ILLINOIS DEPARTMENT OF Healthcare and Family Services

Illinois Medical Necessity for Nursing Services

Reference Manual

Illinois Department of Healthcare and Family Services

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This reference manual describes the steps for reviewing the medical necessity of in-home shift nursing services, as required for the prior approval of those services for eligible children. The prior approval of in-home shift nursing services is separate from the Level of Care assessment that is used to identify whether a child is eligible for the Illinois Home and Community Based Services Waiver for Medically Fragile, Technology Dependent Children (MFTD Waiver).

This manual consists of the following key components:

- An overview of the medical necessity determination process
- The Medical Necessity for Nursing Services (MNNS) Checklist and instructions
- Reference Materials, such as glossary of terms and acronyms, and links to websites on Illinois regulations, handbooks and other informative information.

Medical Necessity Determination Process

A federally approved Quality Improvement Organization (QIO) utilizes nurses to gather records, conduct an in-person interview, and complete the MNNS Checklist for children seeking prior approval for in-home shift nursing services. The MNNS checklist will be filled out based on information obtained by the Nurse Reviewer during the face-to-face interview with the family. The QIO nurse will also obtain any additional information as needed before, during, and after the interview so that the QIO's physician has a complete view of the child's needs. The physician will review the results of the MNNS Checklist and any other relevant information obtained. The physician will give an opinion and a recommendation to the Department as to the medical necessity and appropriateness of in-home shift nursing for the individual child. The Department, after reviewing the physician's opinion and recommendation, makes and issues a determination on the prior approval of in-home shift nursing.

Scheduling the Face-to-Face MNNS Checklist Review

1. The MNNS Checklist review begins upon receipt of the "referral" from the the Division of Specialized Care for Children (DSCC) or the Department. The referral comes in the form of the medical documentation that the family and/or the nursing agency believes supports the medical necessity for nursing services in the home including but not limited to the plan of care, nursing notes and nursing agency supervisory summaries.
2. If there are any areas contained within the medical documentation that are unclear, the Nurse Reviewer will contact the referral source to obtain clarifying information.
3. Once a referral is received, the Nurse Reviewer will contact the family utilizing the processes and timelines established with HFS. The date of the referral, and the date of first contact with the family will be documented in Atrezzo to allow for monitoring of compliance to required implementation timeframes.
4. The QIO will contact the family by telephone to confirm the family's address and schedule the face-to-face interview, and inform the family of the name of the QIO Nurse who will conduct the in-person interview. This in-person interview may be done in an inpatient setting, a transitional care setting, or at school or home, as long as it done in a face-to-face manner. This interview should include family, be child-friendly, and should accommodate the time and location suitable to the family. If unable to reach the family or there is no phone number in the information packet, the QIO will immediately ask the Department to assist with family contact.

Obtaining Information about the Applicant and Family

Before the in-person interview, the QIO's Nurse Reviewer will review information about the child and family that was obtained from DSCC and/or the Department. Possible information resources include, but are not limited to, medical documents such as the plan of care, nursing notes, any pertinent information provided by the child's family, and nursing agency supervisory summaries. The DSCC and/or the Department will provide contact information with the supporting documents. If the Nurse Reviewer determines there are additional questions that go beyond the scope of the medical documentation provided and the MNNS Checlkist, the Nurse will request additional information to obtain a true and holistic perspective of the child's need for in-home nursing.

At a minimum, the Nurse Reviewer should review:

- Medical records including a medical history, medical summary or similar documentation, sufficient to describe the cause, severity and effect of the applicant's condition
- Any pertinent information provided by the family
- Supervisory summaries from nursing agency if applicable (for reassessments only)
    - Nursing notes, if applicable (most current 2 weeks available, including if previously insurance funded)

Conducting the MNNS Checklist Review

At the time of the face-to-face interview, the Nurse Reviewer will gather all of the necessary information that is available to complete the MNNS Checklist. Upon request, the family will be provided a copy of a blank MNNS checklist. The MNNS Checklist is comprised of distinct clinical review domains. The items assess a participant's needs across both technology and direct nursing care needs with the intent to capture the degree of complexity and intensity of these needs through assignment of points. In order to maintain the integrity of the MNNS Checklist, the point values assigned to individual domains are not known to the nurse reviewer, the QIO physician, or the Department's professional staff involved in the review process. The MNNS Checklist consists of the following clinical domains: Skin, Physical Management, Metabolic, Urinary/Kidney, Gastrointestinal/Feeding, Neurological, Vascular and Respiratory. Within each of these domains are a set of "care elements" that correspond to a technology or nursing care need.

In addition to the care elements covered on the MNNS Checklist, the Nurse Reviewer will ask three questions to gain a better understanding of the individual's current medical status: 1) Please explain any Emergency Room visits in the last 12 months, including dates; 2) Please explain any hospitalizations in the last 12 months, including dates; and 3) Please explain any other medical issues the caregiver feels impacts the child's medical needs that have not already been discussed.

If before, after, or during the MNNS Checklist Review, the Nurse Reviewer determines there are additional questions that go beyond the scope of the medical documentation provided and the clinical domains assessed on the MNNS Checklist, the nurse should request additional information. The face-to-face interview with the family includes review of the preliminary MNNS review to ensure that all information from the medical documentation review is complete and accurate and to allow the recipient's family to provide additional information to show a medical need for nursing.

Physician Review for Medical Necessity of Nursing Resource Allotment:

The reviewing nurse enters the responses to the MNNS Checklist into the Atrezzo system. The Atrezzo system applies the applicable point values to the MNNS Checklist responses and computes the total point value of the

completed MNNS Checklist. This point value corresponds to a baseline monthly amount of service allocation funds, which can be converted to nursing hours by applying the Department's authorized nursing rates. The resource allocation resulting from the MNNS Checklist forms the baseline for the QIO physician's further review of the individual child's medical need for in-home shift nursing services. Neither the QIO physician nor the Department are strictly constrained by the resulting MNNS Checklist score, or the corresponding resource allocation, for any opinion or determination regarding the medical necessity or appropriateness of in-home shift nursing for a particular child. The physician consults the MNNS Checklist, as well as all other relevant medical documentation, to reach an individualized determination of need for services for each child. That individualized determination may deviate upwards or downwards from the allocation suggested by the MNNS score, depending on whether information has been provided to the physician indicating that child needs additional or fewer services. If the reviewing physician agrees with the level of allocation suggested by the MNNS, the physician indicates so in the recipient's case file. If the physician disagrees with the level of allocation suggested by the MNNS, the physician indicates the reason for that conclusion as well as a recommendation for the appropriate level of allocation based on the child's medical need for in-home shift nursing.

A child's medical diagnosis alone is not sufficient rationale to justify a resource allocation. The justification must be clinically indicated based on the child's current medical status and need for nursing care. That is, a child's allocation is determined based on the services the child needs for shift nursing, not the child's diagnosis.

Prior Approval of Medically Necessary Nursing Services:

After the physician's review, the QIO will upload the MNNS checklist that has been completed by the nurse reviewer and the physician, the MNNS checklist report and the physician reviewer report which includes the physician's recommendation to its administration through its virtual private network. The QIO will notify HFS's Bureau of Professional and Ancillary Services (BPAS), and other entities as designated by HFS, when its review is completed. The notification will be via email, using a PHI secure participant coded file number, such as the Medicaid Recipient Number. The Nurse Reviewer and the physician will be available to answer questions and provide clarifications for HFS staff. The QIO will make Nurse Reviewer and physician contact information available to HFS.

