Breakout Session:
Nursing and Treatment Documentation
Patient Assessment

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Documentation and Assessment

Objectives – To review and discuss each of the following:

- Patient history form
- Authorization of prohibited item
- Patient education checklist
- Treatment consent
- Patient Assessment
- Pretreatment safety check
- Treatment record
- Progress note
- Billing units

Hyperbaric Medicine Service
Patient History Form

Name_____ Date _____ Diagnosis_____

PATIENT TO COMPLETE WHITE SECTION **Nursing Staff to complete grey section; follow-up questions**

Allergies		Latex? ☐ Iodine? ☐ Tape? ☐ Reactions?
Do you have: Advanced Directives, Medical Power of Attorney, Living Will?	Yes ☐ No ☐	Ask for chart copies of medical- legal documentation **DNR** ☐
Have you had a chest x-ray?	Yes ☐ No ☐	Date of last one _____
Have you had an EKG?	Yes ☐ No ☐	Date of last one _____
Seizure/stroke/neurological problems?	Yes ☐ No ☐	Epilepsy☐ multiple sclerosis☐ paralysis ☐ **s**wallowing difficulty ☐
Asthma/ COPD/ emphysema?	Yes ☐ No ☐	Home oxygen ☐ liters/min _____ Sleep apnea ☐
Active tuberculosis?	Yes ☐ No ☐	Productive cough ☐ last PPD: _____ Tx: _____
Previous pneumothorax?	Yes ☐ No ☐	When?
Do you smoke now or in the past? (cig, vape, pipe)	Yes ☐ No ☐	Number of years _____ packs/day_____ when quit_____
Any Nicotine or Recreational drug use?	Yes ☐ No ☐	Type and frequency
Chest Pain? Cardiac surgery?	Yes ☐ No ☐	History of heart attack ☐ irregular heartbeat ☐ palpitations ☐ pacemaker ☐ defibrillator ☐
Problems with blood flow/swelling/leg pain?	Yes ☐ No ☐	Leg edema ☐ phlebitis ☐ stroke ☐ PVD ☐
Problems with your blood pressure?	Yes ☐ No ☐	Chronic HTN ☐
Take blood thinners? Aspirin? Bleed easily?	Yes ☐ No ☐	Anemia ☐ blood transfusions ☐ blood disorder☐
Arthritis? Any steroid use/when?	Yes ☐ No ☐	Prednisone ☐
Objection to blood products?	Yes ☐ No ☐	Is it documented in chart?
Hearing difficulty? Able to clear ears?	Yes ☐ No ☐	Hearing aids ☐ PE tube referral ☐
Chronic sinus troubles?	Yes ☐ No ☐	How managed?
Eye or vision troubles?	Yes ☐ No ☐	Cataracts ☐ contacts ☐ glasses ☐ implants ☐ glaucoma ☐
Dentures, capped teeth, retainers?	Yes ☐ No ☐	Removable?
History of alcohol or drug use or abuse?	Yes ☐ No ☐	Type? Last use?
Claustrophobia?	Yes ☐ No ☐	Anti-anxiety medication ☐
Cancer? Type?	Yes ☐ No ☐	Chemotherapy ☐ radiation☐ type and amount
Hyperthyroid?	Yes ☐ No ☐	Medication? Dose? Date of last lab work?
Sickle cell disease or trait?	Yes ☐ No ☐	Last time in crisis? _____
Hernia, ulcers, heartburn, bloody stool?	Yes ☐ No ☐	Discuss diet and position of comfort
Kidney, bladder problems?	Yes ☐ No ☐	Dysuria/frequency ☐ dialysis ☐ schedule_____
Diabetes?	Yes ☐ No ☐	Type? _____ Controlled by insulin ☐ diet ☐
Could you be Pregnant?	Yes ☐ No ☐	LMP _____ Order lab work? _____
Ever been told you had MRSA?	Yes ☐ No ☐	Standard precautions ☐
Medication patches?	Yes ☐ No ☐	Type? _____

Do you have any special needs? Yes ☐ No ☐ (i.e. VAC, implanted pumps, prosthesis, colostomy, drains, central lines (PICC), Foley catheter, bladder irrigation, hearing aid, dialysis catheter, continuous glucose monitor)	List special needs: Call manufacturers for implanted devices. Remove alcohol swabs on ports

Nursing Comments, History of Present Condition, Barriers:

