

**ScotCen**

**Social Research** that works for society



**Developing an understanding of children's education experiences: linked education data in the Growing Up in Scotland study**



# What is GUS?

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- Large-scale longitudinal birth and child cohort study involving national samples
- Three cohorts:
  - Birth cohort 1: 5217 children, born 2004/05, aged 10.5 months at the 1<sup>st</sup> interview
  - Child cohort: 2859 children, born 2002/03, aged 34.5 months at the 1<sup>st</sup> interview
  - Birth cohort 2: 6127 children, born 2010/11 aged 10.5 months at the 1<sup>st</sup> interview
- Began in 2005 and has been running continuously since then



# Ages and stages (so far...)

Child's age	Cohort/Year of data collection		
	Child cohort	Birth cohort 1	Birth cohort 2
10 months		2005/06	2010/11
Age 2		2006/07	
Age 3	2005/06	2007/08	2013
Age 4	2006/07	2008/09	
Age 5	2007/08	2009/10	2015
Age 6	2008/09	2010/11	
Age 8		2012/13	
Primary 6 (Age 10)		2014/15	

# Sources of information

10mths

Age 2

Age 3

Age 4

Age 5

Age 6

Age 8

P6

BC1 &  
BC2

BC1

CC, BC1,  
BC2

CC & BC1

CC, BC1,  
BC2

BC1

BC1 (&  
BC2?)

BC1 (&  
BC2?)

Main carer

Main carer

Main carer

Main carer

Main carer

Main carer

Main carer

Main carer

Partner

Teacher

Interviews

Child

Child

Ch. height  
& weight

Ch. height  
& weight

Ch. height  
& weight

Ch. height  
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Ch. height  
& weight

Cognitive  
assessmts

Cognitive  
assessmts

Cognitive  
assessmts

Health  
records

Health  
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Health  
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Pre-School  
details

Pre-School  
details

School  
records

School  
records

School  
records

School  
records

Obj.  
assessment

Linked admin

linked admin

Health records	Health records	Health records	Health records	Health records	Health records	Health records	Health records
		Pre-School details	Pre-School details	School records	School records	School records	School records

anked :

Pre-School  
details

Pre-School  
details

School  
records

School  
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School  
records

School  
records

# Linked education data

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## ■ Pre-school

- Information from Care Inspectorate and Education Scotland
- Provided at pre-school level – i.e. information about the pre-school rather than the child – so no transfer of personal details but consent obtained
- Includes inspection grades/quality indicators, number of registered places, number and qualifications of staff



## ■ School

- Information held by ScotXEd
- School and pupil level data – linked using pupil level information with consent
- Pupil data includes attendance and absence, additional support needs
- School data includes denomination, number of pupils



# Linked pre-school data

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## ■ Care Inspectorate

- Provided list of all daycare of children services registered as providing pre-school education between 2007 to 2010
- Included inspection grades on four themes: quality of care and support; quality of environment; quality of staffing; quality of management and leadership
- Other information where available, e.g. type/funding (LA, partnership), number of registered places, number and qualifications of staff



## ■ Education Scotland

- Evaluations on QIs from all inspections on pre-school settings from 2008 to 2014
- Five QIs: improvement in performance; children's experiences; meeting learning needs; the curriculum; improvement through self-evaluation





# Matching the admin data



**GUS survey:**  
Pre-school  
provider details  
for 3691 children

**Care  
Inspectorate:**  
daycare of  
children services  
providing pre-  
school education

Matched for 99% of  
children.  
1296 'unique' pre-school  
centres.  
Grades for 3000 children

**Education Scotland**  
1244 centres matched  
QI data available for  
1086 children

ay	8.270677	4247.561	48.28767	32.7
Pa	9.337349	1459.109	46.68905	31.7
Gr	11.67315	3670.115	46.36591	13.7
ne	17.9941	3254.487	42.16867	21.6
En	17.24138	4857.471	46.10895	32.2
ree	5.48926	4290.566	43.06785	32.4
an	10.41162	3563.636	50.47022	36.3
ay	16.11842	2469.512	47.97136	22.6
is:	15.40541	5200	47.2155	15.9
e	25.90909	43.75	43.75	32.8
C	4.868914	2829.054	42.97297	37.8
v	11.11111	2013.38	52.27273	43.6
H	7.38255	1209.251	38.20225	13.4
k	9.343936	4157.692	47.40741	27.7
	15.70513	3926.027	48.65772	26.8
		2668.047	44.334	18.2
		3705.738	48.07692	29.7
		2619.266	43.09623	37.9

