Flexabed Hi-Low Adjustable Bedframe Letter of Medical Necessity for Alexandra Ingersoll

M.D.

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I am requesting approval of the Hi-Low SL adjustable queen bed from Flexabed for my patient, Alexandra Ingersoll, by Blue Cross and Blue Shield of North Carolina (BCBSNC), The Hi-Low SL is a medically necessary piece of DME equipment for Alexandra in order to reduce the incidence of decubitus pressure ulcers, choking hazard resulting in death, autonomic dysreflexia, musculoskeletal pain, and fall risks from transfers. Alexandra has been using this adjustable bed by Flexabed for the last 10 years and her current bedframe is currently damaged beyond repair.

Alexandra is a 38-year-old female with the diagnoses of C6 quadriplegia, paralysis resulting in partial loss of all four limbs and torso from a diving accident in August 2010. As a result of Alexandra's spinal cord injury, she suffers from urinary tract infections, spasticity, recurrent decubitus pressure sores, chronic nerve pain, osteoporosis, musculoskeletal pain as a result of overuse injuries, and reduced respiratory function among other secondary complications. Each of these secondary complications results in a reduction of the quality of life for Alexandra. Alexandra has been able to mitigate many of these secondary complications with very specific pieces of medically necessary DME equipment in order to improve her health, safety, and welfare.

The Flexabed Hi-Low adjustable bed frame is far less expensive than the secondary complications that will arise from costly and recurrent hospitalizations without use of this bedframe. Because Alexandra only has caregiver coverage several hours a day, she is alone in bed for over 15 hours, which can lead to very serious medical complications without round-the-clock care.

The adjustable bed frame allows the patient to raise the head and feet of the bed in addition to the vertical height of the bed (www.flexabed.com). Alexandra was approved a queen pressure relieving mattress in 2020 and has been using the accompanying Flexabed queen frame over the last 10 years. The Flexabed Hi-Lo Queen adjustable bed is no more expensive than other comparable products on the market.

Adjustable Bed Frame Medical Necessity Justification

1. Respiratory Function

Impairments in respiratory function from SCI results in medical consequences that are the leading causes of morbidity, mortality, and economic burden for the patient. Pulmonary complications of SCI include increased risk of pulmonary infection and death, and higher rates of symptoms of respiratory dysfunction. In persons with SCI, quality of life is diminished by respiratory symptoms that include cough, phlegm, and wheezing (1).

As a result of Alexandra's quadriplegia her abdominal muscles are paralyzed, which leaves the patient to breathe only with her diaphragm. Diaphragmatic breathing only allows oxygen partially into the lungs resulting in constant fluid buildup leading to chronic bronchitis, pneumonia, and other serious respiratory problems.

When a patient with quadriplegia lies in a horizontal position without the ability to raise the head up to sleep at least 30° fluid buildup in the lungs results the inability for the patient to

clear the lungs on their own. This is a very serious and life-threatening situation leading to choking and death without the assistance of full-time care, which Alexandra does not have.

The Hi-Lo Adjustable Flexabed allows Alexandra to sleep in an elevated position to avoid choking, fluid buildup, and risk of death because she is unable to call for help throughout the night.

2. Decubitus Pressure Ulcers

Pressure ulcers and SCI represent challenging problems for patients, which often lead to recurrent hospitalizations, multiple surgeries, and devastating complications. They present a significant cost of the healthcare system, and require a multidisciplinary team approach to manage. Pressure ulcers can be life-threatening and end-stage cases as a potential source of overwhelming sepsis. Complications from osteomyelitis, destruction of joints, necrosis of muscle and soft tissue can devastate patient's health and quality of life (2).

Patients with SCI and its associated comorbidities are among the highest risk population for developing pressure ulcers. The incidence of pressure ulcers in the SCI population is 25-66%. It is also been reported that patients with higher level spinal cord injuries are more susceptible than those with lower level lesions. The lack of protective sensation, variable home care and access to pressure relieving equipment, and common morbidities (i.e. diabetes, anemia, malnutrition) contribute to the high risk for development of pressure ulcers in this population (2).

A nationwide consensus showed that prevention of pressure sores is less costly than the management of the disease itself. The Healthcare Cost and Utilization Project from the Agency for Healthcare Research and Quality estimated that, in 2006, there were approximately 500,000 total hospital stays in the United States with pressure ulcers as a diagnoses, with a total annual cost of $11 billion (2).

Alexandra has suffered from repeated stage I, II, II, and IV decubitus pressure sores over the last 10 years on her sacrum and tailbone. Alexandra's pressure ulcers/bedsores have resulted from her paralysis and she will always be highly susceptible to ongoing pressure ulcers. However, Alexandra has been able to mitigate further pressure sores over the last five years with the use of her specialized pressure relieving mattress and adjustable bedframe.

Please note the following timeline regarding her skin breakdown/pressure ulcers:

- In 2010, she sustained a stage III pressure ulcer on the sacrum and tailbone requiring a special low loss air mattress to heal taking nearly 9 months.

- In 2015, Alexandra suffered another stage III pressure also requiring wound care management at Wake Med Hospital for several months. The pressure also did not heal leading to the patient having to have her first surgery in January 2016 at Duke Hospital.

The surgery involved was called a Coccygectomy - a surgical procedure in which the coccyx or tailbone is removed. The cause of her pressure sore was due to being born with an extra vertebrae in her tailbone, thus leading to previous years of recurrent pressure sores.

