

Occupational Therapy Evaluation

Letter of Medical Necessity for Farming Adaptive Equipment

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Financial Disclosures

- None

Non-Financial Disclosures

- None



Course Objectives

- Holistic approach for completing an OT evaluation
- Describe the various parts of the evaluation process
- Identify test to interpret levels of impairments
- Develop holistic view of the farm / farmer/ adaptive equipment to maximize independence
- Identify appropriate adaptive equipment that optimizes functional performance.



Putting it on Paper

- PRESENT MEDICAL HISTORY

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- PRESENT WORK ACTIVITIES, FARM TYPE, FARM ENVIRONMENT

Putting it on Paper

- PRESENT MEDICAL HISTORY
- PRESENT WORK ACTIVITIES, FARM TYPE, FARM ENVIRONMENT
- FARMERS REPORTED PHYSICAL AND/OR MENTAL PROBLEM AREAS WITH DAILY FARMING ACTIVITIES.

Purpose and Benefit of the Occupational Therapy Evaluation

- PAST MEDICAL HISTORY
- MEDICATIONS
- CURRENT MEDICAL CONDITIONS



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- PAST MEDICAL HISTORY
- MEDICATIONS
- CURRENT MEDICAL CONDITIONS
 - Cardio-Respiratory



Purpose and Benefit of the Occupational Therapy Evaluation

- PAST MEDICAL HISTORY
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 - Cardio-Respiratory
 - Orthopedic Conditions



Purpose and Benefit of the Occupational Therapy Evaluation

- PAST MEDICAL HISTORY
- MEDICATIONS
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 - Cardio-Respiratory
 - Orthopedic Conditions
 - Skin Integrity



Purpose and Benefit of the Occupational Therapy Evaluation

- PAST MEDICAL HISTORY
- MEDICATIONS
- CURRENT MEDICAL CONDITION
 - Cardio-Respiratory
 - Orthopedic Conditions
 - Skin Integrity
 - Cognition
 - Hopkins Verbal Learning Test



Functional Mobility Skills



Functional Mobility Skills Test

- Household and Farm Related Transfer
 - Timed Up and Go Test
- Community/Farm Mobility
 - 6 Minute Walk Test
 - Dynamic Gait Index
- Static / Dynamic Balance
 - Berg Balance Scale
 - Tinetti Assessment Tool
 - BESTest Balance Evaluation—System Test
 - Mini-BESTest

The Lower Extremity Functional Scale (LEFS)

Instructions

We are interested in knowing whether you are having any difficulty at all with the activities listed below because of your limits with walking for which you are currently seeking attention. Please provide an answer for each activity.

Today, do you or would you have any difficulty at all with:

Activities	Extreme difficulty or unable to perform activity	Quite a bit of difficulty	Moderate difficulty	A little bit of difficulty	No difficulty
1. Any of your usual work, housework, or school activities	0	1	2	3	4
2. Your usual hobbies, recreational, or sporting activities.	0	1	2	3	4
4. Getting into or out of the bath.	0	1	2	3	4
5. Putting on your shoes or socks.	0	1	2	3	4
6. Squatting.	0	1	2	3	4
7. Lifting an object, like a bag of groceries from the floor.	0	1	2	3	4
8. Performing light activities around your home.	0	1	2	3	4
9. Performing heavy activities around your home.	0	1	2	3	4
10. Getting into or out of a car.	0	1	2	3	4
11. Walking 2 blocks.	0	1	2	3	4
12. Walking a mile.	0	1	2	3	4
13. Going up or down 10 stairs (about 1 flight of stairs).	0	1	2	3	4
14. Standing for 1 hour.	0	1	2	3	4
15. Sitting for 1 hour.	0	1	2	3	4
16. Running on even ground.	0	1	2	3	4
17. Running on uneven ground.	0	1	2	3	4
18. Making sharp turns while running fast.	0	1	2	3	4
19. Hopping	0	1	2	3	4
20. Rolling over in bed.	0	1	2	3	4
Colum Totals:					

The Upper Extremity Functional Index (UEFI)

THE UPPER EXTREMITY FUNCTIONAL INDEX (UEFI)

We are interested in knowing whether you are having any difficulty at all with the activities listed below because of your upper limb problem for which you are currently seeking attention. Please provide an answer for **each** activity.

