



# SerenaGroup

Building the Nation's Leading Wound Care Team



Is the RIGHT Time Now, for HBOT?

---

Matthew (Matt) Schweyer CPCO™, CHT-A, CHWS, UHMSDSA

Chief Quality/Compliance Officer

Each New  
Patient, is an  
HBOT  
candidate until  
ruled out!

What does that mean?

Approximately 8-10% of patients will meet criteria for the therapy. And, best opportunity to engage the patient and provider is at the 1st and subsequent visit.

It may be determined the patient IS NOT A CANDIDATE. And, that typically happens when they present w/o an ACCEPTABLE diagnosis.

However, what about that 8-10%?



Think Etiology-  
Is it situational-  
For a Diabetic Foot Ulcer, must be below the Medial Malleolus  
& It Must be a Wagner III.  
For Osteomyelitis, it must be...  
For a Graft it must be...

Who has seen this  
in their Center?

If so, what is it?

And, what should  
the next steps be?







Chronic  
Refractory  
Osteomyelitis  
Case Study

If it probes to BONE...

It is OSTEO until proven otherwise!

Great, it's Situational Awareness!

And, it's one of the diagnosis...

What's the NEXT step in your Program?

Answer-

**EVIDENCE BASED  
WOUND  
MANAGEMENT!**





Are we looking at the patients in the correct lens?

Patients who fail to show a reduction in ulcer size by 40% or more after four weeks of therapy should be reevaluated and other treatments should be considered.(Level II)





# Centers of Excellence.

The solution & the impediment

- The practice of wound care is not uniform.
- Most of the wound care is delivered by “part-time dabblers” rather than true specialists.
- SG solution: centers of excellence with full time certified wound and hyperbaric specialists as a prerequisite for involvement in the programs.



---

# What makes us a Center of Excellence?

---

Team Approach, Provider, RN's MA & Administrative staff-YES

HOWEVER, any and all of the above can "STOP the LINE!"


When the WHOLE team is ENGAGED the patient wins.

Clinicians can discuss HBOT with the Provider as appropriate & when appropriate!

The HBOT checklist is there for that reason!

And, we are focused on Quality!!!





So, Future  
state of  
QUALITY will  
look like this!

1<sup>st</sup> step

New Patient Evaluation!

A-Does patient have a POTENTIAL indication?

- Ulcer of Unknown Etiology & Diabetic or Non-Diabetic
- Diabetic with Ulcer (regardless of Wagner Class)
- Extremity amputation & flapped the closure (margins)
- Patient previous exposure to radiation for Cancer

B- Initiate the HBOT Form.

C- Place patient in the Parking Lot  
(whiteboard, or however you will manage  
the process) maybe add it as a GOAL in the  
Nurses Comment sections

