

## **PT/OT: Lighting Applications for Open Space Environments**

Note: The following recommendations are for typical day to night sleep/wake cycles. If any patients keep an adjusted sleeping schedule due to shift work or other factors, please arrange for modular lighting solutions to tend to their sleep health and circadian health needs. For additional support on what that entails, please contact Light Vitality Group, Inc. for a consultation.

### **DAYTIME-WAKEFUL LIGHT PROFILES**

To suppress melatonin encouraging focus, alertness, concentration and balance while also entraining circadian rhythms to typical day/night cycle.

- A. Windows - with Blinds open
  - 1. Avoid direct glare from the sun (too bright for patients lying on mat and sun shining in eyes)
    - a. Solution 1: Apply white, semi-translucent, tracing paper to area of window where patient will be (buy paper here)
    - b. Solution 2: Have small to medium sized, modular, translucent screen handy to roll or set in place during floor activities to diffuse light from direct glare (buy frame here, alternate frame)
    - c. Solution 3: Diffusing, contact paper for windows (buy paper here)
    - d. Solution 4: Clear, modular, privacy screen with diffusing contact paper applied (buy screen here, buy paper here)
  - 2. Treatments outside when appropriate between 7a – 5p.
  - 3. Arranging equipment - Where are your patients for an extended period of time?
    - a. Place in front of window or create nested areas
      - i. Machines - NuStep, Treadmill, UBE
      - ii. Mats
      - iii. Exercise equipment
      - iv. Staffing desks
- B. Electric Lighting
  - a. Overhead, full output lighting to achieve maximum brightness for suppressing melatonin
  - b. Track lighting aimed against surfaces to reflect light rather than provide direct lighting on patient.
    - i. Track lighting only directly on patient if patient is comfortable and safe from glare effects.
  - c. Must have manual controls for Dimming and On/Off function.
  - d. Separate zones of control within open space plan is encouraged to support any patients with potential adjusted sleep schedule needs.

### **EVENING-SEDATIVE LIGHT PROFILES**

To allow the release of melatonin encouraging sleepiness and relaxation while also entraining circadian rhythms to typical day/night cycle.

- A. Windows - Blinds closed
  - 1. Avoid direct access to daylight above the eye level or from vertical sightline.
    - a. Blinds may be slightly elevated to allow for low-level, ambient, path lighting effect
    - b. Partially closed blinds must have a sill no higher than 30".
  - 2. Treatments inside after 5p, or within 2-3 hours of patients bedtime.
- B. Electric Lighting
  - a. Overhead lighting dimmed to lowest output of visual comfort and safety
  - b. Track lighting aimed against surfaces to reflect light rather than provide direct lighting on patient.
  - c. Must have manual controls for Dimming and On/Off function.
  - d. Separate zones of control within open space plan is encouraged to support any patients with potential adjusted sleep schedule needs or requires calming.