

Community Mental Health Survey: Issues identified in comparing the results of 2012 and 2013

1. Introduction

For the Community Mental Health Survey 2013, all participating trusts were required to submit their samples to the Co-ordination Centre for final quality control checks before they were able to mail out any questionnaires. These sample files did not include patient identifiable data such as names or addresses, but did include demographic and clinical information about each service user. Supporting information was also supplied in each trust's Chief Executive declaration.

Demographic information:

- gender;
- year of birth;
- ethnicity.

Clinical information:

- date of last contact;
- CPA status;
- GP practice code.

Supporting information about the trust:

- total eligible population size;
- total eligible population on CPA, not on CPA, and with CPA status unknown.

With the benefit of the 2011, 2012 and 2013 sample data and supporting information for each trust, it was possible to identify errors in the 2012 samples that could not be picked up at the time.

Of the 58 trusts participating in the 2013 survey, errors were found in ten trusts' 2012 samples that will cause issues with year-on-year comparability. Data quality issues were found in a further eleven trusts' 2012 samples that may cause issues with year-on-year comparability.

2. Errors in 2012 samples

With the benefit of the 2013 sample data, there were ten errors found in 2012 sample drawing. Five were due to a misunderstanding of the sampling guidance; four involved trusts applying extra exclusions; one was due to a trust disregarding some of the guidance.

Misunderstanding of the guidance

Five trusts understood the 2012 sampling guidance to specify the selection of only those service users seen at least twice in the sampling period. The instructions have been clarified in the 2013 sampling guidance to avoid this interpretation: the intention has always been (and has always been understood by most trusts) to sample those service users seen at least once in the sampling period and at least twice ever, including appointments outside the sampling period.

This error will have caused the trusts' samples to be biased towards those who are seen more frequently. In all five cases, following the guidance correctly has decreased the proportion of those on CPA, which is to be expected, given that those on CPA are more likely to be seen more frequently.

It is likely that this error has made the trusts' results artificially positive. These trusts' 2013 results are likely to be lower than their 2012 results.

Table 2.1: Population and CPA figures for the five trusts that sampled only service users seen at least twice in the sampling period in 2012

	Change in eligible population size	CPA proportions		
			2012	2013
Trust A	+30%	CPA	50%	41%
		Non-CPA	50%	59%
		CPA status unknown	0%	0%
Trust B	+90%	CPA	36%	20%
		Non-CPA	54%	69%
		CPA status unknown	11%	11%
Trust C	+52%	CPA	49%	35%
		Non-CPA	32%	23%
		CPA status unknown	20%	42%
Trust D	+27%	CPA	43%	27%
		Non-CPA	57%	73%
		CPA status unknown	0%	0%
Trust E	+40%	CPA	32%	28%
		Non-CPA	4%	2%
		CPA status unknown	65%	70%

Excluded service users with unknown CPA status

Two trusts excluded all service users with unknown CPA status in 2012. In one case, these service users formed about 50% of the trust’s 2013 total eligible population; in the other, they formed 20% of the trust’s 2013 total eligible population.

Those with unknown CPA status typically report poorer experiences of care than those with known CPA status, and so excluding them has made the trusts’ results artificially positive. These trusts’ 2013 results are likely to be lower than their 2012 results.

Table 2.2: Population and CPA figures for the two trusts that excluded all service users with unknown CPA status in 2012

	Change in eligible population size	CPA proportions		
			2012	2013
Trust F	+33%	CPA	38%	20%
		Non-CPA	62%	60%
		CPA status unknown	0%	20%
Trust G	+100%	CPA	71%	26%
		Non-CPA	29%	21%
		CPA status unknown	0%	52%

Excluded all service users receiving care through primary mental health workers

One trust employs “primary mental health workers” who operate largely in a primary healthcare setting. They support GPs and provide diagnostic/assessment work, but they do also offer some treatment, and so service users treated by them are eligible for this survey.

These service users appear to be largely of unknown CPA status, who typically report poorer experiences of care, but as they are receiving a distinct service it is not clear whether and how this will affect the trust’s ratings.

Table 2.3: Population and CPA figures for the trust that excluded all service users receiving care through primary mental health workers

	Change in eligible population size	CPA proportions		
			2012	2013
Trust H	+28%	CPA	29%	24%
		Non-CPA	37%	37%
		CPA status unknown	35%	39%

Excluded all service users whose cases were being managed by local authority or primary healthcare workers

One trust excluded all service users whose cases were being managed by local authority or primary healthcare workers, even when those service users were receiving services that would make them eligible for the survey. As with the exclusion immediately above (primary mental health workers), it seems the service users excluded last year were largely of unknown CPA status, but this is not enough to predict how this may affect the trust's ratings.

(Note the lower total eligible population figure in the 2013 information is due to a minor error in the 2012 provision of supporting information. The total eligible population figures for 2012 were taken before all exclusion criteria were applied to the population, but the sample itself was correctly drawn from the smaller population after the exclusion criteria were applied.)

