

CONSIDERATIONS FOR A

Letter of Medical Necessity (LMN)

FOR A LUCI EQUIPPED POWER WHEELCHAIR

The following is a sample Letter of Medical Necessity (LMN) designed as an example when including LUCI with a power wheelchair. **This is not intended to take the place of a thorough seating evaluation.** Any documentation provided by the ordering/evaluating clinician must be specific to the client's medical and functional needs, and environments of use. LUCI recommends you also consult the LUCI Funding Toolkit at luci.com/funding for additional funding information.

Name: [Jane Doe]

Age:

DOB:

Diagnosis:

Date of Evaluation:

Background Information

[Jane Doe] is...

include name, age, diagnosis, history, and any other relevant medical information.

Be sure to include and highlight:

- » Past accidents / injuries due to wheelchair collisions or tip-overs
- » Wheelchair damage incurred from collisions or tip-overs
- » Environments in which [Jane] does not operate a power wheelchair due to concern for safety or lack of confidence
- » Environments in which [Jane] is not permitted to operate a power wheelchair due to past collisions, tip-overs, or safety of others
- » [Jane] and/ or caregivers stated concerns about safety when operating a power wheelchair
- » Other concerns resulting from the power wheelchair evaluation; including those about safety, spatial awareness, collisions in tight spaces, trouble negotiating doorways or ramps, access to transportation, etc.
- » The type of spaces [Jane] is negotiating in the home, van / transportation, and other environments routinely accessed in the community
- » Include activities [Jane] has stopped participating in due to inability to safely operate a power wheelchair when in a specific environment

You may also include others who were present during the evaluation.

Goals (examples)

Include goals specific to the client that support safety and independence in mobility and with ADLs, both in the home and community.

- » To provide [Jane] with a power wheelchair that includes a LUCI safety system, to achieve the highest level of independence with powered mobility while maintaining safety for [Jane] and others in her environment.
- » To provide [Jane] with a power wheelchair that includes a LUCI safety system, that allows [Jane] to operate the power wheelchair confidently and safely in all common environments in her home and community.
- » To provide [Jane] with a power wheelchair that includes a LUCI safety system, that allows [Jane] to independently operate a power wheelchair in all common environments throughout the day in her home and community.
- » To provide [Jane] with a power wheelchair that includes a LUCI safety system, allowing for safe and independent mobility even when her voluntary motor functions may be less than reliable due to [examples - fatigue; decreased vision; progression of neurological function; etc.].

Current Equipment

- » Current mobility base (include manufacturer, model, age, driving method and power seating functions if applicable)
- » Current seating system
- » Age of current equipment
- » SPECIFIC reasons the current equipment is NOT meeting the client's mobility needs in the home and/or community

Example 1: [Jane] has been using ABC power wheelchair with right joystick and T-handle for more than 5 years. She also controls her power tilt and power seat elevation through the joystick. [Jane] is a good driver but struggles in specific environments *[examples – making the 90 degree turn into her bedroom; negotiation the narrow hallway in her home/ building; getting in and out of an accessible elevator]* due to *[examples - slow reaction time to engage the joystick; visual deficit restricting sight of items that are low in relation to her wheelchair; etc.]*.

Example 2: [Jane] has been using her power wheelchair for over 2 years. As her disability has progressed and her motor limitations have increased, she can now safely and independently drive her power wheelchair only when she is outside in large open spaces. She is transferred to a manual wheelchair when inside her home and pushed by her caregiver as she is not able to safely drive through the hallways, doorways, or rooms due to *[examples – deficits in voluntary motor control; slow reaction time to engage the joystick; visual deficit restricting sight of items that are low in relation to her wheelchair; etc.]*.

- » Seating
 - Include information such as current seating system, posture in the current system.

» Home accessibility

- Specifically describe 'problem' areas in the client's home where safe driving of the power wheelchair is very difficult.

» Vehicle/ Transportation accessibility

- Specifically describe 'problem' areas using van ramps or otherwise accessing the client's transportation where safe driving of the power wheelchair is very difficult.