LIST ALL DOCTORS INVOLVED WITH MEDICAL CARE

Doctor	Specialty	Office Number		Doctor	Specialty	Office Number

LIST HOME HEALTH CARE COMPANY AND ANCILLARY MEDICAL CARE RECEIVING

Home Health Care Company	Phone Number		Ancillary Health Care	Specialty	Office Number

LIST ALL MEDICATIONS CURRENTLY TAKING *(Include Non-Prescription Medicines, Vitamins, Minerals, and Herbs)*

Medication	Dose	Frequency		Medication	Dose	Frequency

LIST ALL PREVIOUS SURGERIES AND HOSPITALIZATIONS

Date	Surgery or Hospitalization		Date	Surgery or Hospitalization

T_____	**BP_____**	**P_____**	**R_____**	**%O2 SAT_____ liters on O2_____**

NEW HBO PATIENT CHECKLIST	
Teaching Instructions Given? ☐	Insurance Information/Authorization Obtained? ☐
Unit and Chamber Orientation Done? ☐	Photo of wound/Photo Consent Signed? ☐
Consent Signed? ☐	New Patient Packet Given? ☐

Nurse Signature:
Date/Time:

Hyperbaric Medicine Service

Authorization For
Prohibited Item

Patient Name:

A risk assessment has been discussed between the safety coordinator and provider. The following item is normally classified as Prohibited in our policies and/or NFPA 99, however due to the patient's medical necessity for the item and utilizing methods of modification as described below, the risk has been mitigated in order to allow this item to safely enter the chamber with the patient for treatment. NFPA 99 14.3.1.6.4.4

ITEM	DESCRIPTION	MODIFICATION (if any)
Example: Velcro	Attached to essential material: wrist restraint or ET tube in order to keep item secure on patient	Tape over each face of Velcro. Use tape to secure item. Ensure patient is grounded
Example: Petroleum or Oil Based Topical or Impregnated Dressing (Unna's boot)	Petroleum/hydrocarbon off-gassing and readiness to ignite with spark	Wrap with dry 100% cotton towel Ensure patient is grounded
Example: Pacemaker or Intrathecal Pump	Brand, Model and Serial #. Check manufacturer for efficacy under pressure	If tested and approved to set pressure, then only treat to approved pressure or less. ECG monitor patient during treatment
Example: Implanted Cardiac Defibrillator	Theoretical risk of spark ignition through skin upon defibrillation	Cardiology referral to determine deactivation with magnet during treatment
List item here:		

SUPERVISING HYPERBARIC PROVIDER

In my capacity as Supervising Hyperbaric Provider, I authorize the use of the item listed above during hyperbaric oxygen therapy for the following schedule:

☐ Today's treatment only ☐ Initial treatment only ☐ All treatments

☐ Other (specify when):_____

Provider Signature **Date/Time**

HYPERBARIC SAFETY COORDINATOR

In my capacity as Hyperbaric Safety Coordinator, I, concur with the above authorization.

Hyperbaric Safety Coordinator Signature **Date/Time**

Hyperbaric Medicine Service

Patient Education Checklist

All teaching is age and education level appropriate. Each time teaching is performed, the staff member documents Date/Time/Initials in one box followed by learning code as indicated below. Mark N/A for items not applicable.

Patient and/or Family Educated on:				
GENERAL	**Date/Time/Initial**	**Code(s)**	**Date/Time/Initial**	**Code(s)**
Introduction: Hours of Operation/Scheduling/Check in/phone #				
Unit Orientation: Chambers/Dressing/Bath/Exam room; Exit door(s)				
Billing/Pre-Authorization: Medicare; Commercial Insurance				
Wound Care: Instruction specific to patient				
Nutrition Education: Pamphlet/Dietitian referral				
Diabetic Teaching: Diet/Blood sugar mgmt.				
Anxiety: Patient is in charge! May offer meds				
Infection Control: Hand Washing/Precautions				
Patient Education: Indication handout and HBO patient guide				
Visitor Policy: limited for privacy; waiting room				
"HBO and You" Video: available to offer online, if needed				
HYPERBARIC TREATMENT				
Purpose:				
HBO therapy is mostly adjunctive				
Increases O2 levels in affected areas; systemically				
Referring physicians will confer regularly				
Treatment Procedure:				
Prohibited items/Fire safety: minimize fuel				
Patient preparation - 100% cotton, VS, ECG, BS, grounded, mask check, sippy cup				
Compression:				
Approx rate (1-3 psi/min) according to patient equalizing capability: Valsalva/Toynbee/PE tubes				
Compressing molecules cause warming, humid climate. Rapid, deeper descent = warmer				
At Pressure:				
90-minute O2 treatment at pressure				
O2 is a medication (drug)				
Signs and symptoms of oxygen toxicity				
Air-breaks; acute mask use				
Decompression:				
Decompression is easier; approx 5-15 minutes				
Chamber temperature decreases upon ascent				
Never hold breath; avoid Valsalva during decompression				
Effects of Smoking on Healing:				
Nicotine constricts blood vessels, decreases flow				
Smoking should be stopped during HBO series				
Smoking cessation referral				
Can't stop: No Smoking 2 hr pre & 2-4 hrs post tx				
Side Effects/Risks				
Visual changes may exist up to 4 months post tx				
Cataracts may mature sooner				
Contraindicated in pregnancy unless CO				
Barotrauma: ear, sinus, tooth squeeze, pulmonary				
Claustrophobia; confinement anxiety				
Hypoglycemia in diabetes				