Hyperbaric Oxygen Therapy - Dual Criteria and Pre-Treatment Checklist			
<p>***History &amp; Physical must be done and each Pertinent Criteria below MUST be clearly described in Hyperbaric Evaluation Physician Note Section Below for the HBO indication recommended***</p>			
<p>Pat: _____ Patient Name: _____</p>			
Need	<p>Actinomycetosis 039.0-4, 039.3-0</p> <p>Prolonged administration of antibiotics</p>	Need	<p>Acute Peripheral Arterial Insufficiency 444.21, 444.22, 444.81</p>
Need	<p>Must document that disease is refractory to antibiotics and surgery.</p>	Need	<p>Documentation of sudden occlusion of a major artery (which):</p>
Need	<p>Documentation of <del>ischemic gangrene</del> infection</p>	Need	<p>Vascular study to confirm i.e. CTA/MRA/Aortogram</p>
		Need	<p>Revascularization Candidate: Yes / No</p>
		Need	<p>IR NO: reason in Hyperbaric evaluation note</p>
		Need	<p>TCCM &lt;30 mm/Hg and evidence of response to O2 in Chamber TCCM to show response to O2 w/ SATX</p>
Need	<p>Crush Injuries and Sucking of Severed Limbs 927.-, 928.-, 929.-</p> <p>**RE-EVAL after 12 treatments</p>	Need	<p>Acute Traumatic Peripheral Ischemia 902.33, 903.1, 903.01, 904.0, 904.41</p>
Need	<p>Documentation of loss of function, limb or life being threatened</p>	Need	<p>Documentation of loss of function, limb, or life threatened (i.e. injury that compromises circulation)</p>
Need	<p>TCCM &lt;30 mm/Hg</p>	Need	<p>TCCM &lt;40 mm/Hg</p>
Need	<p>Diabetic Wound Lower Extremities 250.70-73, 250.80-83 with 707.10-707.19, 707.19</p> <p>**RE-EVAL Q 30 Days - Must show signs of measurable improvement to continue past 30 days</p>	Need	<p>Gas Gangrene 040.0</p>
Need	<p>Documentation of Type I or Type II</p>	Need	<p>Adjustment to antibiotic therapy &amp; surgery</p>
Need	<p>Diabetics with lower extremity diabetic wound</p>	Need	<p>Clinical sign and symptoms</p>
Need	<p>Documentation of Wagner III or higher</p>	Need	<p>X-ray findings</p>
Need	<p>Documentation of standard wound care for 30 days with no measurable signs of healing</p>	Need	<p>Progressive Necrotizing Infections 728.88</p>
Need	<p>Standard wound care must include all the following:</p>	Need	<p>Documentation of laboratory reports that confirms the diagnosis of progressive necrotizing infection</p>
Need	<p>Vascular Assessment and correction of problem in affected limb</p>	Need	<p>Culture or gram stain that confirms diagnosis of MRSA/MSSA</p>
Need	<p>Optimization of nutritional status</p>	Need	<p>Skin Graft Failure</p>
Need	<p>Optimization of glucose control</p>	Need	<p>Documentation of graft date</p>
Need	<p>Obtainment by any means to remove devitalized tissue</p>	Need	<p>Documentation of compromised state of graft site</p>
Need	<p>Wound Dressing of a clean moist wound bed</p>	Need	<p>Documentation of flap date</p>
Need	<p>Appropriate offloading</p>	Need	<p>Documentation of compromised state of flap site</p>
Need	<p>Treatment to resolve infection</p>	Need	<p>Chronic Refractory Osteomyelitis 730.10-730.19</p>
Need	<p>TCCM &lt;30 mm/Hg</p>	Need	<p>Definitive evidence condition is chronic and unresponsive to conventional therapy i.e. ASX and wound care</p>
Need	<p>Diabetic Ulcer Wagner III</p>	Need	<p>Definitive imaging (i.e. MRI, X-ray, Bone Scan) and bone culture with CBS</p>
Need	<p>Documentation of one or more: <del>Carpal, Osteomyelitis, Tendonitis, Abscess, <del>2nd/3rd</del></del></p>	Need	<p>Failed antibiotic regimen of at least 6 weeks</p>
Need	<p>Diabetic Ulcer Wagner IV</p>	Need	<p>Some debridement (when possible)</p>
Need	<p>Documentation of Wet or Dry gangrene of the foot or foot/leg</p>	Need	<p>Osteomedial necrosis 528.89</p>
Need	<p>Diabetic Ulcer Wagner V</p>	Need	<p>Documented date and anatomical site of prior radiation treatments include number of treatments</p>
Need	<p>Documentation of gangrene involving entire foot</p>	Need	<p>Diagnosis from referring physician</p>
Need	<p>Absolute Contraindications</p>	Need	<p>Plan to or document debridement/resection of non-viable tissue (if present in conjunction with antibiotics)</p>
Need	<p>Bleed risk</p>	Need	<p>Soft Tissue <del>Radionecrosis-Late Effects of Radiation</del> 930 or 909.2</p>
Need	<p>Untreated Pneumothorax</p>	Need	<p>Documented date and anatomical site of prior radiation treatments include number of treatments</p>
Need	<p>Relative Contraindications</p>	Need	<p>Documentation of treatment with conventional therapy (i.e. antibiotics and debridement)</p>
Need	<p>Adrenomyelomeningocele</p>		

