

EFFECTIVE DATE: 10 | 01 | 2015

POLICY LAST UPDATED: 09 | 02 | 2015

OVERVIEW:

Hyperbaric oxygen therapy (HBOT) involves breathing 100% oxygen at a pressure of more than 1 atmosphere (atm). It is generally applied systemically with the patient inside a hyperbaric chamber. It can also be applied topically; that is, the body part to be treated is isolated, e.g., in an inflatable bag and exposed to pure oxygen.

MEDICAL CRITERIA

Failure to respond to standard wound care

Failure to respond to standard wound care is defined as no measurable signs of healing after a minimum of 30 consecutive days of treatment. In addition, the clinical information submitted must document that all of the following have been addressed:

1. Assessment of a patient's vascular status and correction of any vascular problems in the affected limb if possible,
2. Nutritional status,
3. Glucose control (if diabetic),
4. Debridement by any means to remove devitalized tissue,
5. Maintenance of a clean, moist bed of granulation tissue with appropriate moist dressings, appropriate off-loading, and
6. Necessary treatment to resolve any infection that might be present.

PRIOR AUTHORIZATION:

BlueCHiP for Medicare and Commercial Products

Prior authorization is recommended and obtained via the online tool for participating providers. See the Related Policies section.

POLICY STATEMENT:

HBOT is covered with for the following conditions when filed with the applicable diagnosis noted in the coding section.

- Actinomycosis
- Acute carbon monoxide intoxication
- Acute traumatic peripheral ischemia
- Crush injuries and suturing of severed limbs
- Decompression illness
- Cyanide poisoning
- Gas embolism
- Gas gangrene
- Osteoradionecrosis
- Progressive necrotizing infections (necrotizing fasciitis)
- Soft tissue radionecrosis
- For any condition in which the severity warrants inpatient care (e.g., profound anemia with exceptional blood loss: only when blood transfusion is impossible or must be delayed)
- Pre- and post-treatment for patients undergoing dental surgery (non-implant related) of an irradiated jaw

For wounds that fail to respond to standard wound care, HBOT is medically necessary when the medical criteria is met.

HBOT is not medically necessary for the following indications as due to limited peer reviewed studies to support its clinical efficacy have not been established:

- Treatment of autism spectrum disorders
- early treatment to reduce the side effects of soft tissue clarify radiation therapy
- Topical hyperbaric oxygen therapy

For Simultaneous use of systemic HBOT and Negative Pressure wound closure, medical criteria for each device must be met using the web based authorization tool.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Evidence of Coverage, Subscriber Agreement, or Benefit Booklet for applicable Rehabilitative/Surgery coverage.

Note: Services rendered by institutional providers apply to the members Surgery benefit.
Services rendered by professional providers apply to the members rehabilitative services benefit.

BACKGROUND

Hyperbaric Oxygen Therapy

Hyperbaric oxygen therapy (HBO) is a treatment delivering higher pressure of oxygen to the tissues. There are two types of administration.

Systemic Hyperbaric Oxygen Therapy

A patient receiving systemic hyperbaric oxygen therapy is entirely enclosed in a pressurized chamber and breathes pure oxygen at a pressure greater than one atmosphere (the pressure of oxygen at sea level). The systemic circulation delivers the highly oxygenated blood to the wound site. Treatment may be administered in a monoplace (one person) or multiplace (two or more person) chamber with the patient receiving pure oxygen by mask, head tent, or endotracheal tube.

The use of systemic HBO therapy as an adjunctive therapy is typically covered only after there are no measurable signs of healing after a minimum of 30 days of treatment with standard wound therapy. Failure to respond to standard wound care is defined as no measurable signs of healing after a minimum of 30 consecutive days. HBO is used in as an adjunct to standard wound care

Topical Hyperbaric Oxygen Therapy

Topical hyperbaric oxygen therapy (THBO) is a treatment delivering oxygen directly to a moist, open wound. THBO uses appliances to enclose the wound area and a conventional oxygen tank. Treatment may be performed in the office or when properly trained, without supervision by the patient in the home. Topical hyperbaric oxygen therapy is not covered as its clinical efficacy has not been established.

Simultaneous use of systemic hyperbaric oxygen therapy and vacuum-assisted wound closure

Wounds failing to heal due to persistent infection, inadequate perfusion, hypoxia, cellular failure, repetitive trauma, or tissue injury may benefit from the simultaneous use of HBO and VAC.

CODING

The following code is medically necessary when filed with a covered diagnosis or medical criteria has been met:

99183 Physician attendance and supervision of hyperbaric oxygen therapy, per session

G0277 Hyperbaric oxygen under pressure full body chamber, per 30 minutes

The following codes are not medically necessary:

A4575 Topical hyperbaric oxygen chamber, disposable

E0446 Topical oxygen delivery system, not otherwise specified, includes all supplies and accessories

The following are covered ICD-9 and ICD-10 diagnosis:

ICD-9-CM codes:

