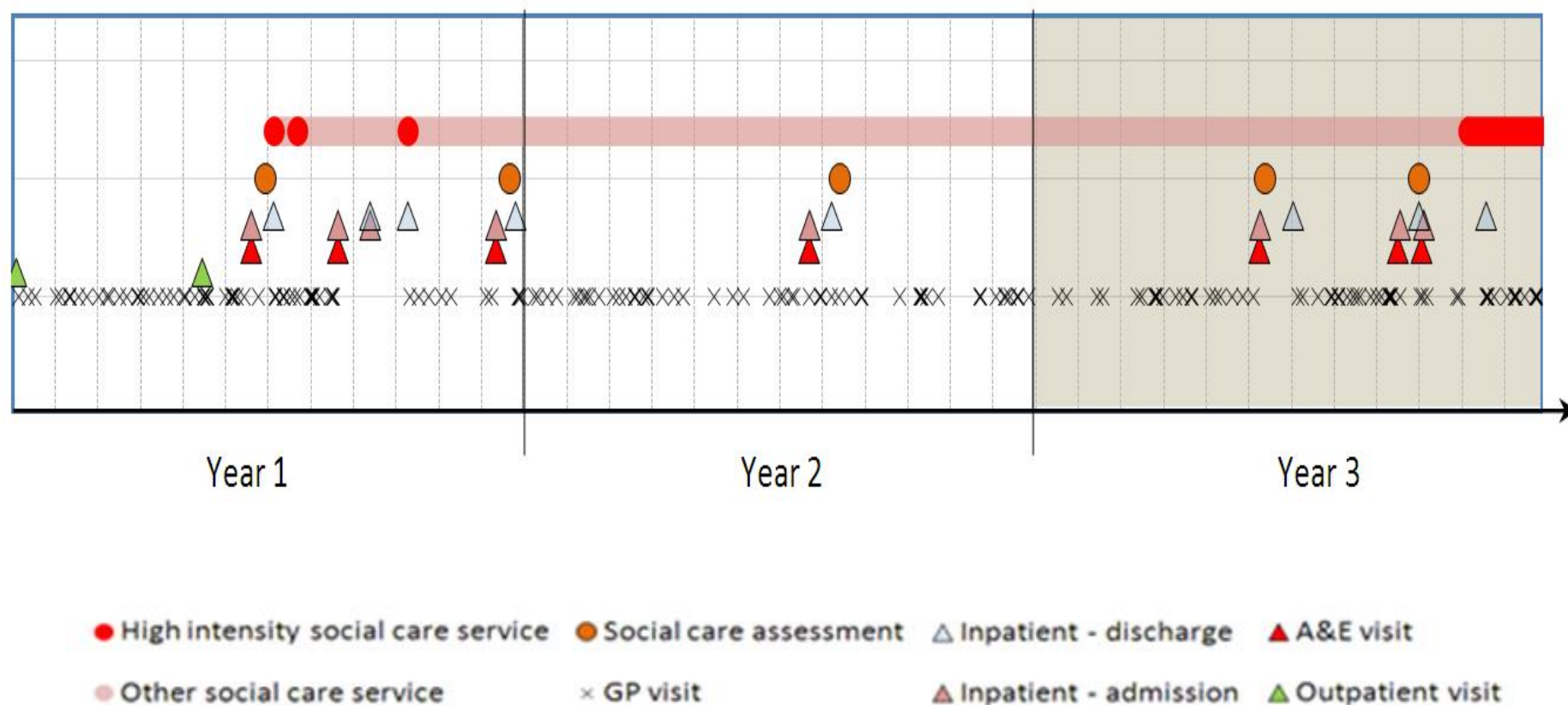
Case finding. Identify individuals at high risk of admission



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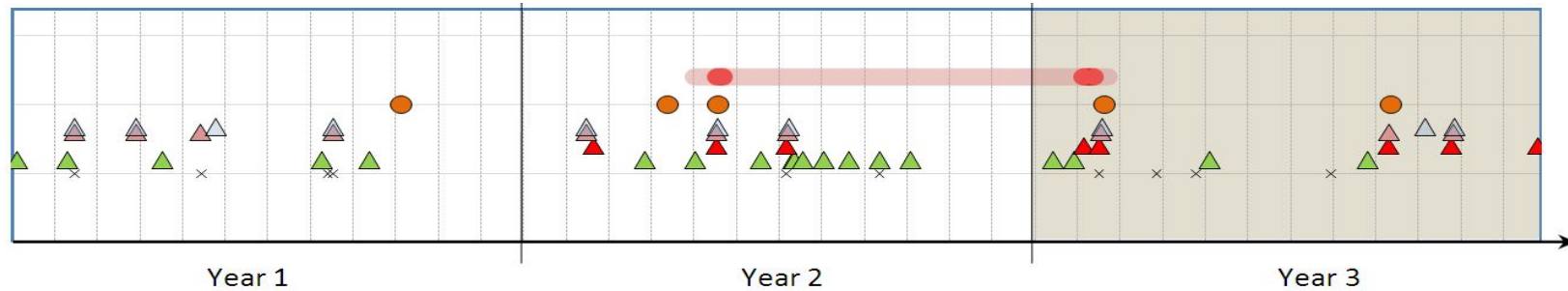
Health and social care event timeline



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Information for.....?



- Policy analysis.
- Commissioning.
- Delivering health care services.
- Clinical staff.
- Service Users.



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Reform Lab: concurrent sessions

1. Polysystems: Redbridge: The Future is here?
Azalea

2. How data changed clinical behaviour. United Health. **Bay**

3. Stemming demand: How we can track what works? Nuffield Trust. **Begonia**

4. Converging data to create visual information - providing the real-time perspective of operational efficiency and 'releasing time to care.
Walsall Hospitals NHS Trust. **Wotton Suite**



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