Wound Care Specialists  
HBO Dual Criteria and Pre-Treatment Checklist

9996TREATMENTCENTER9996  
Wound Center

%%UNCLLE%%  
%%UNCLLE%%  
%%UNCLLE%%  
%%UNCLLE%%  
%%UNCLLE%%  
%%UNCLLE%%

Relative Risk/Contraindication/Status with patient			
YES	NO	YES	NO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		1. Upper Respiratory Infections	10. Viral Infections
		2. Chronic Sinusitis	11. Congenital Spherocytosis
		3. Seizure Disorders	12. Asymptomatic Pulmonary Lesions on X-Ray
		4. Cardiomyopathy / CHF	13. Pregnancy
		5. Uncontrolled High Fever	14. Body Temperature
		6. History of Spontaneous Pneumothorax	15. Blood Glucose Levels
		7. History of Thoracic Surgery	16. History of previous ear or sinus surgery
		8. History of Surgery for Glaucoma	17. Pulse and blood pressure
		9. Claustrophobia	18. Severe Emphysema and COPD with CO2 Ret

Hyperbaric Evaluation Physician Notes:


**Pretreatment Checklist**

\*\*\*Check if needed for patient- fill out separate prescription as needed\*\*\*

<input type="checkbox"/>	Obtain Chest X-Ray prior to first Treatment
<input type="checkbox"/>	Obtain BCG Prior to first Treatment
<input type="checkbox"/>	Nasal Spray for Congestion - 2 Puffs in each nostril prior to Hyperbaric Treatment and at bedtime
<input type="checkbox"/>	Pre-Treatment Medication Prescription given for _____
<input type="checkbox"/>	Completion of HBO Initial Start Order Sheet
<input type="checkbox"/>	Refer to _____ for _____
<input type="checkbox"/>	Refer to _____ for _____
<input type="checkbox"/>	Refer to _____ for _____

Date/Time _____	Physician Signature _____
Wound Care Specialists	9996TREATMENTCENTER9996
HBO Dual Criteria and Pre-Treatment Checklist	Wound Center
%%UNCLLE%%	%%UNCLLE%%
%%UNCLLE%%	%%UNCLLE%%
%%UNCLLE%%	%%UNCLLE%%
%%UNCLLE%%	%%UNCLLE%%
%%UNCLLE%%	%%UNCLLE%%

04/09/2012 Page 2 of 2

# Hyperbaric Checklist

Does the patient have one of the diagnoses on it?

If patient presents with a potential TREATABLE diagnosis, This form WILL BE STARTED & REVIEWED AT EACH VISIT.

The purpose, is not punitive, it is to Case Manage this patient for Advanced modality.

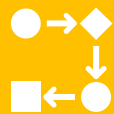
# Step Two



After New Patient Visit, discuss with the Team (brainstorm) Remember Provider is part of this HUDDLE



Second Visit review the Goals to Treatment. Is the patient still on the path to Advance Modality? Is the patient regressing in Goals to Treatment? Have the conversation with patient what options and impediments they may have.



Revisit, your Parking Lot and update patients' condition. Now is the time to start looking at what are the roadblocks to success! Transportation, Co-Pays, Compliance!



# Step Three

What are the impediments for Success?

Financial (co-pay) Have you discussed w/Financial Services options & alternatives?

Does the CFO, realize that an HBOT patient, yields \$371 (\$116.x4-.20) Medicare rate, per day?