Legend:	**Learner**	**Readiness**	**Method**	**Response**
	P-Patient	A-Acceptance	D-Demonstration	DU-Demonstrates Understanding
	F-Family	E-Eager	E-Explanation	VU-Verbalizes Understanding
	O-Other	N-Non-acceptance	H-Handout	NR-Needs Reinforcement

Hyperbaric Medicine Service
Informed Consent for Elective Treatment

I, _____, hereby grant consent to and authorize the Hyperbaric Medicine Service, its providers, employees, and agents to treat me with **Hyperbaric Oxygen Therapy** for the condition of: _____.

Further, I understand that hyperbaric oxygen therapy might call for more than one treatment, and I hereby authorize the Hyperbaric Medicine Service providers to determine the number of treatments necessary to treat my condition.

Risks of Hyperbaric Oxygen Therapy

1. Oxygen toxicity-central nervous system/lung (seizure)
2. Ear drum discomfort/rupture; sinus pain; dental pain (barotrauma)
3. Myopia, temporary vision change (reversible after HBO)
4. Increased growth rate of existing cataracts; thickening of lens
5. Increased risk of fire while in 100% oxygen hyperbaric chamber
6. Over pressurized lung; pneumothorax; emphysema (collapsed lung/bubbles in bloodstream)
7. If you are diabetic, your blood sugar may drop during chamber treatment (hypoglycemia)
8. Pulmonary edema (lung fluid accumulation)

The nature and purpose of hyperbaric oxygen therapy have been explained to me by _____ and I hereby acknowledge that I know and understand the nature and the purpose of the treatments.

Additionally, the provider has explained to me the consequences, risks and alternatives to receiving hyperbaric oxygen treatment. I have been given the opportunity to ask questions and have them answered so that I can form my own decision.

_____ _____

Patient Signature **Date/Time**

_____ _____

Relationship if not Patient **Witness**

I have explained the nature, purpose, prognosis and possible consequences of diagnostic and/or treatment procedures, and the risks involved, possible associated complications and alternative treatments of diagnostic and/or treatment procedures.

Provider Signature: _____ Date/Time: _____

Hyperbaric Medicine Service

Patient Assessment & Treatment Checklist

Patient Identication

Patient Name: JOHN SMITH **HBO#** 123456

General				Pre Tx Vital Signs (Post Tx PRN)					Pre Tx Assessment (Post Tx PRN)						Safety					Verification	
Date	Treatment #	Patient Status O/P or I/P	Wound Photo? Y/N	Blood Sugar for Diabetics	Temperature	Respiration	Pulse	Blood Pressure	Lung Sounds Left	Lung Sounds Right	FallRisk? Y/N	Pain Level (0-10)	TM Right	TM Left	ECG Alarm Settings	Patient Ground Confirmed? Y/N	Fire Risks Assessed? Y/N	Prohibited Items Authorization Form Completed?	PT/Family Education? Y/N	Supervising	Clinician (RN Co-Sign) Physician
1/29/24	3	O/P	Y	140	98.7	20	88	140/80	CE / CE	CE / CE	Y	0	T-0 / T-2	T-0 / T-0	90-50	Y	Y	Y	Y	Cone	Handley

SN=See Notes
NA=Not Assessed

Photos: inital tx. then q 5 txs & upon D/C
Label with date, MR# and # of completed treatments

Pain Level
0 (none) - 10 (intense)
Chart how pain is managed in progress note

Draw a diagonal line / thru the box if post tx value obtained.
Record value below line.