The Department's professional staff reviews the opinion and recommendation of the consulting QIO physician and makes a determination on the prior approval. After a determination has been made, HFS will send a decision letter regarding prior authorization to the child's family. If the request is approved, the child's family and his or her provider will receive a Prior Approval Notification, listing the approved resource allocation amount for services.

If the request is denied or granted at a level less than requested, a form will be mailed to the child's family and provider that states the denial reason and provides information on when and how the child may appeal the denial. If a provider or child obtains additional information that could result in reversal of the denial, the provider or child may make a new prior approval request with the supporting medical information attached. That prior approval request will be addressed by a new review.

If a child's nursing allocation is reduced from a prior-received amount, HFS implements the change through a transition process that gradually reduces nursing hours over a six month period. During the transition process, the current allotted budget for recipients remains the same for either the first two or the first three months, depending on the child.

If, at any time, including during the transition process, there is a change in a child's condition that the family or a provider believes warrants an increase in hours or restoration to a prior allotted level, the family may notify the Department, and the Department will review and make a decision at that time regarding the request for increase in resource allocation.

Additionally, HFS authorizes monthly budget amounts for nursing services in excess of prior authorized amounts in instances where there is a temporary need for additional in-home shift nursing services or where the child has an exceptional medical care need. All requests for temporary increases or exceptions to the resource allocation amount are made to the Department. The child's assigned DSCC care coordinator will be available to assist the family with gathering information and providing the information to the Department if applicable.

Children and their families themselves or through their DSCC care coordinator, nursing agency, physician or other medical provider can present a temporary increase request to HFS. Such a request is one in which a child requires additional nursing care for a limited span of time. Examples of when a temporary increase request may be granted include increased resource allocation needed after a hospital stay, during a medical crisis, when a caregiver has a medical or family crisis, or when there is a change in caregiver.

Children and their families themselves or through their DSCC care coordinator, nursing agency, physician or other medical provider may request the Department grant an exception to increase a resource allocation in order to address an exceptional medical care need that requires additional nursing services beyond the approved resource allocation. Exceptions are available when there is a threat to a child's health and safety due to a medical care need or issue that is not apparent from the MNNS Checklist Review or materials reviewed by the consulting physician from the QIO. The Department may increase the resource allocation if sufficient documentation is provided indicating the frequency, intensity, or duration of care is exceptional and necessary to meet the child's medical needs. An exception increasing the resource allocation may also be granted if the child has a medical care need that could not have been identified by the MNNS Checklist Review or the physician's review of the medical information submitted.

Appeal Rights:

Recipients have the right to appeal resource allocation determinations to the HFS Bureau of Administrative Hearings. Recipients may file an appeal within sixty days following the date of notice in order to receive a fair hearing. These appeal rights are explained in notices sent to clients and families following any decision to deny a prior approval request or to approve a request for a resource allotment smaller than requested.

By Department rule, if an appeal is initiated by the date a reduction or discontinuance of nursing will occur, or within ten calendar days of the date of the denial or reduction notice, services will be continued at the level in effect prior to the proposed action, pending the results of the fair hearing process.

Care Coordination:

DSCC will work with individuals and their families to provide a care coordination plan for a child's care. DSCC assigns the family a care coordinator who will work with the family to review the child's medical needs, provide information regarding services available under different state programs, and assist in linking up with other support services. This process entails assisting families to identify how assessed needs may be supported through resources other than nursing. The plans are designed to help set and track goals, to make sure care is coordinated between various providers, and to provide clear communication between everyone who helps care for eligible children.

Appendix A: MNNS Checklist

Child's First Name:	
Child's Last Name:	
Nurse Reviewers Name:	
Date:	

Overall		**Neurological**	
1A. Intervention no more than 2x noc	❍	28A. Szs-no intervention (>1x/week)	❍
1B. Intervention > 2x at noc	❍	28B. Mild-mod szs (min. intervention): 1x/w - 1x/d	❍
2. Needs isolation	☐	28C. Mild-mod szs (min. intervention): 1-4x/d	❍
3. Complic. Med Schedule > q2hr	☐	28D. Mild-mod szs (min. intervention): >4x/d	❍
4A. Caregiver/provider in close promixity to child 24/7	❍	28E. Mod-sev szs (mod + intervention): >1x/week	❍
4B. Caregiver/provider awake 24/7	❍	28F. Mod-sev szs (mod + intervention): >6x/day	❍
4C. Mod ongoing assess	❍	**Vascular**	
4D. Continual assessments	❍	29A. Central lines	❍
5A. 2-10 hrs per week of LN	❍	29B. Central line w/TPN	❍
5B. Needs LN > 10 hrs per week	❍	30A. IM/SQ pain control	❍
5C. Needs LN > 10 hrs per day	❍	30B. IV pain control	❍
6A. VS/Neur/Resp asses < q4hr	❍	31A. Occ transfusion or IV Rx > q mo & < qd	❍
6B. VS/Neur/Resp asses q2-4hr	❍	31B. IV Rx less often than q 4 hr	❍
6C. VS/Neur/Resp asses q 0-2hr	❍	31C. IV Rx q 4 hr or more often	❍
Skin/Physical Management		**Respiratory**	
7. ROM	☐	32. O2 via cannula low flow rate	☐
8. OT (in the home)	☐	33. O2 unplanned change >1x/d	☐
9. PT (in the home)	☐	34. Tracheostomy	☐
10. Stoma care (enter # of stomas)		35. Cyanosis req pulse oxim	☐
11. Stage 2 skin breakdown (enter # of sites)		36. C02 monitor	☐
12. Stage 3-4 skin breakdown (enter # of sites)		37. Signif. apnea/bradycardia	☐
Metabolic		38A. Suctioning <q 4 hr	❍
13. Insulin-dependent	☐	38B. Suctioning 1-4 hrs	❍
14A. Gluc monitoring < qid	❍	38C. Suctioning > q 1 hr	❍
14B. Gluc monitoring > qid	❍	39A. CPT or Neb Rx < q 4 hr	❍
15. Sign. Metabolic disorder	☐	39B. CPT or Neb Rx q 2-4 hrs	❍
Urinary/Kidney		39C. CPT or Neb Rx > q 2 hrs	❍
16. Urinary cath. qday or <(not self)	☐	40. Resuscitation within 1 yr	☐
17. Indwelling cath or cath > qday	☐	41A. Trachael diversion, < 5 y/o	❍
18. Peritoneal dialysis	☐	41B. Tracheal diversion, ≥ 5 y/o	❍
19. Hemodialysis (in the home)	☐	41C. Tracheal diversion, > 10 y/o	❍
GI/Feeding		42A. Needs support to maintain airway	❍
20. Difficult/prolonged oral feeding	☐	42B. Cannot maintain airway without contin. Supp.	❍
21. Complex dietary needs	☐	43. Ventilator	☐
22A. Uncomplicated G tube feeding	❍	44. No respiratory effort	☐
22B. G tube feeding with min. problem	❍	45. Number of hours per day on Vent	
23. NG tube feeding	☐	46. Standby only	☐
24. J tube feeding	☐	47. Vent unplanned chngs >qd	☐
25. Mod-sev problem w/tube feeding	☐	48. Hypoventilation, w/criteria	☐
26A. Reflux without airway involv	❍	**Circular button indicates an item is mutually exclusive**	
26B. Reflux with airway involve	❍	**Square shaped box is used for items that stand alone**	
27. The child is 6 months of age or younger	☐	**Fill-in Field is an area for text/numeric entry.**	

Appendix A: Addendum

The following information must be included in the Illinois MNNS checklist used during the face to face interview with the child/child's family/child's caregiver. Inclusion of this information is necessary to ensure that all current medical information is included for review of the child's medical necessity to receive in-home nursing services:

- How many emergency room visits has the child had in the past 12 months? Explain reason(s) for the emergency visits.
- How many hospitalizations has the child had in the past 12 months? Explain reason(s) for the hospitalizations.
- Are there any other care issues that the caregiver feels impact the child's medical care needs that have not already been discussed?

