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STRATEGY CONSULTING

Inpatient Capacity – Hampshire Partnership FT

1 Executive Summary

1.1 This report summarises an analysis of inpatient capacity (beds) operated by Hampshire Partnership NHS Foundation Trust (HPFT) across its adult and older people's mental health services.

1.2 The work was commissioned by HPFT to help answer the following questions:

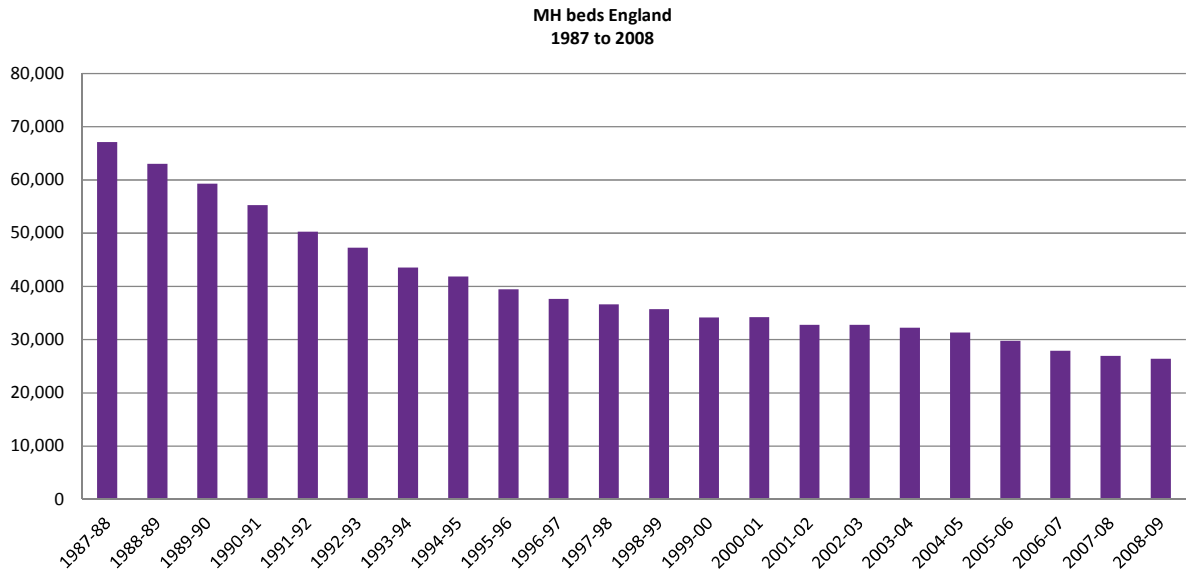
- Are there 'too many' inpatient beds across HPFT's adult mental health (AMH) and older people's mental health (OPMH) services?
- How does HPFT's bedded capacity compare to other MH Trusts?
- How do the different localities compare?
- What constitutes 'best practice' and what changes to service models are being made elsewhere?
- How many beds does HPFT need in the future?

1.3 At the time the project was undertaken related work benchmarking community services was being carried out by the Audit Commission. This report does not consider this work, but we recommend that both projects are considered together due to the impact community service resourcing can have on inpatient bed use.

2 Background

2.1 The number of psychiatric beds provided by the NHS in England is at an all-time low. Bed numbers have reduced continuously since the 1950s when they peaked at over 150,000. Since the late 1980s the rate of reduction has quickened as the large asylums have closed and a new model of care based on assertive outreach, crisis intervention and home treatment has become the norm.

Mental health beds 1987 to 2008



2.2 It can be argued that mental health services are at least ten years ahead of physical health services in the degree to which people are treated at home rather than in hospital. Nevertheless the question posed by HPFT is essentially 'has the downward trend in bed numbers reached a natural conclusion, or can inpatient capacity be reduced further?' Answering this question is important given the scale of the efficiency challenge facing all NHS providers because treating patients in the community rather than as inpatients has been shown to reduce costs by approximately 25%[1].