Table 2.4: Population and CPA figures for the trust that excluded all service users whose cases were being managed by local authority or primary healthcare workers

	Change in eligible population size	CPA proportions		
			2012	2013
Trust I	-27%	CPA	54%	34%
		Non-CPA	46%	59%
		CPA status unknown	0%	7%

Ignoring instructions

One trust drew a sample stratified on age rather than a simple random sample, despite the clear instructions in the guidance to combine all subpopulations before drawing the sample.

The trust had two different systems – Older Patient Mental Health, Adult Mental Health – and instead of combining the two systems before drawing the sample, they drew 40% of their sample from OPMH, 60% from AMH and then combined the two.

This error was particularly bad because the 40%/60% split was not the actual split of eligible service user proportions at the time, but more a “general rule of thumb” for the service division.

It is not possible to predict what effect this will have on the trust’s ratings. Some of the problem may be mitigated by the gender/age-group weighting used to control for gender and age differences between trusts, but it is not obvious what other biases may have been introduced by this or, indeed, what other errors may be masked.

Table 2.5: Age distribution for the trust that drew a stratified sample based on perceived service division between age groups

	Age group	2012 sample proportions	2013 sample proportions
Trust J	18-35	18%	22%
	36-50	24%	21%
	51-65	22%	15%
	66-80	18%	19%
	81+	18%	23%

Table 2.6: Population and CPA figures for the trust that drew a stratified sample based on perceived service division between age groups

	Change in eligible population size	CPA proportions		
			2012	2013
Trust J	+12%	CPA	30%	26%
		Non-CPA	57%	64%
		CPA status unknown	13%	11%

3. Data quality issues

Eleven trusts attributed large changes in total population or CPA proportions to data quality issues – in particular, the changes are due to improving data quality in some way. This raises the question of what data quality issues have not yet been flagged up because steps have not yet been taken to improve them.

Data cleaning

Four trusts attributed changes to data cleaning. This took such forms as deleting “ghost” patients or correcting long-standing errors resulting from bad practice, such as not recording CPA status for service users. One trust (Trust 4 in the table below) deleted around 3000 ghost patients from its system in the last year.

It is not clear what, if any, effect this will have on the trusts’ ratings, though it is hoped the removal of ghost patients will improve response rates.

Table 3.1: Population and CPA figures for the four trusts that undertook data cleaning initiatives in the last year

	Change in eligible population size	CPA proportions		
			2012	2013
Trust 1	-8%	CPA	53%	90%
		Non-CPA	18%	10%
		CPA status unknown	29%	0%
Trust 2	+9%	CPA	44%	36%
		Non-CPA	23%	47%
		CPA status unknown	33%	18%
Trust 3	-22%	CPA	22%	22%
		Non-CPA	53%	53%
		CPA status unknown	25%	25%
Trust 4	-25%	CPA	26%	24%
		Non-CPA	74%	76%
		CPA status unknown	0%	0%

Improved record-keeping

Four trusts attributed changes to improved record-keeping and/or a renewed commitment to policy adherence.

It is not clear what, if any, effect this will have on trusts' results.

Table 3.2: Population and CPA figures for the four trusts that improved record-keeping in the last year

	Change in eligible population size	CPA proportions		
			2012	2013
Trust 5	+2%	CPA	34%	57%
		Non-CPA	45%	36%
		CPA status unknown	21%	7%
Trust 6	+81%	CPA	69%	63%
		Non-CPA	19%	37%
		CPA status unknown	13%	0%
Trust 7	-8%	CPA	33%	46%
		Non-CPA	21%	34%
		CPA status unknown	46%	20%
Trust 8 (also had change in database system)	+36%	CPA	66%	53%
		Non-CPA	16%	41%
		CPA status unknown	18%	6%

Change in database system

Four trusts (including Trust 8 in Table 3.2) attributed changes to having moved to a new database system.

It is not clear what, if any, effect this will have on trusts' results. System changes can result in data cleaning, as the consolidation of databases may remove duplicates and allow for those no longer receiving services to be recognised and removed. However, service users may also get lost in system changes, and these may be those whose care co-ordinators/lead professionals do not engage as fully with their care, as so do not notice when they cease to be on the system.

Table 3.3: Population and CPA figures for three of the four trusts that changed database systems in the last year (see Table 3.2, Trust 8 for the fourth trust)

	Change in eligible population size	CPA proportions		
			2012	2013
Trust 9	-42%	CPA	31%	46%
		Non-CPA	62%	36%
		CPA status unknown	7%	19%
Trust 10	-39%	CPA	51%	37%
		Non-CPA	44%	63%
		CPA status unknown	5%	0%
Trust 11	+19%	CPA	31%	24%
		Non-CPA	46%	41%
		CPA status unknown	23%	35%