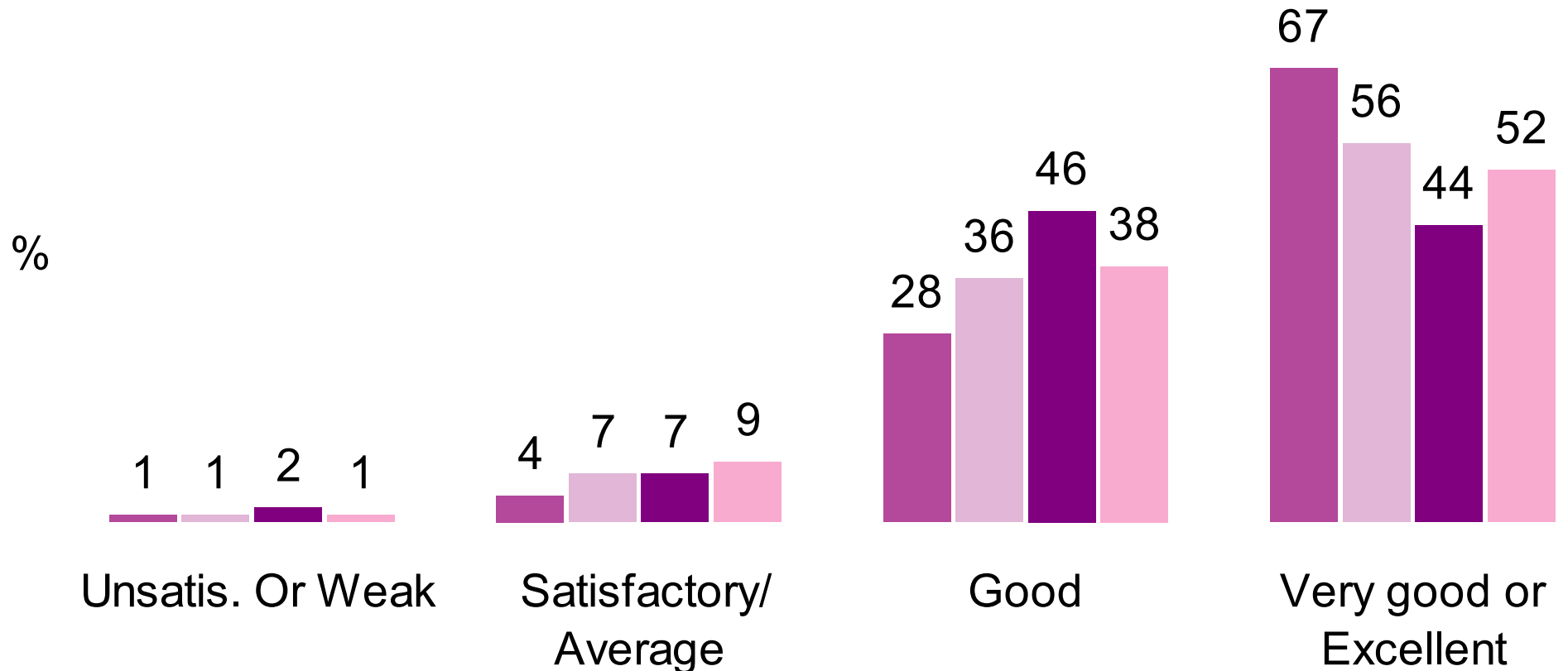
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