Specialized Seating and Mobility Evaluation

Include any additional client information and needs here. What are the specific needs not already addressed? What needs are not being met with the current mobility system? How does the addition of LUCI address these needs?

History - Include information about symptoms, history of pressure injuries, clinical progression of the diagnosis, other related impenitents (e.g. respiratory, cardiac, pain management).

Physical Exam - Includes the results of the supine and seated assessment, conducted outside of the wheelchair. Describe the sitting balance, postural support needs, level of sensation. Include range of motion, strength and coordination information.

Functional Assessment - Describe the persons ability/inability to perform transfers, self-generate mobility, as well as perform activities of daily living.

Environmental Assessment - Describe current living situation. Note accessibility of entrances/exits as well accessibility in the home and mobility limitations faced in the community. Include information about transportation options.

Recommendations

1. Power wheelchair: Include Manufacturer name and model
 - List all options with individual medical justification
2. Seating System: Include Seat/Back Manufacturer name(s) and models
3. LUCI, a sensor system designed to make the power wheelchair safer and more efficient. LUCI will prevent most collisions, drop-offs and tip-overs. Please see additional information in the Evaluation section above.
4. Any other required components/accessories listed with individual medical justification

LUCI is a system that is added to a new or current power wheelchair for the purpose of increasing safety and efficiency in driving for a client who has motor, sensory, visual and/or cognitive limitations. LUCI utilizes a combination of sensors which are integrated with the power wheelchair electronics to specifically prevent most collisions, drop-offs, and tip-overs, and to control the speed of the wheelchair as dictated by the driving conditions. LUCI is not automated driving.

LUCI may be unfamiliar to the funding source. It is important to define this technology in your documentation.

LUCI is configured to each client by capturing an individual's unique reaction time. Based on this reaction time setting, LUCI will slow and, in most cases, ultimately stop the power wheelchair when an object or step is detected in the path of travel. LUCI will allow wheelchair movement in open, safe directions.

LUCI has an override feature that allows the client to disable LUCI for a short period of time to navigate situations that LUCI would typically prevent, such as intentionally using the footplates to open a doorway.

I recommend LUCI to be added to [Jane's] new (or current) power wheelchair, to address the following concerns when she is operating her power wheelchair. When equipped with LUCI, [Jane] will be in full control of her mobility, but will be prevented from accidentally driving into obstacles, over a curb or step, or into another person due to her *[slow reaction time; decreased motor control; visual deficit; cognitive impairment; etc.]*. LUCI will allow [Jane] to be a safe and functional independent driver of her power wheelchair both in her home and community.

The following scenarios may be applicable to individual clients. The ordering clinician may use the following information as a guide when writing their supporting documentation, however it must be individualized based on the client's presentation.

Mobility:

- » If a new power wheelchair is recommended, include results of mobility evaluation and all recommendations including things such as drive wheel configuration, tracking technologies, driving method, and power seating. The justification should support each item based on individual medical needs. If adding LUCI to a current power wheelchair, be specific as to what needs are not being met and why the client cannot function safely and independently without LUCI.

Motor Limitations:

- » Motor limitations [decreased range of motion; decreased strength during the day; increased fatigue; etc.].
- » Motor processing delays which lead to delayed joystick response time which can result in collisions, drop-offs, or tip-overs.
- » LUCI will compensate for motor limitations and motor delays through collision avoidance, tip alerts, and drop-off protection. LUCI will allow the client to be independent with powered mobility versus relying on a caregiver to push a manual wheelchair.

Vision Limitations:

- » Visual limitations impact driving precision, effort, and reaction time required to drive a power wheelchair safely and functionally.
- » Low vision impacts acuity and focus in recognizing and responding to obstacles in the environment.
- » Visual perceptual deficits impact ability to determine position-in-space relative to other items.
- » Visual perceptual deficits impact ability to detect changes in height, such as recognizing a curb or ramp edge.
- » The client is unable to visually monitor the environment behind the power wheelchair or recognize items that are blocked by the power wheelchair base itself.