- In late January 2016 the surgery did not yield successful results requiring the patient to use a wound vacuum for several months. The wound vacuum did not close a pressure ulcer on the tailbone and due to tunneling inside the sacrum, the patient then underwent a unilateral flap surgery in May 2016

(Please see ***Appendix A*** for Pressure sore photographic evidence)

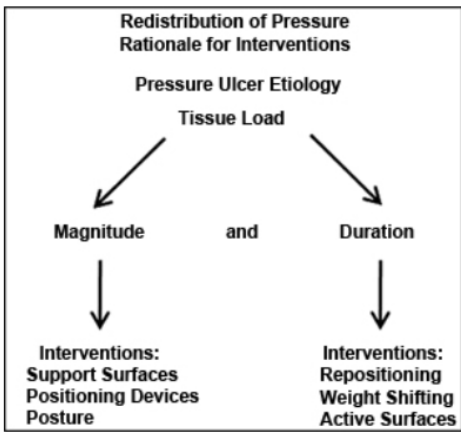
- **In 2016, Blue Cross and Blue Shield paid out nearly $67,000 just to in-network providers for surgeries, hospital stays, wound vacuums, and air fluidized beds associated with the stage IV pressure ulcer. The cost of a $2,700 bedframe for long-term prevention far exceeds the long-term cost Blue Cross will pay out for the recurrence of further surgeries needed for pressure sores, which are starting to develop as the present bedframe is damaged.** These 2016 costs do not factor in medical costs from 2015 associated with the pressure sore. Please access her records to see the many thousands of dollars included in 2015 to go see wound doctors.

(Please see ***Appendix B*** for pressure sore costs incurred by BCBSNC)

It's extremely important to note that pressure sores can sometimes heal with wound care and at times, surgical debridement. However, the skin is forever compromised in the area where the surgery was performed requiring constant weight shifting and turning in bed.

While Alexandra has the proper pressure relieving mattress to avoid some recurring pressure sores it is standard medical practice for a patient to turn every 2-3 hours to avoid the recurrence of pressure sores. This is not possible on a specialized pressure reducing mattress alone. The patient must turn throughout the night.

Clinical interventions typically target the magnitude and/or duration of loading. Pressure magnitude is managed by the selection of support services and postural supports as well as body posture on supporting services. Duration is addressed via turning and weight shifting frequency as well as with the use of dynamic services that actively redistributes pressure on the body surfaces (3).



Further, the use of a regular schedule of turning at night every 2 to 6 hours is imperative for individuals who are at a higher risk for pressure sores (4).

Alexandra does not have full-time caregiving to turn at nighttime and while her pressure relieving mattress aids in being able to reducing the amount of turn time throughout the night, it is still imperative for her to turn at least twice after being in bed for 15 hours a day. Alexandra does not have a choice but to be in bed 15 hours a day due to lack of caregiving hours from the financial burden associated with caregiving costs, which BCBSNC will not provide on an ongoing basis.

An adjustable Hi-Low bedframe offers Alexandra the ability to weight shift on her own by raising the head up and the feet of the bed up as it provides her with proper angle where she can turn by herself.

In addition, raising the feet of the bed up also offers pressure relief from bedsores on the heels and ankles, which is a very common area for pressure ulcers to occur. Further, Alexandra suffers from extreme edema due to lack of blood circulation in the lower extremities of her body. The elevated feet function allows for the reduction of edema.

3. Fall Risk

An adjustable bed alone is not sufficient for Alexandra. The Hi-Low function is critical to raise the bed up to the height of Alexandra's wheelchair in order to perform a transfer from bed to chair and chair to bed. Without a proper transfer bed height the patient increases the risk of patient falling out of her wheelchair while transferring.

Specifically, Alexandra transfers on a level surface at nighttime from her chair to her bed, but in the morning she has to raise the bed up a little bit higher, so when she puts the sliding board under her body to get back into the chair the bed has to be slightly higher to slide into the chair when she pushes with her arms. Alexandra does not have the upper body strength to transfer back from the bed to the chair without a slight incline from the bed and cannot reach her power chair to make these adjustments on her own. The Hi-Low feature of the bed allows

Alexandra transfer on her own increasing her independence and improving her Assisted Daily Living Activities (ADL's).

Alexandra suffers from severe osteoporosis, has broken multiple bones, and is in a high risk category for falls. It is imperative and medically necessary for her to have a properly positioned transfer height in order to prevent further broken bones, which have resulted in lengthy hospital stays for her.

4. Musculoskeletal Pain

In 2013 Alexandra underwent a triple laminectomy due to an ascending arachnoid cyst in her spinal cord, which would have led to death. Unfortunately, she now suffers from extreme cervical neck pain in addition to scapular destabilization as a result of the surgery and damaged nerves.

When the patient lies in the same position for too long she suffers from debilitating pain reducing her quality of life and ADL's - all of which prevents the maintenance of her independence.

4. Spasticity

With the proper mattress and adjustable bedframe Alexandra is able to adjust her body positioning, which reduces her involuntary muscle spasms. As a result she has been able to reduce her intake of baclofen leading to less spasticity. This has led her to improve her daily independence and ADL's.

In my medical opinion the adjustable Hi-Lo bedframe by Flexabed is medically necessary for Alexandra in order for her to maintain her independence, quality of life, reduce recurring pressure sores, reduce musculoskeletal pain, and improve respiratory function. An adjustable bedframe is a much less expensive option as compared to the secondary complications that will arise for the patient, which will result in costly long-term hospital stays for her insurance company.

Sincerely,

References

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3. Sprigle S, Sonenblum S. Assessing evidence supporting redistribution of pressure for pressure ulcer prevention: A review. Vol. 48, Journal of Rehabilitation Research and Development. 2011. p. 203–13.

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