Appendix B: MNNS Checklist Instructions

	GENERAL INSTRUCTIONS 1.Include only those items that are expected to last for a minimum of six months. Unusual or acute needs should not be included unless they occur on a regular basis. 2. Include only the care item that is applicable at the greatest or most intense need on a routine basis. For example, if the child needs vital signs taken every hour, include only question 6C and leave questions 6A and 6B blank. 3. Whenever the word "physician" is used, a nurse practitioner, physician assistant or other physician extender may be used. Person must be capable of prescribing medical interventions and pharmacy. 4. Include only those items with a current identifiable need, as evidenced by documentation of at least weekly use or intervention, except for ventilators. 5. Include durable medical equipment only with physician orders and usage that meets the Illinois Medicaid authorization guidelines. 6. Code only those interventions that happen routinely in the family home. School-based services are not scorable. All in-home therapy plans must be written, be available for review in the home and be current (i.e. reviewed and prescribed within the last year). All providers must document interventions that are occurring regularly. This includes caregivers; we encourage them to document or it isn't considered done. 7. When physician's orders are required, orders must be current within the past year, available in the home at time of the evaluation, and relevant to ongoing interventions. 8. All children require twenty-four hour supervision; this is not coded on this Checklist. 9. It is recommended that care elements 4 and 5 be coded once the face-to-face assessment has been completed. Review nursing notes and MAR in home. 10. Any service funded by the schools, e.g., Early Intervention (EI) or another insurance would not be coded here. This information may be found on the DSCC Cost Worksheet or on an Individualized Education Plan (IEP).

#	Care Element	Criteria	Clarification/Qualifiers/Exceptions
		I. Overall	
1A	Intervention no more than 2x at night	Requires changes or monitoring of equipment, changes of position, suctioning, feeding, or other direct intervention at least once but no more than twice during the normal 8-hour night.	Night is defined as a normal 8-hour period of sleep, i.e., the child's normal sleeping time at night. May include monitoring of I/O based on clinical need due to TPN, IV therapy, or some clinical diagnosis that requires monitoring. May include interventions associated with a pulse oximeter reading. Having a pulse oximeter used at night would not apply without a corresponding intervention. Administration of prn orders would apply here if there is record of their documentation in the nurses' notes.

1B	Intervention > 2x at night	Same as 1A, more than twice per night on the average.	Regardless of who performs these tasks, check yes. These tasks are not required to be performed by a nurse. If parent does it, it is not required to be documented.
2	Needs isolation	Needs procedures by the parent or in-home caregiver and supplies for infection control for a known pathogen with which the child is expected to be infected or carry for greater than 3 months (e.g., Hepatitis B, HIV, or resistant staph).	Requires physician order. This does not apply to the application of the use of Universal Precautions only.
3	Complicated medication schedule (> q 2 hr)	Receives medication under a schedule prescribed by a physician more often than every 2 hours throughout the normal awake 16-hour day.	PRN medications do not count here. May include continuous SQ meds or Intravenous Immunoglobulin (IVIG) and intrathecal meds via spinal infusion such as intrathecal baclofen that require close monitoring. May include nebulized treatments such as albuterol. Regardless of who gives the medications, parent or nurse, it still counts. Parents are not required to document meds were given. If continuous SQ meds also code yes to 31C.
4A	Caregiver or a provider in close proximity to child 24/7	There must be a caregiver or provider in the home, in close proximity to the child for supervision purposes during the entire 24- hour day, seven days per week for 6 months out of the last 12 months.	The caregiver or provider does not have to be awake the entire 24 hour period but must be in the home, in a room or location around the home close enough to the child to respond to an emergency should an alarm go off. The child would need to be on a monitor such as an oximeter, a ventilator alarm for respiratory issues, or use a baby monitor. Questions to consider with this section - Are the parents trained caregivers? Does another trained caregiver in the home attend to the child when the primary trained caregiver has to leave the room for any reason? Do the parents sleep in the same room as the child? How long do the parents sleep? Are they able to leave the child to cook? When scoring, only trained caregivers count. Untrained caregivers do not count. If this is checked, when a pulse oximeter is used for monitoring, item 35 should only be checked if the child meets the criteria of item 35.
4B	Caregiver or a provider awake 24/7	There must be a caregiver or provider in the home and awake during the entire 24-hour day able to perform direct visual or manual assessment while awake less frequently than every 15 minutes per 24 hour period.	Similar to Item 4A however for this to apply there must be a caregiver or a provider awake in the home for the entire 24 hour period per day due to the child's medical fragility.

4C	Moderate ongoing assessments	Requires direct visual or manual assessment at least every 15 minutes, throughout the entire 24-hour day with continuously awake supervision.	For this to apply, the caregiver must be awake and cannot leave the child for more than 15 minutes at a time. For example, a parent may be able to go to the kitchen to cook but would have to leave on an oximeter, a ventilator alarm for respiratory issues, or use a baby monitor. Case examples include: (1) a baby with a non-sutured trach; (2) a child with behavior issues; (3) clients with a trach that may need more than one person to replace it, (4) high volume vents with special PEEP valve ambu bags where the client is technically stable with some vent changes but may require eyes on to keep the vent attached at all times, or there may be a behavior component that makes it unsafe (5) a client who recently had Respiratory Distress Syndrome with high volume and pressure needs or changes.
4D	Continual assessments	Requires direct visual or manual assessment because of on-going quickly changing medical status. The caregiver can only leave the room for 2-3 minute intervals throughout the entire 24-hour day. Child's health is not stable and their medical status is unpredictable.	Child must be in line of vision at all times except for rare intervals. This is seldom coded outside of discharge from hospital, moving from ICU to home. If 4D is checked, the child may not be ready to come home.
5A	2-10 hrs per week of LN	Needs nursing interventions that require the skills and training of a licensed nurse for at least 2 hours per week, but not more than 10 hours per week and has a physician order for nursing interventions.	5A is often coded when services are delegated from licensed nurses to non-licensed staff, or when intermittent nursing for periodic interventions is used. In these situations, whether the child needs intervention by a licensed professional should be informed by, but not solely be based upon, a physician order or request for LN. Assess what the child actually needs based upon the documentation provided and the face-to-face assessment. **General section note** The responses in this section are to be based upon the number of nursing hours that the child is currently receiving or the number that has been recommended by the child's physician. This section is not intended to dictate an ultimate conclusion of medical necessity for any particular amount of in-home shift nursing services.