Today, do you or would you have any difficulty at all with:

(Circle one number on each line)

	Activities	Extreme Difficulty or Unable to Perform Activity	Quite a Bit of Difficulty	Moderate Difficulty	A Little Bit of Difficulty	No Difficulty
1	Any of your usual work, housework, or school activities	0	1	2	3	4
2	Your usual hobbies, re creational or sporting activities	0	1	2	3	4
3	Lifting a bag of groceries to waist level	0	1	2	3	4
4	Lifting a bag of groceries above your head	0	1	2	3	4
5	Grooming your hair	0	1	2	3	4
6	Pushing up on your hands (eg from bathtub or chair)	0	1	2	3	4
7	Preparing food (eg peeling, cutting)	0	1	2	3	4
8	Driving	0	1	2	3	4
9	Vacuuming, sweeping or raking	0	1	2	3	4
10	Dressing	0	1	2	3	4
11	Doing up buttons	0	1	2	3	4
12	Using tools or appliances	0	1	2	3	4
13	Opening doors	0	1	2	3	4
14	Cleaning	0	1	2	3	4
15	Tying or lacing shoes	0	1	2	3	4
16	Sleeping	0	1	2	3	4
17	Laundering clothes (eg washing, ironing, folding)	0	1	2	3	4
18	Opening a jar	0	1	2	3	4
19	Throwing a ball	0	1	2	3	4
20	Carrying a small suitcase with your affected limb	0	1	2	3	4
	Column Totals:					

Minimum Level of Detectable Change (90% Confidence): 9 points

SCORE: ____/80

Physical Assessment

- Head and Neck:
- Upper Extremities
 - Right UE:
 - Left UE:
 - Strength
 - Grasp Strength
 - Fine pinch strength: Lateral pinch, 3 jaw pinch, pincer pinch.
- Trunk
 - Short-sitting
 - Standing

Physical Assessment Conti.

- Lower Extremities:
- Pelvis:
- Hips:
- Knees:
- Ankles/Feet

ASSESSMENT

- Overall Impression
- Physical & Mental Barriers
- Client's potential to utilize adaptive equipment

Percentage of Impairment

- Anticipated Functional outcomes



Goals For Advised/Recommended Adaptive Equipment

- Example Goals
 - Client will demonstrate at least 20% but less than 40% level of impairment with their lower extremity functional index with utilization of mobility adaptive equipment interventions
 - Interventions to promote fall prevention, & farming transfer safety.
 - Interventions to promote safe accessibility to farm environment and likewise maximize farming productivity.
 - Farmer will lower their pain level for 8/10 to 4/10 with the utilization of adaptive farming equipment.

Recommendations

- Automated Take-Off Milking Unit
- Tractor Step Modification Kits
- Ergonomic / contour seating / Suspension Seating/ Swivel Seating
- Power Operated Mobility Device
- Power Mechanical Lift System
- Electric Motor Fuel Pump
- Fence Post Grass Mower
- Rubber/Padded Foot Matting
- Automated Open/Closure Animal Gate System
- Ergonomic Tools
- Motorized Feed Carts or High Flotation Wheeled Carts
- Milk Railing System
- Sun Protection Cab Canopy
- Heat and/or Air Conditioning Systems
- Camera System / Mirror Extensions