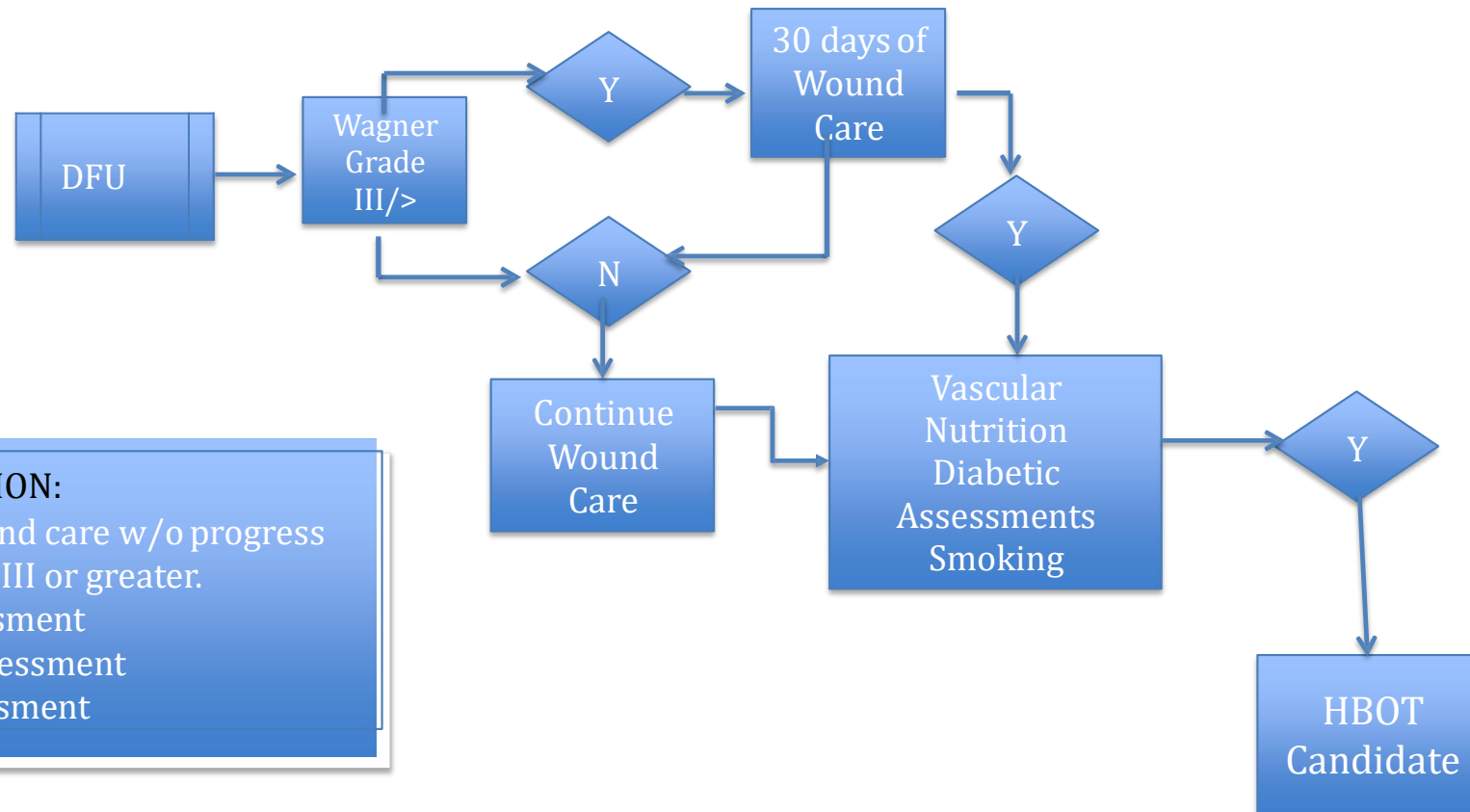
Compliance:

Transportation: can't get to or can't afford?

Housing- does the patient live so far, this might be an issue?

