

Summary of In-patient care Health Building Note 04-01: Adult in-patient facilities

Introduction

1. The document titled [HBN_04-01_Final](#) provides comprehensive guidance on the planning and design of adult in-patient facilities within healthcare settings. **Health Building Notes (HBNs)** provide best practice guidance on the design and planning of new healthcare buildings and the adaptation/extension of existing facilities. They support the briefing and design processes for NHS building projects.
2. The HBN suite is organized into 17 core subjects, each addressing specific care groups or pathways and cross-referencing generic clinical activities or support systems.

The document takes account of the shift of care into community settings and the need for in-patient accommodation for complex cases or major surgeries. It also reflects NHS England's higher expectations for treatment environments, privacy, dignity, and the provision of same-sex accommodation.

Ward Size

3. The schedules of accommodation for adult in-patient facilities are based on a 24-bed ward.
4. This size is common throughout NHS hospitals and supports the assumption that an eight-bed cohort is the preferred workforce planning unit, with one clinician and one support worker caring for each cohort.
5. Wards may be larger or smaller than the 24-bed example, and the number of beds in each ward should be determined locally.

Layout and Functional Relationships

6. **Location and Relationships:** In-patient accommodation should minimise distances between patient rooms and staff workstations, and ensure privacy, particularly at night.
7. **Horizontal vs. Vertical Layouts:** Beds can be organized horizontally over large floor areas or stacked into towers. Multi-storey wings separate from diagnostic and treatment facilities allow more consistent planning and flexibility.
8. **Privacy and Daylight:** Ground-floor locations should be considered only where the adjacent environment is free of hospital traffic and publicly accessible areas. Views outside and access to natural daylight are important for patient recovery.

9. **Isolation and Flexibility:** The ability to isolate components of in-patient accommodation is crucial for infection control and emergencies. Combining clusters of beds allows for different needs over time.

Key Features of a Desirable Environment

10. **Space Requirements:** Sufficient space in clinical areas, particularly for each bed space, is crucial. Ergonomic studies suggest dimensions of 3600 mm (width) × 3700 mm (depth) for clear bed space.
11. **Sanitary Facilities:** Separate sanitary facilities for in-patients, clinical staff, and visitors are essential for infection control. All single-bed and multi-bed rooms should have en-suite sanitary facilities.
12. **Hand Hygiene:** Antibacterial hand-rub dispensers should be provided at the ward entrance, and clinical wash-hand basins should be located conveniently within patient rooms.
13. **Observation and Communication:** Design should support good observation and communication between staff and patients. Glazed walls or large windows between rooms and corridors can help.

Specific Layout Examples

14. **Each single-bed room** should have an en-suite shower room (with WC, shower, and wash-hand basin). The location of the en-suite can significantly impact the bedroom in terms of floor area, views, and support facilities.
15. **A multi-bed room** should have en-suite sanitary facilities accessible without crossing circulation routes. Privacy and dignity should be ensured with appropriate security devices.
16. **Isolation Suites** comprising a single-bed room, en-suite shower room, and ventilated lobby, isolation suites are necessary for patients with airborne diseases or those who are immuno-suppressed.

Support Facilities

17. **Supplies, Storage, and Disposal:** Options for delivering and storing clean supplies and consumables include clean utility rooms or clean supply rooms serving multiple wards.
18. **Utilities:** Medicine storage/preparation rooms, dirty utility rooms, and cleaners' rooms are essential.
19. **Administration and Staff Facilities:** Reception desks, waiting areas, office/meeting rooms, staff locker bays, and rest rooms should be well-located and designed.

The size requirements of a single-bed room

20. The size of single-bed rooms should be 23.5 m²

Area – Single-Bed Room	m ²
Single-bed room	16
Family and clinical support area	3
Sub total	19
En-suite shower room	4.5
Total single room	23.5

The size of multi-bed rooms should be 72.5 m².

Area – 4-Bed Room	m ²
4-bed room	64
clinical support area	included in above
sub total	64
en-suite assisted shower & wash	6.5
Semi-ambulant WC	2
En-suite assisted WC/wash	4.5
Total 4-bed room	72.5

Example Layouts

21. The document includes example layouts for single-bed rooms with different en-suite locations, highlighting the impact on access points, support facilities, views, privacy, and floor area.

Schedules of accommodation

22. The document provides a series of examples of schedules of accommodation, showing

An example 24 bed ward with 50% single-bed rooms

An example 24 bed ward with 83% single-bed rooms

An example 24 bed ward with 100% single-bed rooms.

The schedules set out the rooms and physical space required for each example, and include the physical space for the beds, shower facilities, WCs and all supporting essential complementary accommodation to support the inpatient activity (cleaners' cupboards, administrative area, storage space, reception, etc). An allocation is then added for circulation, communication and engineering space.

The gross internal area for a 24 bed ward with 50% single rooms is 1,065m².

The gross internal area for a 24 bed ward with 83% single rooms is 1,165.5m²

The gross internal area for a 24 bed ward with 100% single rooms is 1,206.7m²

23. In addition to the above, additional complementary accommodation should be added where necessary up to an additional 84.6m² per 24 bed ward.

24. NHS Kent and Medway has used 50% single room requirement for its modelling for the Highsted Park development. The total floor area needed for a 24 bed ward with 50% single rooms is therefore 1,149.6m² (1,065m plus 84.6m), which equates to 48m² per bed.
25. NHS Kent and Medway's modelling of the impact of the Highsted Park development calculates that the growth in population will generate a mitigation of 62.34 inpatient beds. As it is impossible to provide 0.34 of a bed, this figure has been rounded up to 63 inpatient beds.
26. Using the above calculations, a building comprising three 24 bed wards would generally require a total floor area of 3,448.8m² (three floors of 1,149.6m²). However, co-locating three wards does allow for some economies of scale to be delivered (shared staff rooms, shared storage areas, shared clinical space) which reduces the actual required footprint.
27. The Highsted park development requires 63 beds, therefore the sidm model calculates the amount of space needed to accommodate this number of beds using an average per metre square footprint and allows for associated economies of scale brought about by co-location of some support accommodation. The calculated footprint of 2,992m² works out at around 47.5m² per inpatient bed.
28. NHS Kent and Medway has used a conservative planning assumption figure for acute care facilities of £10,000 average cost per s/m. This is based on figures taken from two recent new build projects in Maidstone Kent which equated to an average of £11,180 per sq/m.