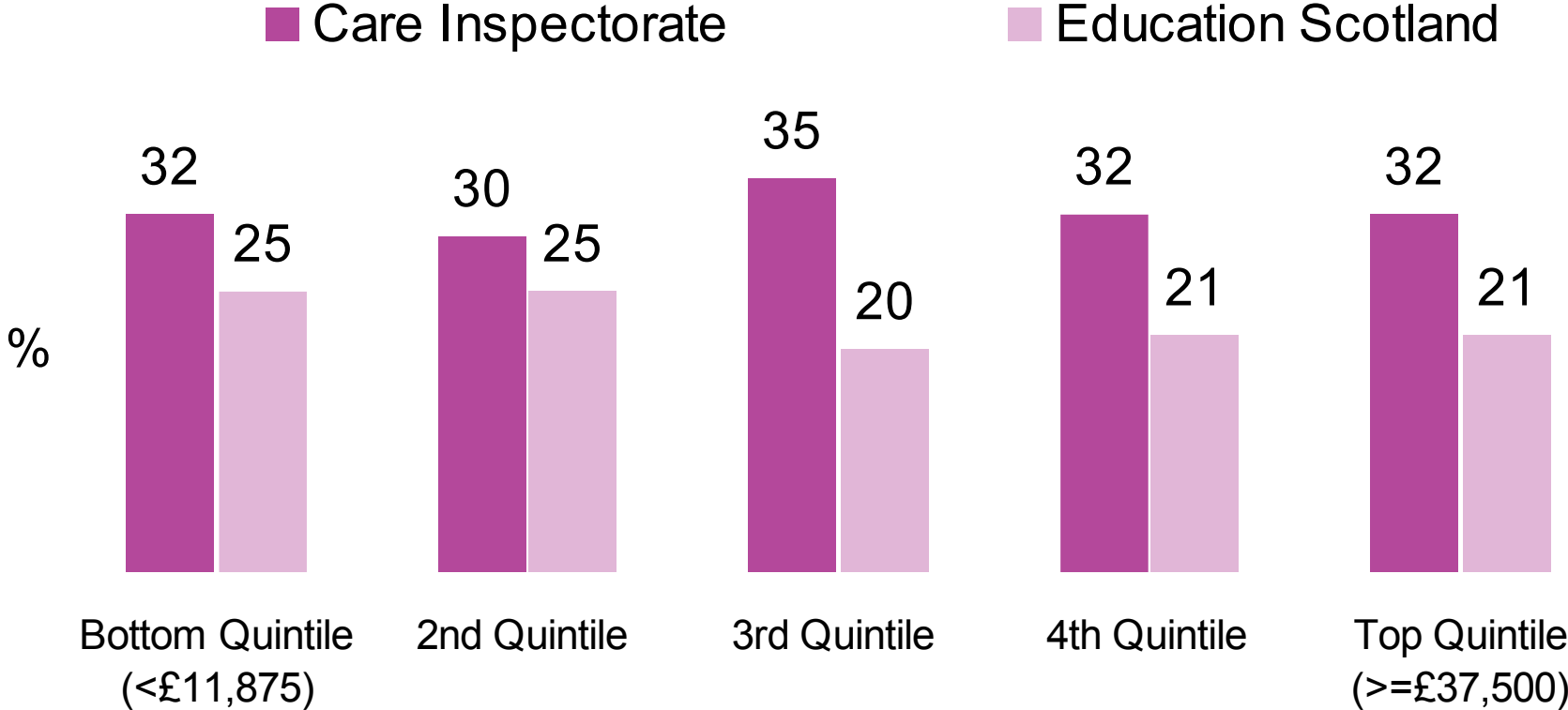
# % of children attending pre-school centres with the following Care Inspectorate grades