Lung Scale
CE=Clear/Equal thru ou
DT=Diminished thru ou
DB=Diminished @ bas
DU=Diminshed upper
CRT=Crackles thru out
CRB=Crackles @ bases
CRU=Crackles upper
WT=Wheezes thru out
WB=Wheezes @ bases
WU=Wheezes upper
O=Other (see progress note)

Teed Scale
T0= Teed 0
T1=Teed 1
T2=Teed 2
T3= Teed 3
T4=Teed 4
T5=Teed 5

Fall Risk Assessment

Impaired judgement/lack of safety awareness	3
History of falls; past 3 months prior to admission/during hospitalization	3
Agitation	2
Impaired gait; shuffle/wide base; unsteady walk, amputation	2
Wets/soils self on way to bathroom	2
Dizziness/vertigo	1
Prosthesis	1

Fall Precautions for a score of >2

Revised 1/2024

Hyperbaric Medicine Service

Pre-Treatment Safety Checklist

To be completed with patient prior to every treatment

✓ ***If Applicable & Completed*** ✗ ***If Not Applicable*** ***Treatment #_____***

Prescreen Confirmation:	***100% Cotton Textiles:***	***Assessment:***	***Comfort/Safety Measures:***
☐ Patient identity	☐ 1 gown	☐ Vital signs	☐ Water bottle
☐ Pretreatment orders	☐ 2 sheets (top/bottom)	☐ Lungs	☐ Juice (diabetic)
☐ Prohibited items	☐ 1 blanket	☐ Patient grounding	☐ Positioner
☐ Staffing appropriate	☐ 1 pillowcase	☐ Mask tested	☐ Dressing covered
☐ *Authorization form	☐ 1 washcloth	☐ Blood sugar	☐ Collection bag emptied

Prohibited Items

✓ ***If Not Applicable or Removed.*** ✗ ***If Present and *Authorization for Prohibited item form is completed.***

- ☐ Flammable liquids, gases or vapors
- ☐ Implanted devices: pacemakers, defibrillators, pumps
- ☐ Products containing alcohol: alcohol swabs/hand disinfectant, hairspray, mousse, gel, perfume, body spray, deodorant
- ☐ Products containing petroleum; lotion, oil, grease, cream, sunscreen, cosmetics, lip balm
- ☐ Electronic devices: cell phone, pager, tablet, hearing aids, ear buds, headphones, watch, biometric ring
- ☐ Personal warming devices: heating pads, hand warmers or anything that generates heat
- ☐ Items that may accumulate static electricity or generate electrical discharge (spark)
- ☐ Paper, books, magazines, pens, pencils
- ☐ Cigarettes, electric cigarettes/vapes, matches, lighters, all nicotine products
- ☐ Negative pressure wound vacuum device (not including packing sponge, seal or hose)
- ☐ Hair extensions, wigs, weaves, dreadlocks, dirty or greasy hair
- ☐ Hair accessories: scrunchy, barrette, hair pin, hair band, head band, hair glue, beads
- ☐ Fresh chemical hair treatments must be at least 8 hours old.
- ☐ If a new perm is not yet washed, then it will be wrapped in a cotton towel while in the chamber.
- ☐ Jewelry: piercings, rings, bracelets, necklaces, anklets
- ☐ Removable mouth wear: dentures, partial plates, retainers
- ☐ Food, candy, mints, chewing gum
- ☐ Medication: patch, pills, gummy, ointment, cream, foam, lozenge, spray, inhaler
- ☐ Nail polish, artificial nails, nail polish remover (wait 8 hours after applied)
- ☐ All sparking toys; or can generate static electricity: stuffed animals, cars, dolls, cards, games
- ☐ Velcro, paper, silk, wool, linen made synthetic material
- ☐ Casts and Unna's boot (wait 8 hours after applied; cover with cotton towel or pillowcase)
- ☐ Prosthetics or foam plastic materials
- ☐ External fixator (unless padded with taped towels to protect acrylic window; needs Auth Form)
- ☐ All personal clothing or entertainment devices
- ☐ Lasers, penlights, cameras, flash photography
- ☐ All batteries: lithium, lithium-ion, alkaline, nickel, lead-acid, zinc-carbon, rechargeable, solar
- ☐ Smoking, open flames, hot objects, any hazardous material
- ☐ **Anything else identified as a risk for inside the chamber**

"If you have anything else on your body that is not already mentioned above, please inform the staff so we can discuss your options and safely address it."

The Hyperbaric Safety Coordinator and Provider determine if exceptions based on medical necessity and risk/benefit for the patient can be authorized and if there is an acceptable modification to be applied.