5B	Needs LN > 10 hrs per week	Same as 5A, but, scheduled nursing hours are greater than 10 hours per week but less than or equal to 10 hours per day.	See general section note below. In general, if 5A is inapplicable and other information on a need for a particular number of licensed nursing hours is not otherwise available or provided, check 5B if the child **is not** on a ventilator, CPAP or BiPAP. **General section note** The responses in this section are to be based upon the number of nursing hours that the child is currently receiving or the number that has been recommended by the child's physician. This section is not intended to dictate an ultimate conclusion of medical necessity for any particular amount of in-home shift nursing services.
5C	Needs LN > 10 hrs per day	Same as 5A, but hours are greater than 10 hours per day. To be coded only if on ventilator or child has medical interventions that cannot be done by staff without at least a LN.	See general section note below. In general, if 5A is inapplicable and other information on a need for a particular number of licensed nursing hours is not otherwise available or provided, check 5C if the child **is** on a ventilator, CPAP or BiPAP. If the child is not on a ventilator, CPAP, or BiPap, 5C may be checked if there is documentation indicating the child has medical interventions that cannot be done by staff without at least a licensed nurse over 10 hours per day. **General section note** The responses in this section are to be based upon the number of nursing hours that the child is currently receiving or the number that has been recommended by the child's physician. This section is not intended to dictate an ultimate conclusion of medical necessity for any particular amount of in-home shift nursing services.
6A	VS/Neur/Resp asses < q4hr, ≥ qd	Assessment is required at least once daily, less often than every 4 hours.	Assessment is defined as the taking of pulse, respiration, blood pressure, and the assessment of orientation, level of consciousness, size of pupils and auscultation of lungs. There must be a written nurse or physician order and a written record of the assessments. Do not code the sole use of a monitor here such as pulse oximeter. This is a hands-on assessment of vital signs performed by the caregiver or provider, not through the use of a monitor.
6B	VS/Neur/Resp asses q2-4hr	Same as 6A, but 2-4 hours.	
6C	VS/Neur/Resp asses q 0-2hr	Same as 6A, but more often than every 2 hours.	
II. Skin / Physical Management			
7	Range of Motion (ROM)	Requires passive or active range of motion at least daily in the family home, and the caregiver(s) have been trained or supervised by an OT, PT, nurse or physician.	This typically refers to ROM done by caregivers, without current MD orders, as part of the daily care. If ROM is listed in the OT and/or PT service plan, and is performed by the OT and/or PT, do not count ROM here. If the parents say they are doing the ROM and they have been trained by a PT, OT, nurse or physician, we check," yes." Parents are not required to document the teaching or how they have been trained to do ROM. School-based services do not count.

8	OT (in the home)	Has a current physician order for Occupational Therapy services. The parent or in-home caregiver is implementing the written motor program daily and documenting the prescribed activities. This program has been developed under the supervision/training of the OT, as documented by the OT.	The application of splints does not count. School–based services should not be scored. Excludes ROM, if ROM Is listed in the OT Service Plan. Do not include services reimbursed by other sources. Do include services provided by the trained caregiver (paid and unpaid).
9	PT (in the home)	Has a physician order for Physical Therapy services. The parent or in-home caregiver is implementing the written motor program daily and documenting the prescribed activities. The program has been developed under the supervision/training of the PT, as documented by the PT.	The application of splints does not count. School-based services should not be scored. Excludes ROM, if ROM Is listed in the PT Service Plan. Do not include services reimbursed by other sources. Do include service provided by the trained caregiver (paid and unpaid).
10	Number of stomas requiring dressing or cleaning at least weekly	The child has one or more stoma(s) that require care, dressing, or cleaning at least weekly.	Record number of stomas which meet criteria. Include tracheostomy, gastrostomy, enterostomy, colostomy, ileostomy, urostomy.

11	Stage 2 skin breakdown	Currently, or in the past 12 months, has had a Stage 2 skin breakdown diagnosed by a nurse, OT, PT, or physician, or has a physician order that the child is at high risk of such skin breakdown.	Fill in the Number of Stage 2 skin breakdown areas. If none, leave blank. Skin breakdown is staged to classify the degree of tissue damage observed. STAGE 1: An observable pressure related alteration of intact skin whose indicators as compared to the adjacent or opposite area on the body may include changes in one or more of the following: • Skin temperature (warmth or coolness), • Tissue consistency (firm or boggy feel), and/or • Sensation (pain, itching) The ulcer appears as a defined area of persistent redness in lightly pigmented skin, whereas in darker skin tones, the ulcer may appear with persistent red, blue, or purple hues. STAGE 2: Partial thickness skin loss involving epidermis and/or dermis. The ulcer is superficial and presents clinically as an abrasion, blister, or shallow crater. STAGE 3: Full thickness skin loss involving damage or necrosis of subcutaneous tissue that may extend down to, but not through, underlying fascia. The ulcer presents clinically as a deep crater with or without undermining of adjacent tissue. STAGE 4: Full thickness skin loss with extensive destruction, tissue necrosis or damage to muscle, bone, or supporting structures (for example, tendon or joint capsule). Note: Undermining and sinus tracts may also be associated with Stage 4 pressure ulcers. Check, "yes," if the child has been admitted currently, or in the past 12 months has had a stage 2 skin breakdown diagnosed by a nurse, OT, PT or physician, or has a physician order that the child is at high risk of such skin breakdown within the last 12 months for worsening decubitus. If the child has an omphalocele that is closed, but not healed, it is checked here. History (not within the last 12 months) of omphalocele or a closed and completely healed omphalocele does not get checked. Skin breakdown around stomas and breakdown being actively treated with topical medication and dressing changes is checked as item 11 **only** if it is a Stage 2 breakdown as diagnosed by a nurse, OT, PT or physician.
12	Stage 3-4 skin breakdown	Currently, or in the past 12 months, has had a Stage 3 to 4 skin breakdown diagnosed by a nurse, OT, PT, or physician, or has a physician order that the child is at high risk of such skin breakdown.	Fill in the Number of Stage 3-4 skin breakdown areas. If none, leave blank. If a Stage 2 deteriorates to a higher stage, code only item 12. If a separate breakdown occurs that only reaches a Stage 2, also code item 11. Check," yes," if the child has been admitted currently, or in the past 12 months has had a Stage 3-4 skin breakdown diagnosed by a nurse, OT, PT or physician, or has a physician order that the child is at high risk of such skin breakdown within the last 12 months for worsening decubitus. If the child has an omphalocele that is closed, but not healed, it is checked here. If the child has an open omphalocele, it is checked here. If a Stage 2 deteriorates to a higher stage, code only number 12. If a separate breakdown occurs and only reaches a stage 2, also code item 11 for that breakdown. Skin breakdown around stomas with active treatment and diagnosed as Stage 3 or 4 is checked as item 12 **only** if it is a Stage 3 or 4 breakdown as diagnosed by a nurse, OT, PT or physician.

		III. Metabolic	
13	Insulin-dependent diabetic	Child has insulin-dependent diabetes.	
14A	Glucose monitoring < qid (at least q/2 days)	Child has a physician order for glucose monitoring at least once every other day but not more than 4 times per day.	Blood glucose monitoring with no order or indication cannot be checked. If blood glucose monitoring is not in the child's record, ask to see the nurses' notes if the order is in the home record. DSCC or BPAS may also have a subsequent order for this.
14B	Glucose monitoring > qid	Same as 14A, but frequency is more than 4 times per day.	
15	Significant metabolic disorder	Has a metabolic disorder that a) if left untreated could cause death or disability, b) requires daily laboratory monitoring or weighing and recording of caloric and/or fluid intake, AND c) is not diabetes.	This is usually a genetic/inborn error of metabolism or any acquired disease condition that may affect the hypothalamo-pituitary adrenal axis such as diabetes insipidus, hyperaldosteronism, and brain tumors affecting hormone feedback mechanisms. Other examples include: Congenital Adrenal Hyperplasia, MSUD (maple syrup urine disease), Fatty acid oxidation disorders such as Medium-chain acyl-coenzyme A dehydrogenase deficiency (MCAD), Very long-chain acyl-coenzyme A dehydrogenase deficiency (VLCAD), Long-chain 3-hydroxyacyl-coenzyme A dehydrogenase deficiency (LCFAD), Organic acid disorders, etc. Also code here if the child is having blood draws (not for diabetes) of at least bid through a venous access such as portacath, mediport.