Care and support  
Staffing

Environment  
Management and leadership



# % of children attending a centre graded very good or excellent on all CI or all ES QIs, by hhold income



# Linked school data

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- Written consent obtained during child's P1 year
- Data is held/provided by ScotXEd and taken from annual school and pupil censuses
- Linked at pupil level using deterministic linkage
- Identifiers:
  - Date of birth
  - Home postcode
  - Sex
  - School name/SEED code



# Consent and linkage rates

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Consent obtained for **3634 children** – 95% of those asked

**3534 cases** sent to ScotXEd for matching (sw6 consented only)

Matching run against 2009 and 2010 pupil census datasets  
**3365 cases (95%)** successfully matched

**3034 (90%)** matched on all 4 variables  
**268 (8%)** matched on DoB, sex and school ID (home movers)  
**63 (2%)** matched on DoB, sex and home postcode (school movers)

# What data does it give us?

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## ■ Pupil level:

- Attendance and absence (i.e. number of half-days attended/absent and reasons for absence – e.g. number of half days sick)
- Census: e.g. stage (e.g. P1, P2), ASN indicators, mainstream/special education, disability, looked after status, free school meal entitlement
- Exclusions: e.g. length of exclusion, alternative education provision

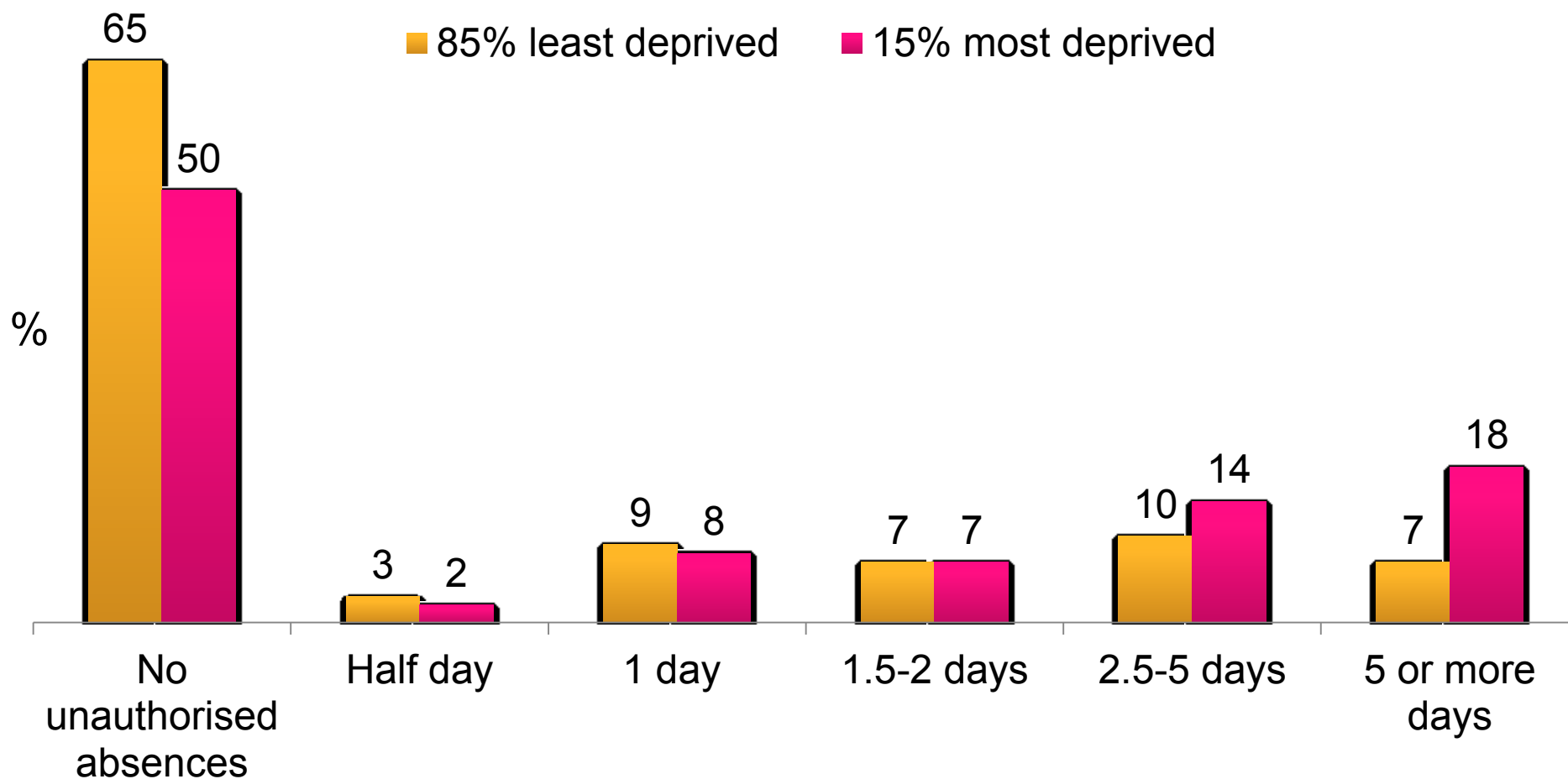


## ■ School level:

- School roll and class size (also includes no. of teachers)
- ‘Other establishment data’: e.g. primary/secondary, special school, denomination
- School level attendance, exclusions, FSMs, teacher numbers