Cognitive Limitations:

- » Cognitive limitations impact driving precision, effort, and reaction time required to drive a power wheelchair safely and functionally.
- » The client is easily distracted which can result in collisions, drop-offs, or tip-overs.
- » The client has impaired judgment [secondary to _____] and does not fully comprehend the consequences of the power wheelchair colliding with an object or with others. LUCI will compensate for distractibility and decreased judgment through collision avoidance, tip alerts, and drop-off protection.

Additional Justification

Be client specific regarding motor, visual and/or cognitive limitations. Keep in mind, all the following reasons may not apply or be necessary. What is specific to your client? Be sure to describe the client's driving abilities before and after a trial with LUCI. Be as descriptive as possible for a funding source to truly understand the need for the product.

- » LUCI will compensate for [Jane's] *visual limitations* by providing collision avoidance, tip alerts, and drop-off protection, by slowing the chair and most often, if needed, stopping the chair, when an obstacle or drop-off (curb) is detected in the path of travel.
- » LUCI will increase [Jane's] driving safety and reduce potential for injury by preventing collisions with people, walls, or other obstacles.
- » LUCI will alert [Jane] that the wheelchair is at an angle which could lead to tipping; and will prevent accidental driving of the wheelchair over a drop-off, such as a curb or step.
- » [Jane] has a history of needing repairs to her power wheelchair, due to collisions damaging her joystick, footplates, legrests, armrests, etc. LUCI will reduce the number of repairs, by stopping the chair prior to the collision that has in the past resulted in broken components of the chair.
- » LUCI will provide [Jane] with the confidence needed to drive independently. Understanding that LUCI will provide collision avoidance will reduce her stress, anxiety, and fear stemming from past collisions and injuries.
- » With the collision avoidance provided by LUCI, the incident, frequency, and severity of injuries to [Jane's] feet, ankles and knees will be reduced.
- » With the drop-off protection and tip-over avoidance provided by LUCI, the incident, frequency, and severity of injuries to [Jane] will be reduced.
- » LUCI will increase driving efficiency. Less effort and time will be required to complete a driving task which will conserve energy and prolong the amount of time [Jane] can drive throughout the day.
- » [Jane] would benefit from the LUCI system due to her *visual limitations** as it will allow her to drive her power wheelchair safely and independently. Without LUCI her driving efficiency and safety would be compromised.
- » LUCI will compensate for [Jane's] visual acuity and perceptual limitations through its collision avoidance, tip alerts, and drop-off protection. LUCI will allow [Jane] to be independent versus being dependent on a caregiver to push her in a manual wheelchair by slowing or even stopping the chair as needed, when an obstacle of curb is detected in the path of travel.
- » [Jane] is unable to maneuver through the hallway safely and independently from her bedroom to kitchen in her current power wheelchair. After a trial with LUCI added to her power wheelchair, she was able to demonstrate consistent success in driving throughout her home including between these two rooms.

- » When in a crowd of people, LUCI will slow down when the people near [Jane] slow down and then speed up again with the pace of those around her. [Jane] will be in full control and will not accidentally run into others around her. Navigating a power wheelchair through crowds can be very challenging as people are unpredictable.
- » LUCI allows for safe navigation on a ramp both to access her home and her accessible vehicle.
- » LUCI will allow [Jane] to easily navigate through doorways in her home without colliding with the doorframes.

Individualize by adding other things to consider such getting close to the refrigerator, negotiating specific doorways in the home, using a van ramp, avoiding collisions with small children or pets that live in the home, etc.

More information can be found at LUCI.com.

Functional Conclusion

It is important to stress the functional implications of the client's limitations and how LUCI mitigates the risk of injury to the user and others in the environment.

(Example) As a result of [list the specific concerns], [Jane's] ability to drive a power wheelchair efficiently and safely are decreased. Therefore, [Jane] is limited to driving safely only in large open spaces. In other environments, her speed is reduced to a non-functional level for her to be safe. A power wheelchair equipped with a LUCI safety system will allow [Jane] to be independent in her home and all other common environments vs. being dependent on a caregiver for mobility.

Feel free to contact me with any questions or further needs.

Clinician Printed Name (signature above)

Date Signed

I have read the above evaluation report and concur with the recommendations therein. I follow this client for medical care.

Physician Printed Name (signature above)

Date Signed

NPI

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