Have you discussed with Social Services/ Do they have alternatives? Ride Share, Vouchers, Community Resources. Ronald McDonald or other housing accommodations?

# Diabetic Foot Ulcer Wagner II/>

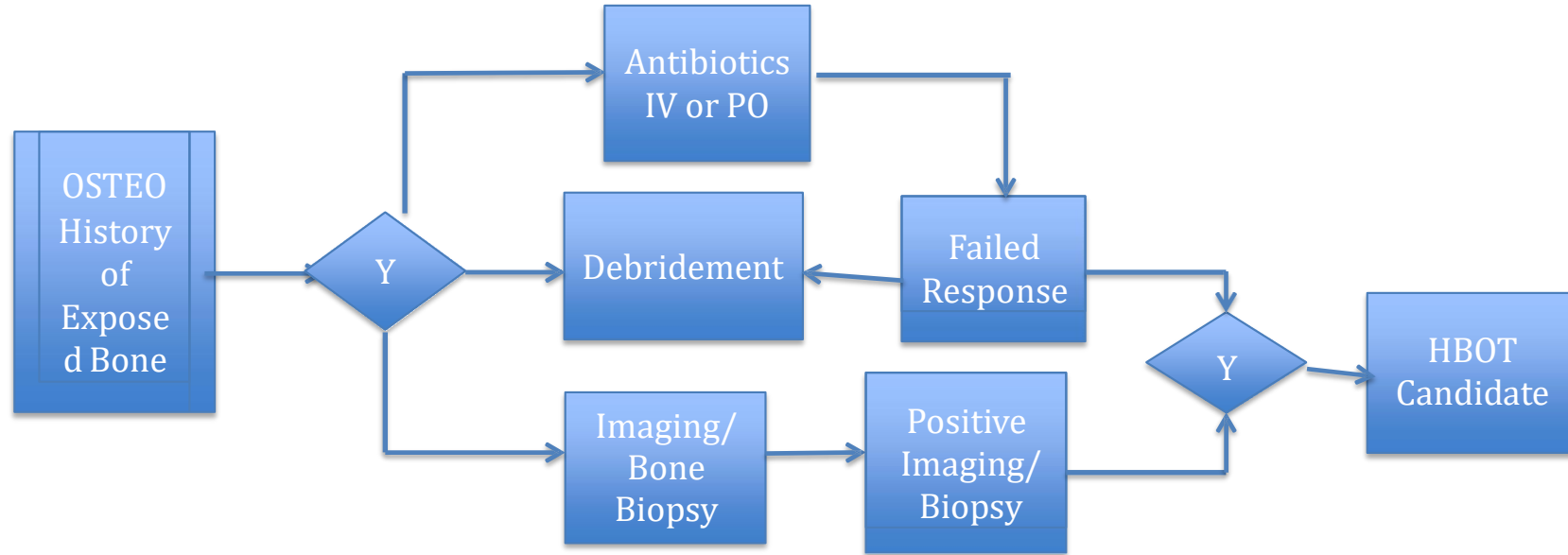


## DOCUMENTATION:

30 days of wound care w/o progress  
Wagner Grade III or greater.  
Vascular Assessment  
Nutritional Assessment  
Diabetes Assessment



# Chronic Refractory Osteomyelitis



## DOCUMENTATION:

Initial Consultation substantiating the condition of Osteo.  
Radiology & Bone Culture Report  
Notes from I/D or PCP; antibiotic