3 Methodology

3.1 Trust level benchmarking of bed numbers has been done before. But the results are often misleading due to a failure to take full account of the different range of services provided by different mental health providers. We, therefore, focused the benchmarking exercise, whenever possible on:

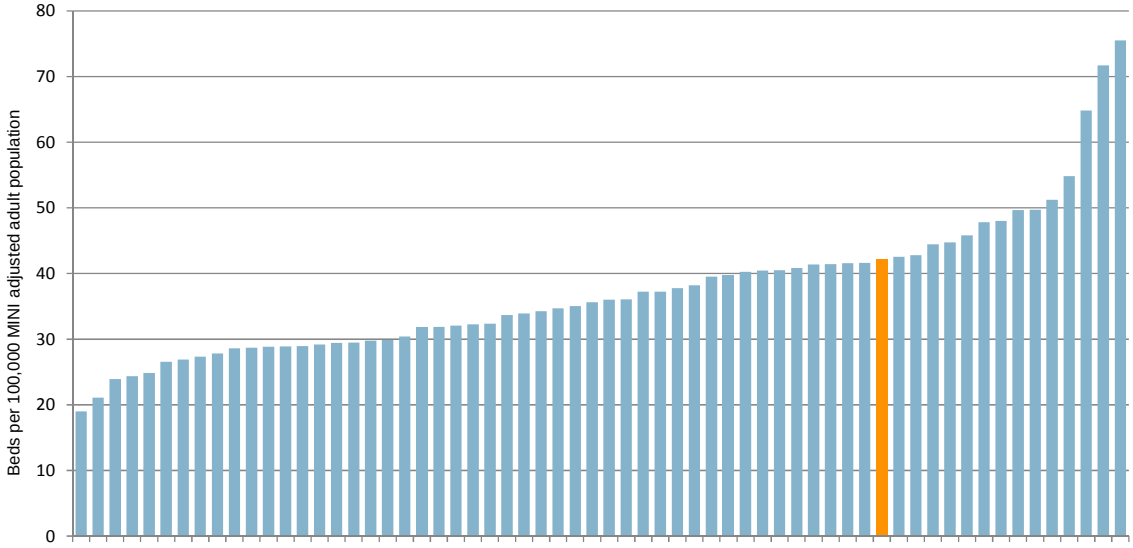
- Adult acute beds including psychiatric intensive care units (PICU).
- Older people's functional illness beds.
- Older people's organic illness beds.

3.2 We excluded beds for: adult rehabilitation; older people's continuing care; older people's challenging behaviour; and mother and baby services. By refining the services benchmarked we have ensured that we were able to produce Trust and locality level comparisons on a true 'like for like' basis.

4 Adult mental health (AMH) services

4.1 The Trust provides 281 adult mental health short stay[2] beds (165 acute beds 25 PICU and 91 rehab beds). When compared to other English mental health Trusts on a weighted population basis this represents relatively poor performance.

Trust-level AMH bed benchmarking



[1] Audit Commission. A recent Irish comparison (2010) showed home treatment to be 29% cheaper.
[2] Short stay is defined as beds with an expected patient length of stay of one year or less.

4.2 With 42 beds per 100,000 weighted[3] population, HPFT is above the English average of 37 beds per 100,000. Furthermore the base information for comparator Trusts dates from 2009/10 whilst HPFT's numbers are from 2010/11 and we know that most Trusts are actively reducing bed numbers.

4.3 If we exclude HPFT's 91 rehab beds, the Trust has 28 AMH beds per 100,000 weighted population. This compares to leading Trusts which operate on between 15-18 beds per 100,000.

4.4 We have identified four Trusts providing good quality services, as identified by the Care Quality Commission, from a low bed base. By adjusting for relative local need using the MINI index, we have estimated the number of beds HPFT would use if operating to an equivalent bed base.

