For nursing care to be performed efficiently the maintained illuminance over the general area of the bed should be at least 300 lx with a uniformity (minimum/average) of 0.5 or better. A combination of general and task lighting may be used. The maintained illuminance in the central space between the beds should be not less than an average of 100 lx at floor level. This level will be sufficient for the general activities of ambulant and recumbent patients without causing disturbance to other patients in the room who may want to rest.

It is common practice that when patients are being attended to by nursing or medical staff, their bed curtains will be pulled around to provide an element of privacy. When the bed curtains are pulled around, the average illuminance within the curtained area for both the general level and the nursing care level must not be reduced by more than 25 percent when compared to the unscreened bedded area. A minimum acceptable mean illuminance of 75 lx for the general ward lighting should be maintained outside the bedded area when all the bed curtains within the ward are drawn around simultaneously.

The lighting of wards can be done in several different ways. Ceiling mounted ward luminaires are usually required but these can be supplemented with bed lighting consisting of compact fluorescent lamps in ceiling-recessed luminaires positioned centrally over the bed area or linear fluorescent luminaires mounted on top of a strengthened curtain rail between beds to provide uplighting. This latter approach will not be appropriate where the distance between the curtain rail and the ceiling is less than 1 m and/or where the ceiling height is more than 3 m (Figure 14.4). Another possibility is to use luminaires that are integral within a wall-mounted bed-head services trunking system that also provides piped medical gas and cabled services. The optimum mounting height for such integrated luminaires is 1.8 m. Any luminaire mounted below 1.8 m will need careful light control if glare to patients and staff is to be avoided.



Figure 14.4
Ward and
bedhead lighting

Ceiling mounted ward luminaires can be suspended, surface mounted or recessed. The minimum ceiling height required for suspended luminaires to be considered is 3.5 meters. This will ensure that adequate clearance is still possible for the use of mobile apparatus at the bedside. The mounting height above the floor should not be less than 2.7 m nor greater than 3.5 m. If the luminaire has an upward light component the suspension length should be between 700 mm and 1000 mm to achieve a satisfactory spread of light across the ceiling. For surface-mounted luminaires, the ceiling height may be 2.7 m or less. It is usually convenient to mount single-lamp fluorescent luminaires to coincide with the bed spaces. Twin-lamp luminaires may also be used, usually spaced at one and a half times the bed spacing.