IV. Urinary / Kidney			
16	Urinary catheterization ≤ qd by CG	Requires catheterization for urine at least once per day by a caregiver.	Do not include if child has indwelling catheter or if the child is able to do this task by him/herself.
17	Indwelling catheter or catheterization > qd	Has an indwelling urinary catheter or requires catheterization more than once per day by a caregiver.	Do not include if the child is able to do this task by him/herself.
18	Peritoneal dialysis	Requires peritoneal dialysis at least once per month.	Pertains to end stage renal disease
19	Hemodialysis (in the home)	Requires hemo-dialysis in the home.	
V. GI/Feeding			
20	Difficult/ prolonged oral feeding	A) At least daily, receives oral feeding that takes longer than 30 minutes and requires specific medical techniques designed to reduce the risk of aspiration, OR B) Has rehabilitative feeding program or oral motor stimulus program implemented at least daily by the parent or in-home caregiver under the supervision of a feeding specialist (generally the OT or Speech Therapist).	Documentation must support specialized techniques as directed by professionals. Documentation sources may include the plan of care, nursing notes, and/or other medical records or documentation such as an Individualized Education Plan (IEP) or Individualized Family Support Plan (IFSP). A child with a G-Tube may be coded here if nutrition is obtained through the G-tube and through po feedings. Is the child on a feeding program and if yes, is it being monitored? If the answer is yes, check, "yes." Monitoring includes OT or ST working with the child.
21	Complex dietary needs	Has complex dietary needs where a licensed professional has ordered that the total dietary intake must be weighed or otherwise measured, recorded in detail and monitored by a professional.	The Ketogenic diet is an example of this. Ongoing enteral/parenteral feedings are coded with tube feedings below. Specialized diets might be noted in children with the following conditions: cystic fibrosis, In-born Errors of Metabolism (IEM) such as PKU (Phenylketonuria, tyrosinemia, galactosemia, homocystinuria, MSUD (maple syrup urine disease, Organic acid disorders, Fatty acid oxidation disorders (e.g., MCAD, VLCAD, and LCFAD), Urea cycle disorders, etc. Complex dietary needs are driven by the dietary intake and **not** monitoring of growth. Need to document dietary intake information. For example, ketogenic diet or PKU or renal diet or enteral diets which have multiple additives which are weighed and measured, other than adding water.

22A	Uncomplicated G tube feeding	Receives feeding at least once per week via gastrostomy tube with only routine instructions.	No feeding pump used. If feeding pump used, score 22B.
22B	G tube feeding with min. problem	Same as above, but instructions must be specialized for this child or requires a pump or there is a history of minimal problems within the past year.	Feeding pump used. Flushing and Venting a G-tube and the use of a Ferrell Bag are considered part of G-tube care and would not be coded here as specialized instructions.
23	NG tube feeding	Receives feeding at least once per week via nasogastric tube.	
24	J tube feeding	Receives feeding at least once per week via jejunostomy tube.	Can check both 22A and 24 if the child is getting a bolus feeding, is going through the G-tube and the pump feed is going through the J-tube.
25	Mod-sev problem w/ J,G,NG tube feeding	A licensed professional (physician or dietician) must evaluate feedings at least weekly because of a moderate to severe problem with a J, G or NG tube.	Include children who need complex aspiration procedures and clearing of the airway (not routine positioning). If child is being fed through multiple ports this needs to be documented. Cannot check 22A and 25 together.
26A	Reflux without airway involvement	Has gastro-esophageal reflux diagnosed by a physician. In the past 6 months, has not required suctioning to prevent aspiration, and has not had an episode of aspiration pneumonia within the past 6 months.	Do not include if the child is only on medication and no other intervention is needed. Include if the Plan of Care specifies an action other than "aspiration precautions", the supervisory report indicates an intervention is taken or the nurses' notes document head of bed is elevated. If, in the past 6 months, child has ever needed suctioning or has had aspiration pneumonia, check only item 26B. Note: pneumonia diagnoses must be caused by aspiration; pneumonia without aspiration is not counted. Must have a documented diagnosis of reflux in the medical record. If the child has a history of reflux, has had a Nissen procedure and no further reflux, do not score 26A.
26B	Reflux with airway involvement	Same as 26A, but has required suctioning in the past 6 months, or has had an episode of aspiration pneumonia within the past 6 months.	Has had a history of reflux with airway involvement is not sufficient. The distinction here is an intervention that involves active clearing of the airway (suctioning), not just a position change. Oxygen or chest tube as an intervention does not qualify, unless suctioning is involved.
27	Child ≤ 6 months	Child is age 6 months or younger	
VI. Neurological			

28A	Has seizures-no intervention (≥1x/week)	Has a seizure disorder that must be diagnosed by a physician. The seizures occur at least once per week and require no intervention, other than monitoring or other routine first aid measures.	The seizure history must be within the past year or new onset. Seizures did not require changes in oxygen or child did not have an episode of status epilepticus treated by a physician in the past year. Status epilepticus is defined as a seizure lasting 30 minutes or longer OR two or more seizures without full recovery (regaining normal level of consciousness) before the next one starts again.
28B	Mild-Mod seizures (min intervention) 1x/wk-1x/d	Has mild-moderate seizures and they occur at least once per week and as often as once per day on average.	Seizures meet mild-moderate criteria if: a) require changes in oxygen or b) child has had an episode of status treated by a physician in the past year.
28C	Mild-Mod szs (min intervention) 1x/d - 4x/d	Has mild-moderate seizures and frequency is more often than once per day, but less than or equal to 4 times per day on the average.	
28D	Mild-Mod szs (min intervention) > 4x/d	Has mild-moderate seizures and frequency is more often than 4 times per day on the average.	
28E	Mod-Severe szs (mod intervention) >1x/wk	Has moderate-severe seizures that occur at least once per week, on the average, but less than or equal to 6 times per day. If the severity is moderate to severe and the frequency is less than once per week but they do occur, on average, at least once per month, include on question **28C**	Seizures meet moderate-severe criteria if, within the past month or new onset, the child (any of the following): a) required intervention to maintain an adequate airway; or b) required application of antiepileptic drugs, such as rectal valium/Diastat (other than regularly-scheduled antiepileptic) or c) had an episode of status treated by a physician.
28F	Mod-severe szs (mod intervention) ≥ 6 times per day	Has moderate-severe seizures and the frequency is greater than 6 times per day.	

28G	No seizures		
28H	Has seizures, well controlled by medication		
		VII. Vascular	
29A	Central lines	Has vascular access to a major vein near the heart or to an artery on an ongoing basis.	Vascular access may occur in the medical record or nurses' notes as a PICC line, a venous port or portacath, a Broviac catheter.
29B	Central line w/TPN	Has a central line and receives total parental nutrition through that access.	
30A	IM/SQ pain control	Requires IM or SQ medications for pain control at least 4 times per week, on average.	Administration of prn medications would apply if there is record of their administration in the MAR or nurses' notes.
30B	IV pain control	Requires IV medications for pain control at least 4 times per week on average. If also requires IM or SQ, only check this item.	