Trust	**Acute[4] beds per 100k**	**MINI score**	**Beds per 100k MIN adjusted**	**HPFT MINI score**	**HPFT equivalent beds for 901k population**
Northumberland	14.0	1.21	11.6	0.74	77
Norfolk & Waveney	16.6	0.95	17.4	0.74	116
Tees, Esk & Wear	13.5	1.39	9.7	0.74	67
Sussex	10.4	0.78	13.4	0.74	89
HPFT			*25.8*		*165*

4.5 The analysis suggests that HPFT could reduce the number of acute AMH beds from the existing 165 to between 67 and 116 by achieving the level of AMH bed use of these leading providers.

4.6 Each Trust's relative need for acute AMH beds will be influenced by the number of PICU beds in use. We have, therefore undertaken the same assessment for PICU beds and then combined the acute and PICU results.

Trust	**PICU beds per 100k**	**MINI score**	**Beds per 100k MIN adjusted**	**HPFT MINI score**	**HPFT equivalent beds for 901k population**
Northumberland	7.0	1.21	5.5	0.74	37
Norfolk & Waveney	1.9	0.95	2.3	0.74	15

[3] The AMH population (people aged 18 – 65) has been weighted using the Mental Illness Needs Index (MINI).
[4] AMH acute beds only, PICU excluded.

Trust	PICU beds per 100k	MINI score	Beds per 100k MIN adjusted	HPFT MINI score	HPFT equivalent beds for 901k population
Tees, Esk & Wear	4.4	1.39	6.1	0.74	41
Sussex	Unknown	0.78		0.75	
HPFT					*25*

4.7 HPFT provides comparatively fewer PICU beds than tow of the three peers we have been able to benchmark.

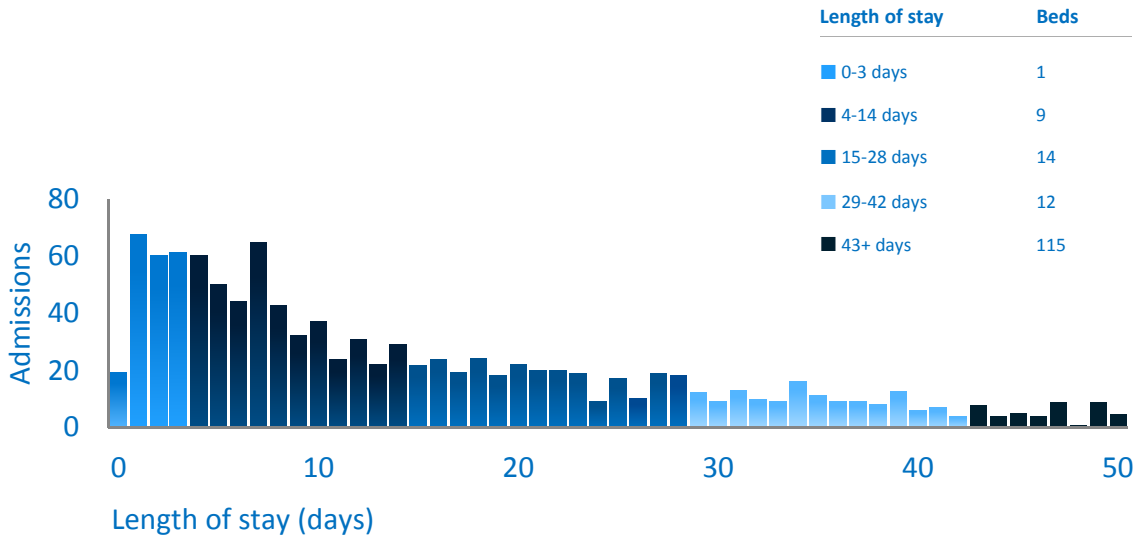
Trust	Acute and PICU beds per 100k	MINI score	Beds per 100k MIN adjusted	HPFT MINI score	HPFT equivalent beds for 901k population
Northumberland	21.0	1.21	17.1	0.74	114
Norfolk & Waveney	18.5	0.95	19.7	0.74	131
Tees, Esk & Wear	17.9	1.39	15.8	0.74	108
Sussex	Unknown	0.78		0.74	
HPFT					*190*

4.8 After adding PICU beds we can see that the equivalent number of beds HPFT would require ranges from 108 (Tees, Esk and Wear) to 131 (Norfolk and Waveney).