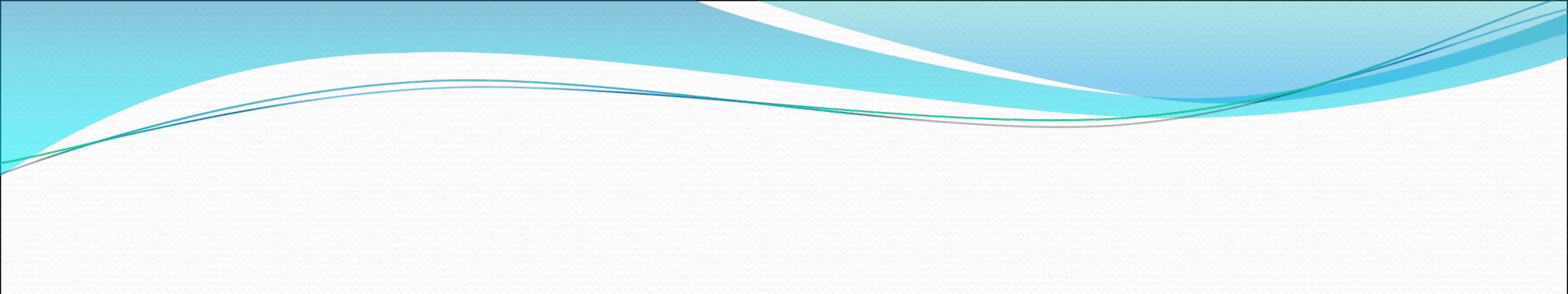


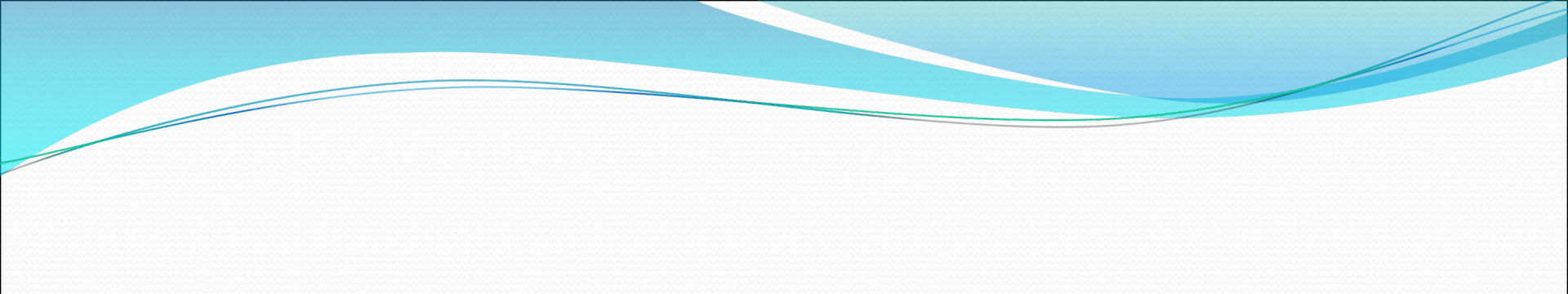
Tractor/Combine Seating Accessories



The Ergonomic Seat and the Suspension Replacement Seat ideally position and support the body to help absorb excessive vibrations and shock while providing comfort and freedom of movement. Also, their armrests and high backs provide added stability for drivers who have balance difficulties. Most replacement seats for cab-equipped tractors come with seatbelts.







Milking Modifications

The Strap-On Milk Stool allows one to sit during milking without having to physically carry a stool around. It's a single-leg seat that straps around the dairyman's waist and buckles in front like a belt. A spring on the leg provides cushioning and improves grip on the floor.