31A	Occ transfusion or IV Rx ≥ q mo & < qd	Requires a transfusion or IV medication in the home at least once per month, but less often than once per day.	Transfusions refer to blood and blood products such as intravenous immunoglubulin (IVIG), plasma. May code continuous subcutaneous infusions under 31C. IV push medications would be counted under item 3. Heparin and saline flushes are normal part of IV infusions and are not coded here.
31B	IV Rx less often than q 4 hr & ≥ qd	Requires a transfusion or IV medication in the home and frequency is at least once per day, but less often than every 4 hours.	
31C	IV Rx q 4 hr or more often	Requires a transfusion or IV medication in the home and frequency is at least as often as every 4 hours.	
			VIII. Respiratory
32	O2 via cannula lowflow rate	Requires at least daily use of O2 via cannula, mask, or tent at a rate of 5 liters or less.	If requires any pressure or a flow rate more than 5 liters at least daily, code as a ventilator on standby (item 46) instead of this item. Can be coded with 33, if changes as described are documented and occurring at least daily. Check item 32 "yes", if oxygen low flow by mask, tent or trach collar via trach. If it requires pressure or flow rate more than 5 liters at least daily, check as item 46 (ventilator on standby).
33	O2 unplanned change ≥qd	Requires changes in the oxygen, which are not predictable or planned, at least once per day on average, in response to levels of oxygenation.	If oxygen is coded in question 32, AND there is documented evidence of titration at least once per day, check both items 32 and 33. If the parents say they do it, documentation is not required.
34	Tracheostomy	Has a tracheostomy and requires care.	Do not include if child is able to do his/her own tracheostomy care. If child also has a trach stoma, code on both this item and on item 10. If child can do his/her own trach care, doesn't count. If has a trach stoma, items 34 and 10 are"yes." If client has a tracheostomy and does his/her own tracheostomy care, item 34 is checked "No." Tracheostomy is counted as a stoma in item 10. If child has a tracheostomy and caregiver provides care, item 34 is "YES" and the tracheostomy is counted as a stoma in item 10.

35	Cyanosis req pulse oximeter	Has cyanosis (or desaturation), as defined as oxygen saturation of less than 88% (or per physician's order) three or more times in the last 6 months. Cannot code apnea-and-bradycardia monitor (item 37) if scoring this item. Do not code here if also scoring tracheal diversion (item 41) or vent unplanned changes (item 47), unless there is medical evidence of another disease causing the cyanosis qualifying for a pulse oximeter.	Other diseases causing cyanosis qualifying for a pulse oximeter may include cardiac conditions such as HLHS (Hypoplastic Left Heart Syndrome) Tetralogy of Fallot, TGA (Transposition of the Great Arteries). Documentation must be recorded in nursing notes. Has cyanosis as defined by O2 sat of less than 88% three or more times in the past 6 months or as defined by O2 sat dropping below the physician's defined parameters for this child three or more times in the past 6 months. (Example - MD orders state to keep O2 sats above 90 %.)
36	CO2 monitor	Has CO2 retention significant enough to have an end-tidal CO2 monitor and has a physician's order for it.	If the child is on a ventilator check,"yes." If the child has a CO2 monitor, monitoring is occurring and Medicaid or commercial insurance is paying for it, check, "yes."
37	Significant apnea and/or bradycardia	Has sleep apnea as diagnosed by a physician with a sleep study, and/or has bradycardia as diagnosed by a physician.	An order for a sleep study without a sleep apnea diagnosis is not coded here. All diagnoses must be up to date, at least in the past year. Must be written documentation of at least one episode per month with intervention by a care giver. Interventions include physical changes to the child, e.g., physical movement such as repositioning, stimulating, changing oxygen or bagging. May or may not have apnea monitor prescribed by physician. If child has apnea monitor prescribed by physician, but does not have an apnea diagnosis, do not code. Check, "no", if for apnea and on a vent. Check, "yes", if on a vent and used for monitoring for bradycardia.
38A	Suctioning <q 4 hr	Requires suctioning at least once per day but no more often than every 4 hours.	Suctioning must include deep pharyngeal or tracheal suctioning (must be other than oral suctioning) with a physician's order. Bulb suctioning does not count here. PRN orders would apply, if there is record of their administration in the nurses' notes. To check this, there needs to be documentation or confirmation from caregivers that deep pharyngeal and/or nasal suctioning of child without a trach or vent is being done. Document how often this suctioning is being done.
38B	Suctioning 1-4 hrs	Requires suctioning at least every 4 hours but less than every hour.	
38C	Suctioning > q 1 hr	Requires suctioning at least every hour. -	
39A	CPT or Neb Rx < q 4 hr	Requires CPT or nebulizer treatment at least once per day or requires mist at least daily.	Requires a physician's order for 1) chest percussion and/or drainage, and/or 2) nebulized treatment, OR 3) requires mist at least daily (not included with a ventilator used daily). Mist refers to humidified air without medication. PRN medications count, if documented

39B	CPT or Neb Rx q 2-4 hrs	Requires CPT or nebulizer treatment and frequency is more than every 4 hours and less than every 2 hours.	in the MAR or in the nurses' notes, if given by nurses or reported by parents. Document answers to the following questions on the face-to-face interview: how often is it being given vs how often is it ordered and is it documented in the home nursing notes? If a nurse is not giving the treatments, does a respiratory therapist come to the home? Ask the same questions of the parents if they are giving the treatments, but documentation is not required. Check if use of mist/humidified air not on a vent. Do not check if humidity given via vent; it should be checked in the vent items.
39C	CPT or Neb Rx > q 2 hrs	Requires CPT or nebulizer treatment and frequency is more often than every 2 hours.	
40	Resuscitation within 1 year	Has required resuscitation (**CPR must include chest compressions or drug resuscitation**) for inadequate ventilation or cardiac output within the past year and the need for resuscitation is likely to recur.	Do not include immediate post birth time. Do not include single traumatic event such as a motor vehicle accident. The resuscitation must be related to the child's condition. Include respiratory or cardiac arrest. If it is documented the child had a code called and the code is not related to immediate post birth or trauma, check, "yes." The code and resuscitation needs to be related to the child's condition.
41A	Tracheal diversion: ≤ 5 y/o	Has a tracheal diversion and is 5 years of age or less, **or** has a medical condition such as seizures, or a developmental or physical condition that prevents them from physically removing an obstruction to the stoma.	If child has a tracheostomy and is 5 years of age or less, check 41A. **Regardless of age, if child has tracheal diversion or tracheostomy and is prevented by medical condition or developmental or physical condition from physically removing an obstruction to the stoma, check 41A.** If child has a documented diagnosis tracheal diversion in the medical record, the physical ability to remove obstruction and is 6 years old or is less than 9, then check item 41B. If child has a documented diagnosis tracheal diversion in the medical record, the physical ability to remove obstruction and is 10 years old or older, then check item 41C. If tracheal diversion is included on questions 41A, 41B, or 41C, then do not check items 42A or 42B unless child has tracheomalacia (as diagnosed by a bronchoscopy performed in the last year) or meets criteria for another medical condition related to the functionality of the trachea. Do not include item 35 (cyanosis) if including any of these items unless there is also medical evidence of another disease causing cyanosis qualifying for a pulse oximeter.
41B	Tracheal diversion: > 5 y/o (6-9 y/o)	Child is 6 years of age or less than 9, has tracheal diversion **and** has the physical ability to remove an obstruction.	
41C	Tracheal diversion: > 10 y/o	Child is 10 years of age or older, has tracheal diversion **and** has the physical ability to remove an obstruction.	