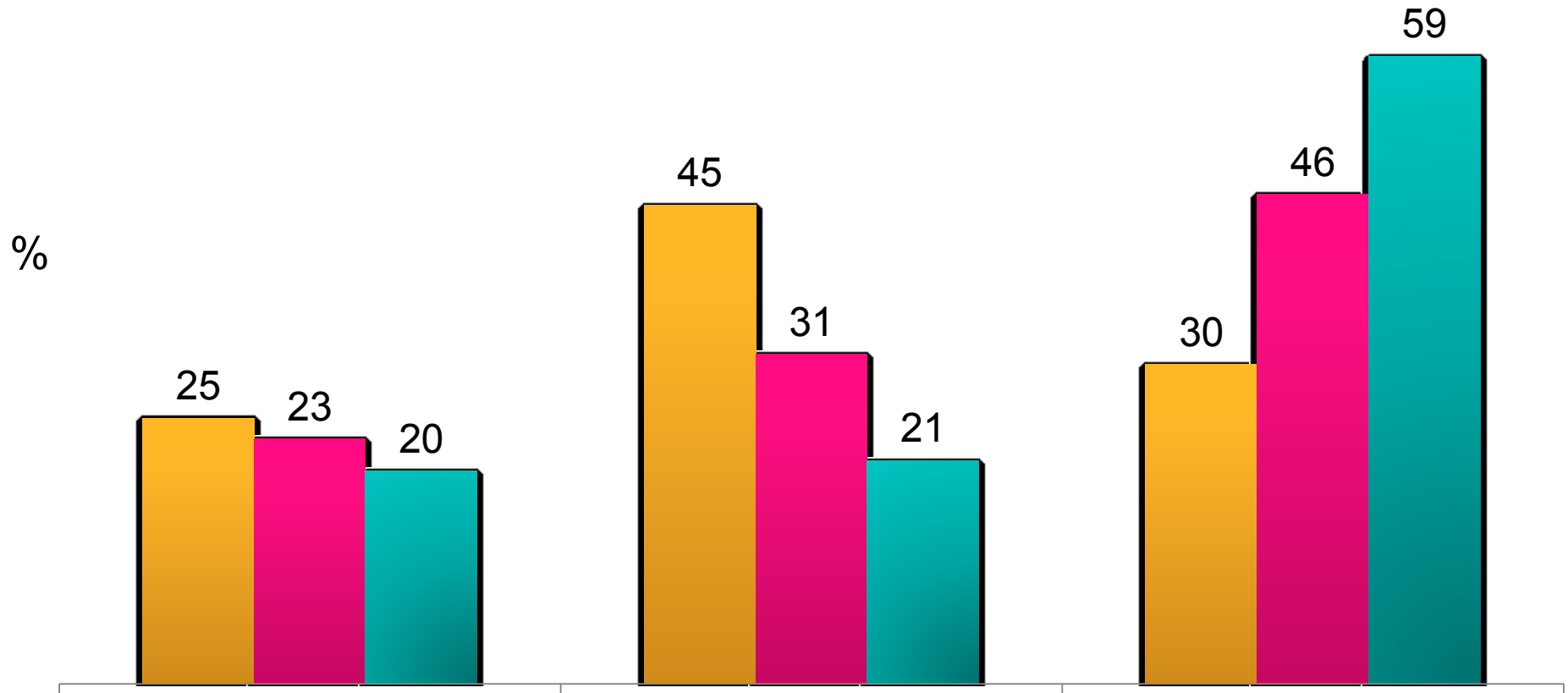


# % of children recording unauthorised absence in P1 by area deprivation



# % of P1 children recording absence due to sickness by parent reported general health

■ Very good ■ Good ■ Fair or poor





# Thank you

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For more information, please visit our website:  
[www.growingupinScotland.org.uk](http://www.growingupinScotland.org.uk)