I have reviewed this checklist with the patient and determined it is safe to proceed with HBO treatment today.

_____ _____

Staff Signature Date/Time

☐ Check here if an ****Authorization for Prohibited Item*** form has been completed by the Hyperbaric Safety Coordinator and Medical Provider, if applicable. Item(s):

_____

Hyperbaric Medicine Service
Treatment Record

Patient Label

Patient's Name : John Smith **HBO #:** 123456

Diagnosis: Late Effects Radiation **ICD Code:** L59.8

Special Details/ Patient Preferences:

Bottle of drinking water; wash cloth, moistened; elevate head of bed 48 degrees

Special Details: Allergies:______________________ **Status:** Full Code ☐ **DNR** ☐

Blood Sugar: Pre-Tx ☐ Post-Tx ☐ PE Tubes ☐ Slow Descent ☐ Air Break(s) 1 ☐ 2 ☐ DCI Table 5 ☐ DCI Table 6 ☐

Myringotomy: Date/Time:______________________ Pre-Treatment Meds: ______________________

DATE	RX #	ATA	Mins of O2	Rate	LS	AP	LP	AS	Total Mins/ Units	Wellness Check every 15 mins Time/Initials	Air Break(s) 1	Air Break(s) 2	Equipment Involved	Initials/ Co-sign
5/1/2022	3	2.5	90	1-2 / 2	0805	0819	1009	1020	135 / 4u	0840 0855 0910 0925 0940 0955	0849-0859	0929-0939	NRB	SH

Rate= psi/min of compression/decompression **LS = left surface** **AP = at pressure** **LP = left pressure** **AS = at surface**

Hyperbaric Medicine Service
Progress Notes

Patient Name: John Smith

Date & Time	Tx #	Notes
5/1/22 0800	3	Patient prepped for HBO tx. Pre tx Safety Check performed.
		Vital Signs & Blood sugar WNL. Physician present to assess.
		Orders confirmed for 2.5 ATA x 90 min ☐ two 10 min airbreaks SH
5/1/22 0805	3	Compression starts @ 2 psi/min rate SH
5/1/22 0806	3	Pt c/o ear pain 4/10 ☐ chamber held at 5psi - then
		decreased to 4psi to allow pt time to clear ears; drinking
		water & Valsalva. SH
5/1/22 0807	3	Pt reports ears cleared. Restart Compression at 1psi/min SH
5/1/22 0812	3	Pt at 9psi "ears feel fine". Compression rate increased to 2psi/min SH
5/1/22 0819	3	Pt at 2.5 ATA, timer started for 30 mins. TV volume adjusted. Purge flow
		valve decreased to warm chamber per Pt. request. SH
5/1/22 0849	3	Airbreak #1 started via NRB mask SH
5/1/22 0859	3	Airbreak #1 completed ☐ difficulty SH
5/1/22 0929	3	Airbreak #2 started SH
5/1/22 0939	3	Airbreak #2 completed ☐ difficulty SH
5/1/22 1009	3	Pt informed to prepare for decompression. Rate 2psi/min SH
5/1/22 1020	3	Pt. @ surface, removed from chamber ☐ complaints. Lungs
		clear. Ears examined by physician; (R) ear teed 2, (L) ear
5/1/22 1035	3	teed Ø. Plan: Pt return for tx tomorrow - reinspect ears SH

* Left surface @ 805
At surface @ 1020
135 mins total (4 units)

Hyperbaric Medicine Service

Medicare Billing for 30-minute HBO Treatment Units

HCPCS Code G0277

Medicare reimburses for the time from when the chamber door is closed until the chamber door is opened again.

This includes **compression time, air-breaks** and **decompression time** in addition to the prescribed oxygen **treatment time**.

The 16-minute rule:

Medicare pays in 30-minute units. Medicare mandates that there must be at least 16 minutes into each 30-minute unit in order to bill for that unit as shown in the chart below.

Example:

So, if a patient started compression at **8 am**, reached pressure at **8:10 am**, had **two 10-minute** air breaks and completed **90 minutes** of oxygen treatment. Then began decompression at **10 am** and reached surface at **10:15 am**. The total treatment time was **135 minutes** or **4 units**.

Minutes	Units
0 - 15	0
16 - 45	1
46 - 75	2
76 - 105	**3**
106 - 135	**4**
136 -165	**5**
166 - 195	6
196 - 225	7
226 - 255	8
256 - 285	9
286 - 315	10
316 - 345	11
346 - 375	12
376 - 405	13
406 - 435	14