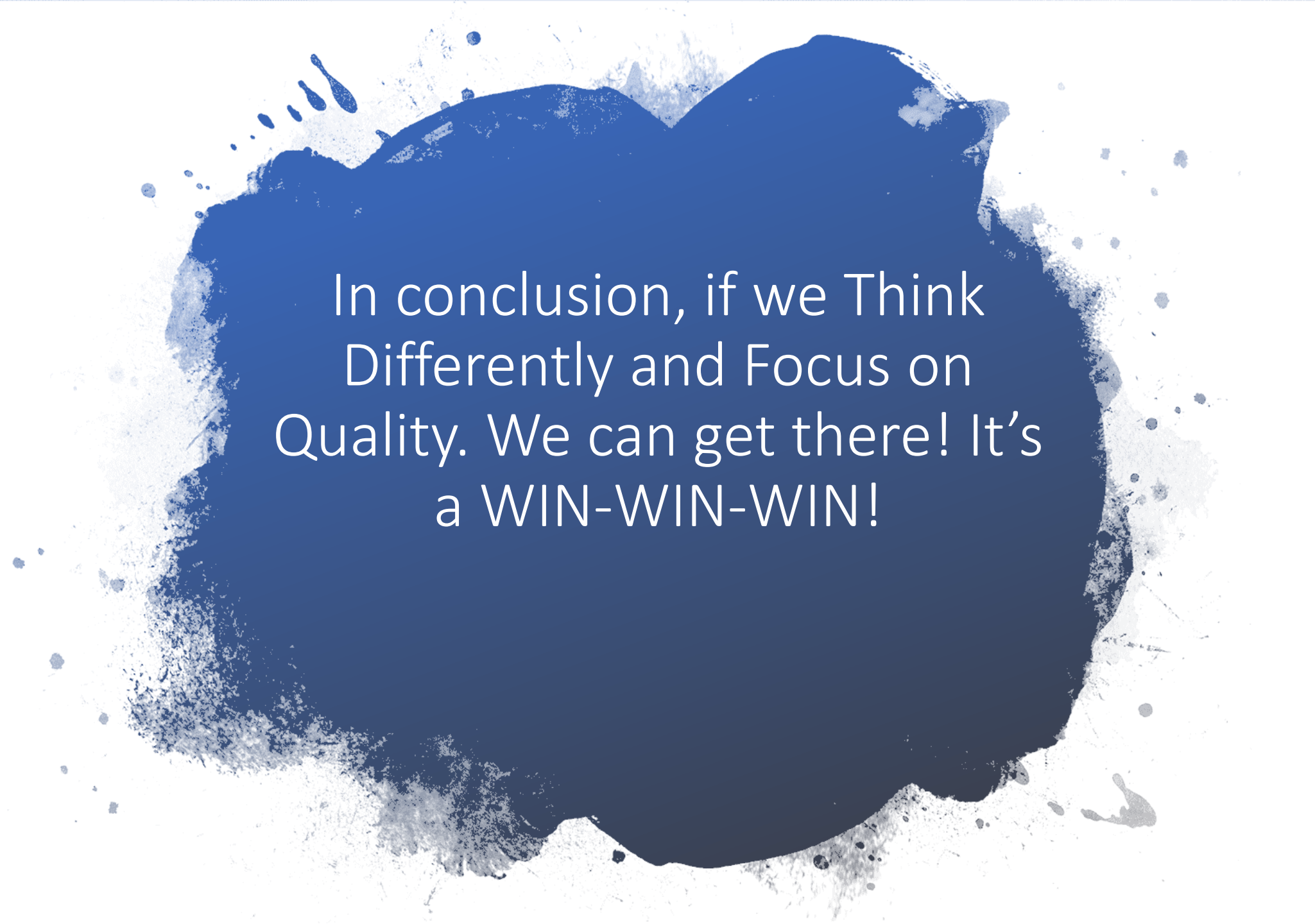


# Why should we embrace the Think HBO Process?

- All **New** Wound Care Patients are sent to Wound Centers for Advance Modalities
- Therefore, all patients should be looked at in the lens of a potential patients for Advance Modalities, including HBOT.
- HBOT like TCC, MLC, BSS, should be a candidate until RULED OUT!







In conclusion, if we Think  
Differently and Focus on  
Quality. We can get there! It's  
a WIN-WIN-WIN!

