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WHITE PAPER
Weighted Blankets and Gel Pads as Non-Pharmacologic Interventions for Agitated Hospital Patients

Executive Summary
Agitation in hospital settings is a common challenge, especially among patients with dementia, psychiatric disorders, developmental disabilities, or those recovering from trauma or surgery. Traditional responses have often included sedative medications, which carry risks of respiratory depression, delirium, and longer hospital stays. This white paper explores the benefits and limitations of using weighted blankets and gel pads as sensory-based, non-drug interventions to reduce agitation and promote patient calm. Drawing on available clinical evidence and use-case scenarios, we identify the patient populations and care settings where these products are most effective and provide guidance for hospitals evaluating these tools as part of a broader behavioral health and patient safety strategy.

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1. Introduction

Agitation is defined as excessive motor activity, restlessness, and heightened arousal that can lead to aggressive behavior or self-harm. It presents serious clinical and safety challenges in acute care, geriatric, psychiatric, and post-operative environments. Amid increasing emphasis on non-pharmacologic interventions and patient-centered care, weighted blankets and gel pads are gaining attention for their ability to calm without chemical restraint.

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2. Understanding Weighted Products

Weighted Blankets:
Designed with evenly distributed weight, usually 5–30 pounds, these blankets apply deep pressure stimulation (DPS), mimicking the feeling of being held or hugged. DPS is thought to lower cortisol levels and increase serotonin and melatonin, promoting calm and improving mood.

Weighted Gel Pads:
Gel pads provide localized deep pressure when placed over the lap, chest, or shoulders. These are often used in wheelchairs or on stretchers and offer a less restrictive alternative to full blankets, making them suitable for shorter durations or partial coverage.

3. Benefits of Weighted Products in Hospitals

A. Non-Pharmacologic Calming Effect

- **Mechanism**: DPS activates the parasympathetic nervous system, reducing sympathetic "fight-or-flight" responses associated with agitation.
- **Clinical Populations Benefited**:
  - Patients with dementia or Alzheimer's
  - Pediatric and adult psychiatric inpatients
  - Post-operative or ICU patients experiencing delirium
  - Individuals with autism spectrum disorder (ASD) or developmental delays

B. Reduction in Medication Use

- Avoids side effects of antipsychotics, benzodiazepines, and sedatives
- Reduces risk of falls, respiratory issues, and prolonged sedation
- Supports goals of restraint-free and minimal-intervention care plans

C. Enhanced Patient Comfort and Sleep

- Improved sleep quality documented among psychiatric and geriatric patients
- May reduce nighttime wandering or restlessness in dementia units

D. Staff and Patient Safety

- De-escalates agitation before it escalates to aggression or restraint
- Promotes a more therapeutic care environment, reducing staff injuries and burnout

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4. Clinical Evidence

Study	Sample Size	Findings
Chen et al. (2013), ***Occupational Therapy in Mental Health***	30 psychiatric inpatients	Use of weighted blankets during sensory rooms resulted in reduced pulse rate and self-reported anxiety.
Mullen et al. (2008), ***Journal of Occupational Therapy***	50 children with ASD	Weighted vests and blankets improved attention and reduced disruptive behaviors.
Gringras et al. (2014), ***Pediatrics***	73 children with autism	No significant difference in sleep onset time, but improved sleep duration and reduced anxiety.

Study	Sample Size	Findings
Gee et al. (2020), *Journal of Clinical Sleep Medicine*	Meta-analysis	Weighted blankets improve sleep and reduce anxiety across multiple psychiatric populations.

While evidence is growing, most studies are small or lack randomized controls. Still, positive trends and patient-reported benefits suggest value when integrated into broader behavioral care strategies.

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5. Limitations and Considerations

Limitation	Mitigation
Not appropriate for all patients (e.g., severe respiratory issues, frailty, pressure ulcers)	Clinical screening and nursing protocols required
Insufficient staff training can lead to improper use	Include weighted product use in staff training and fall prevention protocols
Mixed research outcomes in pediatric populations	Pair with other sensory tools and evaluate individual response
Perception of "restraint" if applied incorrectly	Use as part of a documented sensory diet, with time limits and informed consent

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6. Recommended Use Cases

Setting	Recommended Use
Geriatric psychiatry	Calm wandering, agitated dementia patients in memory care units
ICU/Step-Down Units	Ease delirium symptoms and reduce nighttime restlessness
Pediatric Behavioral Health	Provide comfort during transitions or acute anxiety episodes
Emergency Department	Preemptive calming for patients presenting with psychiatric distress

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7. Implementation Best Practices

- **Screening Protocols**: Assess contraindications (e.g., compromised mobility, skin integrity).
- **Care Plans**: Integrate into occupational therapy or behavioral management plans.
- **Training**: Educate nursing and support staff on safe application, duration of use, and documentation.

- **Trial Programs**: Pilot in one unit with outcome tracking on agitation incidents, medication usage, and staff feedback.

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8. Conclusion

Weighted blankets and gel pads offer hospitals a promising adjunct to medication in managing patient agitation. When applied with clinical judgment and appropriate protocols, these tools can reduce sedative use, promote patient dignity, and enhance care outcomes. While further large-scale studies are needed, existing evidence and anecdotal success support their adoption as part of a comprehensive, non-restraint agitation management strategy.

References

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