4.9 The service model in each of the high performing Trusts has been reviewed to understand what features, if any, give rise to the low need for beds. The models in use are all distinguished by the high degree of integration between community and inpatient staff (Norfolk's model goes one step further with the same staff providing both ward based and home based treatment). The model of care in Teeside and Sussex also features the collocation and flexible use of adult and older people's wards.

4.10 Total bed use is a function of admission rate and length of stay. HPFT's admission rate is 221 per 100,000 weighted population. Upper quartile performance is 150 admissions and less. HPFT's average length of stay is 51 days (which can be split between 43 days acute and 62 days PICU). Upper quartile acute length of stay is under 30 days and national average PICU length of stay is 26 days. We can, therefore, surmise that HPFT's above average bed use is due to both a higher admission rate and higher length of stay than leading Trusts.

4.11 The following length of stay distribution chart demonstrates the substantial number of HPFT AMH beds occupied by people with relatively long lengths of stay – 115 beds are occupied by people who will stay for more than six weeks.



4.12 Most other mental health Trusts are also looking at reducing admissions to acute wards. Alternative services being introduced include:

- Crisis accommodation.
- Intensive day services (partial hospitalisation).
- Assessment units.
- Community resource centre beds.

4.13 We also compared each of the individual inpatient units operated by HPFT to understand whether there were any significant differences in performance (measured by admission rates and length of stay) and to understand the potential gain (measured by reduction in beds) which would accrue if each unit performed as well as the local HPFT best.

4.14 The admission rate per 100,000 weighted population for HPFT's AMH units is shown in the table below.

Adults MH	Wtd popn 16-59/64	Admission rates per 100,000 head of popn.
Antelope House	193,943	205
Havant	88,639	259
Meadows	89,609	417
Parklands	85,165	242
Winchester	86,632	190
Woodhaven	77,040	0
Total	621,029	221

4.15 Data was not available for Woodhaven which serves the New Forest area. Within the remaining five units admission rates ranged from a low of 190 in Winchester to 417 at Meadows. If all units performed at the Winchester rate HPFT would need 27 fewer AMH acute beds.

4.16 A similar analysis was undertaken for length of stay

Adults MH	Wtd popn 16-59/64	Average LOS
Antelope House	193,943	54
Havant	88,639	34
Meadows	89,609	32
Parklands	85,165	51
Winchester	86,632	40
Woodhaven	77,040	-
Total	621,029	43

4.17 The gain if all units performed to The Meadows length of stay would be a reduction of 36 beds.

4.18 A similar comparison of length of stay was applied to compare HPFT's three PICUs. This analysis suggests that HPFT could operate on six beds fewer if each PICU had a length of stay equal to that of Havant (51 days).

4.19 In summary external benchmarking suggests that HPFT could operate on as few as 108 AMH beds (acute and PICU). Internal benchmarking suggests a reduction from 190 to 163 beds based on admission rate comparisons or 148 based on length of stay benchmarking.

5 Older people's mental health (OPMH) services

[redacted]

[redacted]

[redacted]

6 Conclusion

6.1 Benchmarking of AMH, [redacted] demonstrates a consistent theme that HPFT can reduce its current use of beds. Gains can be made form a focus on both admission rates and length of stay in AMH services. [redacted]

6.2 The table below sets out a summary of the potential reduction in beds.

Service	Current beds	Low forecast	High forecast
AMH acute/PICU	190	108 (TEWV)	157
AMH rehab	*91*	*n/a*	*n/a*
[redacted]			