42A	Needs support to maintain airway	Requires an appliance or equipment to maintain a stable airway. Some air is getting in for life support and the appliance can be changed at home by one person.	If trach is used only for access for suctioning or medication administration, do not include here. Instead, include only on question 34 (tracheostomy). Note: The person must have a trach to code this item. Code either 42A or 42B, but not both items. If item 41A, B, or C is checked, do not check unless child has tracheomalacia (as diagnosed by a bronchoscopy performed in the last year) or meets criteria for another medical condition related to the functionality of the trachea. The assumption is that the trach is the appliance. Children who are on a vent check 42A. If the trach is for hygiene purposes only or if decannulated and no immediate crisis follows - do not check 42A.
42B	Cannot maintain airway without continuous support	Requires that the appliance must be replaced immediately, with no hesitation. Upon removal of the appliance, the child instantly turns blue because the trachea collapses immediately, allowing no air into the airway.	In most instances, the physician would change the appliance due to the severity of the tracheomalacia. Note: The person must have a trach to code this item. Code either 42A or 42B but not both items. If item 41A, B, or C is checked, do not check unless child has tracheomalacia (as diagnosed by a bronchoscopy performed in the last year) or meets criteria for another medical condition related to the functionality of the trachea. Check 42B if: the child is on the vent and cannot breath on their own at all; has a stent in the lower airway; or if the trach is decannulated for any reason and an immediate crisis follows.
43	Ventilator	Has a physician's order for a ventilator, CPAP, or BIPAP to be present in the residence.	The ventilator, CPAP or BIPAP must be in use, not just in the home to code this item.
44	No resp effort/on vent 24 hours per day	Has no effective respiratory effort. Without active ventilation, would not survive 1 hour.	This item may be coded in addition to item 43. If 44 is coded, do not code 45. Also code item 42A or 42B, if scoring item 44 or 45. If the child is on the vent 24-hours per day, check, "yes." Cannot check 44 and 45. This item may be coded in addition to item 43. Also code item 42A or 42B, if scoring item 44 or 45.
45	Number of hours per day on a ventilator /(less than 24 hours per day	Document the number of hours per day that the child is on a ventilator.	If hours per day are indicated in half hour increments, round up to the next whole number.
46	Standby only	Ventilator is used only for illnesses or other deteriorations, or rate of 02 is more than 5 liters per minute.	Must have a physician order for standby and a ventilator is present in the home, even if there is if no documented use in the scoring period.

47	Vent unplanned changes >qd	Requires changes in ventilation that are not planned at least daily because of levels of oxygenation.	Changes in ventilation apply to changes in settings of a ventilator, CPAP or BIPAP. This does not apply to changes associated with use of pulse oximeter. If changes to the vent setting other than O2 setting, check, "yes."
48	Hypoventilation with criteria	Has both 1) written documentation of Central Hypoventilation syndrome as currently diagnosed by a pulmonologist or neurologist; and 2) written notes documenting assisted ventilation and interventions by another person in the past month.	Do not include question 35 (cyanosis) if including hypoventilation, unless there is also medical evidence of another disease causing cyanosis qualifying for a pulse oximeter. This must be documented in the face-to-face interview notes.

Appendix B: Addendum

FRAMEWORK FOR DOCUMENTATION OF THE QIO PHYSICIAN REVIEW FOR INITIAL, RENEWAL REVIEWS, SIGNIFICANT CHANGE AND PEER TO PEER REVIEWS FOR MFTD WAIVER, NPCS NON-WAIVER, AND OVER 21 IN – HOME NURSING SERVICES

KEY POINTS:
A child's medical diagnosis alone is not sufficient rationale to justify any changes to the resource allocation. The justification must be clinically indicated based on the child's current medical status. Anticipation of emergency room visits and hospitalizations are not to be used to enhance scoring or increase resource allocation.

PHYSICIAN AGREES WITH THE SCORING ON THE FACE TO FACE INTERVIEW CHECKLIST:
During the QIO physician's review of initial, renewal, or significant change reviews, if the physician agrees with the scoring on the checklist that resulted from the face to face interview, the physician is required to make a notation of agreement with the score.

PHYSICIAN DOES NOT AGREE WITH THE SCORING ON THE FACE TO FACE INTERVIEW CHECKLIST:
If, during review of initial, renewal, significant change or peer to peer reviews, the QIO physician does not agree with the scoring on the checklist that resulted from the face to face interview, the physician is required to document fully the justification for difference in the checklist and physician review results.

- If the physician disagrees with the score itself, the physician will document a rationale for his or her recommended score.

- If the physician disagrees with the resource allocation which resulted from the score, there must be clear documentation identifying the clinical element or medical need is that was not captured in the MNNS checklist, e.g., child has a significantly higher number of seizures than the maximum number of seizures captured under the neurological domain. The physician must also provide justification for his or her recommended hours/resources. The documentation must contain the severity, intensity, duration, or frequency of the medical event(s) that precipitated a recommendation for an increase in hours. The documentation must include the source of the additional medical information or clinical elements e.g., medical record, the child's primary care physician, parent, etc.

Appendix C: Glossary of Home Care Medical Definitions and Administrative Terms

Home Care Medical Definitions

TERMINOLOGY	Abbrev.	DEFINITION OF TERM
Apnea		Breathing stops and starts.
Artificial nose *a.k.a. Breath aid/humivent*	HME	Heat and moisture exchanger. A device that warms and moistens the air the child breathes in.
Aspiration		The entry of secretions or foreign material into the trachea or lungs. The material may be inhaled or blown into the lungs.
Aspiration Pneumonia		Inflammation of the lungs and airways to the lungs (bronchial tubes) resulting from breathing in foreign material such as food, liquids, vomit, or fluids from the mouth. This may lead to: a collection of pus in the lungs lung abscess, swelling and inflammation in the lung or a lung infection (pneumonia).
Bi-level Positive Airway Pressure	BiPAP	The BiPAP machine helps push air into the lungs and helps hold the lungs open to allow more oxygen to enter the lungs. Each time the patient breathes, the BiPAP machine assists the patient by applying air pressure to the lungs while the patient is breathing out (exhaling or expiration) in order to hold open the air sacs in the lungs.
Bolus feedings		Feeding given over 30 minutes to 1 hour several times during the day. Runs in by gravity, pushed in with a syringe, or a feeding pump can be used.
Bowel Program		Following an injury or medical condition, bowel habits often change. A daily routine helps to manage the bowels and prevent constipation or impactions.
Cannula		The tube part of the tracheostomy tube.
Cartilage		The tough tissue rings the wind pipe is made of.

TERMINOLOGY	Abbrev.	DEFINITION OF TERM
Colostomy		Connecting a part of the colon onto the anterior abdominal wall, leaving the patient with an opening on the abdomen called a stoma. In a **colostomy,** the stoma is formed from the end of the large intestine, which is drawn out through the incision and sutured to the skin.
Concentrator		Provides oxygen therapy to a patient at substantially higher concentrations than those of room air. Used as an alternative to oxygen tanks.
Continuous feedings		Feeding is given over several hours from 6-24 hours per day. May be given via NG tube, G-tube or J-tube. A feeding pump might be used.
Continuous positive airway pressure	CPAP	Continuous positive airway pressure given through a mask or through the trach by a machine. Can also be given through a ventilator attached to a trach. CPAP works by pushing air through the airway passage at a pressure high enough to prevent apnea and can be prescribed for both obstructive and central sleep apnea.
Coughalator		A mechanical device that alternates positive and negative airway pressure to stimulate cough (also known as In-Exsufflator, Cofflator, and cough machine). This takes approximately 15-30 minutes.
Cuff		The inflatable balloon on some tracheostomy tubes.
Diaphragm		The big muscle below the lungs that controls breathing.
Drip feeding		Feeding given slowly over time. May be regulated by a feeding pump. May be given via NG tube, G-tube or J-tube.
Encrustation		Hard, crusty, dried mucus.
End Tidal CO2		The level of carbon dioxide in the air exhaled from the body, the normal values of which are 4% to 6%; that is equivalent to 35 to 45 mm Hg.
Enteral nutrition		Liquid nutrition delivered by tube into stomach or small