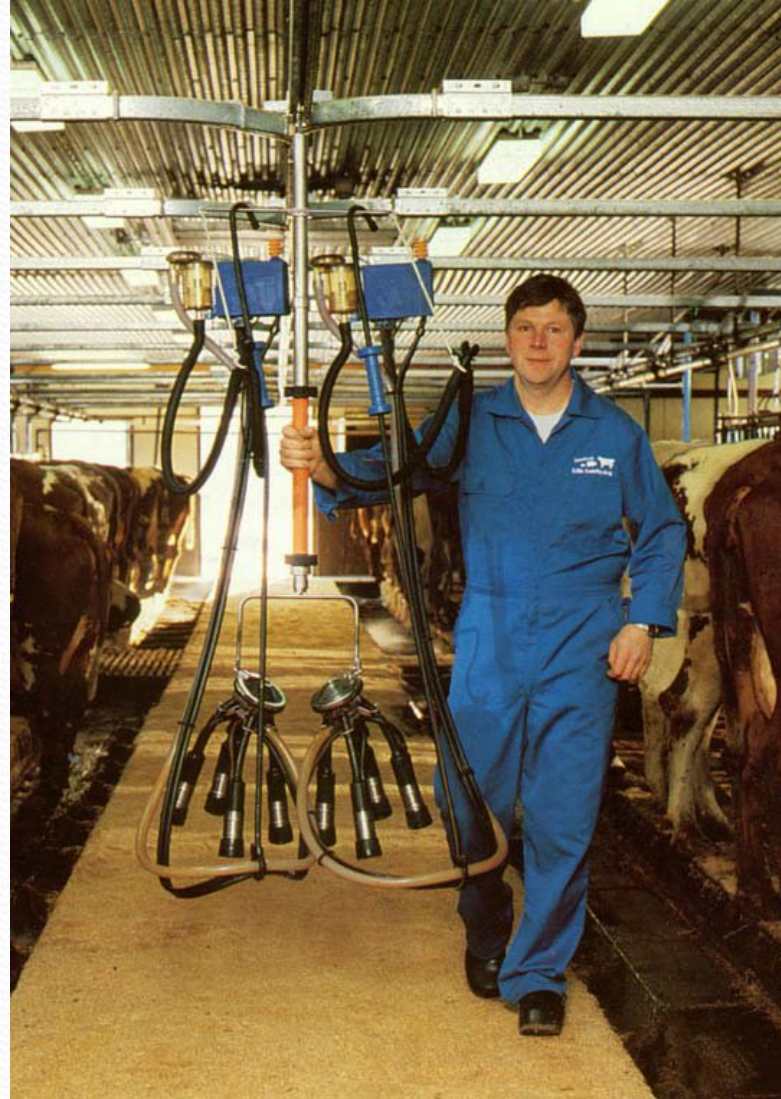
Milking Modifications



The Portable Automatic Milker Detacher for use in stanchion barns is powered by the pipeline vacuum, is operated by a cable system, and hangs from the pipeline. Weighing only about 6½ pounds (including the pulsator), it can be easily carried from cow to cow. One end of the cable fastens to the milker claw; the other end wraps around a pulley on the end of a pneumatic cylinder. As the cylinder extends, the cable is lengthened; as it retracts, the cable is pulled in. The cable is lengthened to put the milker on the cow, causing the cylinder to extend. When the cow is finished milking, a sensor detects the decreased milk flow and signals the vacuum to shut off, causing the cylinder to retract and the cable to remove the milker.

Milking Modifications

- The EasyLine Milker Unit Carrier is an overhead roller track from which the milking units are suspended. The track runs from the milkhouse into the barn and between the stanchions. The dairyman simply rolls the milkers along the track from one position to another, instead of having to lift and carry them.



Attach-Matic Hitch



The Attach-Matic Hitch bolts onto the tractor drawbar and implement tongue in the opposite configuration of the Agri-Speed Hitch – i.e., the angled plate is bolted to the drawbar and the receiver bolted to the tongue. As the angled plate on the drawbar contacts the tongue-mounted receiver, the tongue is lifted to drawbar height then automatically latched when aligned with the drawbar pin hole. The hitch is released by pulling a cable that runs to the tractor cab.

Agri-Speed Hitch



The Agri-Speed Hitch consists of a “receiver” that bolts onto the tractor drawbar and an angled rod that fastens onto the implement tongue. As the angled rod on the tongue contacts the drawbar receiver, it is lifted to drawbar height then automatically latched when aligned with the drawbar pin hole. The hitch is released by pulling a cable that runs to the tractor cab. Agri-Speed hitches do not affect PTO operation.



Equipment Added Steps and Hand Holds



- K & M Manufacturing's wide, non-skid Add-On Tractor Steps (plus handrail) make entering/exiting the cab safer and easier. Simple to install (no holes to drill), step kits are available for various John Deere and Case IH models. Window steps are also available to make window washing more convenient.

Equipment Added Steps and Hand Holds Pilot Lift



Life Essentials Lift Mechanism



Tractor Rear-View Mirrors



The Extendable Rear-View Mirror and the Breakaway Tractor Mirror extend to 14 feet wide the distance from left-side mirror to right-side mirror. This added range allows the operator to see past wide wagons or implements being pulled. The extension arms fold back so the tractor can be stored conveniently in a shed or pass through narrow openings without damaging the mirrors.

Equipment Blind-Spot Monitoring



A Remote-Controlled Mobile Video Camera System can eliminate blind spots and provide a rear view without the operator leaving the cab or even turning his head, because the monitor screen is mounted in the cab to display what the camera views. The MobilVision System and the AG-TV System cameras are weatherproof, rotate 360 degrees, and tilt up or down 120 degrees. They can be mounted on nearly any piece of machinery or even in grain unloading areas to allow better positioning of grain transport vehicles and to monitor loading/unloading.





Livestock Feeding Equipment

Motorized Feed Cart

A Motorized Feed Cart allows the livestock producer to mix and feed rations to his animals without having to scoop grain or fork silage. The cart has both (a) a hydrostatic drive so that it can be driven at various speeds while unloading the mixed feed and (b) a discharge door so that the silage can't spill during mixing and transport. It can fit around tight corners in barns and provides an optional seat for an operator with limited mobility to sit on.







Final Thoughts

- **Remember:** Even-though you see obvious run down farm equipment that alone does not justify new adaptive equipment.
- The Foundation of your treatment plan/adaptive equipment interventions is based upon your evaluation results/testing. Example: If your 6 Minute Walk Test does not justify a mobility assistive device it is unethical to recommend it anyway because the farmer has to manage 1000 acres of pasture to make fence post management easier
- Team Approach

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- MobilVision System, AG-TV System
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- AgriMetal

THANK YOU