TERMINOLOGY	Abbrev.	DEFINITION OF TERM
		intestine.
Farrell Bag		A closed system connected to a gastrostomy tube with a one-way valve to allow release of air from the stomach and a reservoir bag to contain gastric contents.
Gastroesophageal reflux	GER/GERD	Contents of stomach flow backward into esophagus. May be resolved by medications, changes in feeding, position, methods, or formula.
Gastrostomy button	G-tube button	A small plastic device that is surgically placed in the stomach wall that allows the G-tube to be removed between feedings.
Gastrostomy tube	GT/G-tube	A flexible rubber catheter that is surgically placed into the abdominal wall. This tube is clamped between feedings to prevent leakage.
High flow		High Flow O2 – oxygen delivered at greater than or equal to 6 L/min.
Humidifier		A device for supplying or maintaining humidity.
Humidifier collar		Small mask worn around neck over trach connected to a humidifier. Provides direct humidification to the trachea.
Hydrogen peroxide		A disinfecting agent which is mixed with water and used to clean around trachea area.
Hyperalimentation	Hyperal	Same as Total Parenteral nutrition. Amino acids, vitamins and fluids are given intravenously through a central line.
Indwelling catheter		A catheter which is inserted into the bladder and allowed to remain in the bladder. A common type of indwelling catheter is a Foley. A Foley catheter has a

TERMINOLOGY	Abbrev.	DEFINITION OF TERM
		balloon attachment at one end. The balloon prevents the catheter from leaving the bladder.
Intermittent catheter		Intermittent catheters are hollow tubes used to drain urine from the bladder. They are inserted at intervals throughout the day, or when an individual feels the need to go to the toilet. Once the urine has drained out, the catheter is removed.
Jejunostomy tube	J-tube	Tube inserted into surgical opening in abdominal wall and threaded into upper small intestines. Feedings are infused continuously.
Lumen		The inside part of the trach tube where the air goes in and out.
Mucus		Slippery fluid that's produced in the lungs and windpipe which can dry and stick to any surface and form a crust. Can block trachea tube so no air passes.
Nasogastric tube	NG tube	Tube threaded into one nostril down the throat, esophagus, and into the stomach. Tube is usually taped in place.
Nasopharyngeal		An area in the back of the nose toward the base of skull. The nasopharynx is a box-like chamber that lies just above the soft palate in back of the entrance into the nasal passages.
Nebulizer		A machine that provides moisture and/or medicine inhaled into the lungs.
Obturator		The semi-rigid stick placed into the tracheostomy tube to help guide it into the opening in the neck. Must be removed after trach tube is changed.
Peritoneal dialysis		A fluid is entered into the patient's abdominal (Peritoneal) cavity (the "belly"), which is covered by a thin membrane, containing many small blood vessels. This membrane, called the peritoneum, is like a big bag that keeps the stomach, intestines, liver, and other

TERMINOLOGY	Abbrev.	DEFINITION OF TERM
		organs in place. The dialysis fluid will make water, salts, and the waste products move from the blood into the fluid (also called solution). As the fluid gets saturated, the solution must be exchanged.
Pulse oximeter		Measures the amount of oxygen in the blood.
Saline		Salty Solution similar to water found in the body.
Secretions		Another word for mucus.
Speaking valve *a.k.a. Passy-Muir Valve*		A one-way valve that lets air come in through the tracheostomy tube, but then sends it out past the vocal cords and mouth to make talking possible.
Stent		A tube that is inserted into the nasal passageway to secure an open airway
Stoma		Hole in the neck where the tracheostomy tube is inserted or hole in abdomen where G-tube is inserted.
Sterile		Free from germs.
Suction		Clean or evacuate by the force of suction such as removing mucus from an airway.
Swaddle		To wrap a baby like a mummy with only its head protruding.
Syringe		The instrument used to give shots without the needle.
Total parenteral nutrition	TPN	Intravenous nutrition.
Tracheal Diversion		Requires a surgical procedure. Laryngeal diversion is one in which the lower trachea is sutured to the neck skin, and the superior trachea is either closed or diverted into the esophagus.
Tracheostomy or tracheotomy		An operation where a hole in the neck is cut to make breathing easier.

TERMINOLOGY	Abbrev.	DEFINITION OF TERM
Tracheostomy (Trach) tube		Artificial airway. A curved plastic tube which is inserted into the trachea to aid breathing. It comes in different sizes and different types and brands.
Ventilator		A machine that helps a person breathe or breathes for a person.
Venting		Procedure where caregiver opens (unclamps) tube, holds it up away from abdomen to let air escape.
Vesicostomy		It is an opening in the abdomen that allows urine to drain continuously from the bladder.
Water-based lubricant		Used on end of NG tubes and trach tubes to ease insertion.

ACRONYMS: The following acronyms will have the meanings identified below:

BPAS: Bureau of Professional and Ancillary Services

CG: Care Giver

CMS: Centers for Medicare & Medicaid Services

CO2: Carbon Dioxide

CPR: Cardiopulmonary Resuscitation

CPT: Chest Physiotherapy

DSCC: University of Illinois at Chicago, Division of Specialized Care for Children

HCBS Waivers: Home and Community-Based Services Waivers

HCP: Home Care Program

HFS: The Illinois Department of Healthcare and Family Services

HIV: Human Immunodeficiency Virus

I/O: Input and Output

ICU: Intensive Care Unit

IM: Intramuscular

IV: Intravenous

LN: Licensed Nurse

MFTD: Medically Fragile, Technology Dependent

MNNS Checklist: Medical Necessity for Nursing Services Checklist

NEB RX: Nebulizer treatment

O2: Oxygen

OT: Occupational Therapy

PEEP: Positive End Expiratory Pressure

PHI: Protected Health Information

PT: Physical Therapy

QD: Daily

QID: Four Times a Day

QIO: Quality Improvement Organization

QOD: Every Other Day

ROM: Range of Motion

SCM: Service Cost Maximum

SQ: Sub-Cutaneous

VS: Vital Signs

Appendix D: Resource References

1. General Policy and Procedures Handbook, Chapter 100, is available on HFS' Web site at http://www.hfs.illinois.gov/handbooks/chapter100.html.

2. Information on HCBS waivers is located at http://www.hfs.illinois.gov/hcbswaivers/.

3. Information on quality in HCBS waivers can be located at the following Web sites: http://www.cms.hhs.gov/medicaid/waivers/quality.asp and http://www.cms.hhs.gov/Medicaidwaivers/qc9_061305.pdf.

4. Rule requirements for the Home and Community-Based Services Waiver for persons under 21 who are medically fragile, technology dependent are located in 89 Illinois Administrative Code 120.530 at: http://www.hfs.illinois.gov/assets/120.pdf.

5. The QIO web site for providers is located at http://www.hsofi.org/.

6. More information on reporting to the Office of Inspector General (OIG) abuse and neglect of adults with disabilities is located at http://www.dhs.state.il.us/page.aspx?item=10687.

7. Information on reporting abuse and neglect of children can be found at http://www.state.il.us/dcfs/FAQ/faq_faq_can.shtml.