- 039.0 Cutaneous actinomycotic infection
- 039.1 Pulmonary actinomycotic infection
- 039.2 Abdominal actinomycotic infection
- 039.3 Cervicofacial actinomycotic infection
- 039.4 Madura foot
- 039.8 Actinomycotic infection of other specified sites
- 039.9 Actinomycotic infection of unspecified site
- 040.0 Gas gangrene
- 444.21 Arterial embolism and thrombosis of upper extremity
- 444.22 Arterial embolism and thrombosis of lower extremity
- 444.81 Embolism and thrombosis of iliac artery
- 526.89 Other specified diseases of the jaws
- 728.86 Necrotizing fasciitis
- 730.10 Chronic osteomyelitis, site unspecified
- 730.11 Chronic osteomyelitis involving shoulder region
- 730.12 Chronic osteomyelitis involving upper arm
- 730.13 Chronic osteomyelitis involving forearm
- 730.14 Chronic osteomyelitis involving hand
- 730.15 Chronic osteomyelitis involving pelvic region and thigh
- 730.16 Chronic osteomyelitis involving lower leg
- 730.17 Chronic osteomyelitis involving ankle and foot
- 730.18 Chronic osteomyelitis involving other specified sites
- 730.19 Chronic osteomyelitis involving multiple sites
- 902.53 Injury to iliac artery
- 903.01 Injury to axillary artery
- 903.1 Injury to brachial blood vessels
- 904.0 Injury to common femoral artery
- 904.41 Injury to popliteal artery
- 927.00 Crushing injury of shoulder region
- 927.01 Crushing injury of scapular region
- 927.02 Crushing injury of axillary region
- 927.03 Crushing injury of upper arm
- 927.09 Crushing injury of multiple sites of upper arm
- 927.10 Crushing injury of forearm
- 927.11 Crushing injury of elbow
- 927.20 Crushing injury of hand(s)
- 927.21 Crushing injury of wrist
- 927.8 Crushing injury of multiple sites of upper limb
- 927.9 Crushing injury of unspecified site of upper limb
- 928.00 Crushing injury of thigh
- 928.01 Crushing injury of hip
- 928.10 Crushing injury of lower leg
- 928.11 Crushing injury of knee
- 928.20 Crushing injury of foot
- 928.21 Crushing injury of ankle
- 928.3 Crushing injury of toe(s)
- 928.8 Crushing injury of multiple sites of lower limb
- 928.9 Crushing injury of unspecified site of lower limb
- 929.0 Crushing injury of multiple sites, not elsewhere classified

929.9	Crushing injury unspecified site
958.0	Air embolism as an early complication of trauma
986	Toxic effect of carbon monoxide
987.7	Toxic effect of hydrocyanic acid gas
989.0	Toxic effect of hydrocyanic acid and cyanides
990	Effects of radiation, unspecified
993.2	Other and unspecified effects of high altitude
993.3	Caisson disease
996.52	Mechanical complication due to other tissue graft, not elsewhere classified
996.90	Complications of reattached extremity or body part, unspecified extremity
996.91	Complications of reattached extremity or body part, forearm
996.92	Complications of reattached extremity or body part, hand
996.93	Complications of reattached extremity or body part, finger(s)
996.94	Complications of reattached extremity or body part, upper extremity, other and unspecified
996.95	Complications of reattached upper extremity or body part, foot and toe (s)
996.96	Complications of reattached extremity or body part, Other specified body part
996.99	Complication of other specified reattached body part
999.1	Air embolism as a complication of medical care, not elsewhere classified

ICD-10-CM codes:

A42.0	Pulmonary actinomycosis
A42.1	Abdominal actinomycosis
A42.2	Cervicofacial actinomycosis
A42.81	Actinomycotic meningitis
A42.82	Actinomycotic encephalitis
A42.89	Other forms of actinomycosis
A42.9	Actinomycosis, unspecified
A43.0	Pulmonary nocardiosis
A43.1	Cutaneous nocardiosis
A43.8	Other forms of nocardiosis
A43.9	Nocardiosis, unspecified
A48.0	Gas gangrene
B47.1	Actinomycetoma
B47.9	Mycetoma, unspecified
I74.2	Embolism and thrombosis of arteries of the upper extremities
I74.3	Embolism and thrombosis of arteries of the lower extremities
I74.4	Embolism and thrombosis of arteries of extremities, unspecified
I74.5	Embolism and thrombosis of iliac artery
L08.1	Erythrasma
M27.8	Other specified diseases of jaws
M72.6	Necrotizing fasciitis
M86.30	Chronic multifocal osteomyelitis, unspecified site
M86.311	Chronic multifocal osteomyelitis, right shoulder
M86.312	Chronic multifocal osteomyelitis, left shoulder
M86.319	Chronic multifocal osteomyelitis, unspecified shoulder
M86.321	Chronic multifocal osteomyelitis, right humerus
M86.322	Chronic multifocal osteomyelitis, left humerus
M86.329	Chronic multifocal osteomyelitis, unspecified humerus
M86.331	Chronic multifocal osteomyelitis, right radius and ulna
M86.332	Chronic multifocal osteomyelitis, left radius and ulna
M86.339	Chronic multifocal osteomyelitis, unspecified radius and ulna
M86.341	Chronic multifocal osteomyelitis, right hand
M86.342	Chronic multifocal osteomyelitis, left hand

- M86.349** Chronic multifocal osteomyelitis, unspecified hand
- M86.351** Chronic multifocal osteomyelitis, right femur
- M86.352** Chronic multifocal osteomyelitis, left femur
- M86.359** Chronic multifocal osteomyelitis, unspecified femur
- M86.361** Chronic multifocal osteomyelitis, right tibia and fibula
- M86.362** Chronic multifocal osteomyelitis, left tibia and fibula
- M86.369** Chronic multifocal osteomyelitis, unspecified tibia and fibula
- M86.371** Chronic multifocal osteomyelitis, right ankle and foot
- M86.372** Chronic multifocal osteomyelitis, left ankle and foot
- M86.379** Chronic multifocal osteomyelitis, unspecified ankle and foot
- M86.38** Chronic multifocal osteomyelitis, other site
- M86.39** Chronic multifocal osteomyelitis, multiple sites
- M86.40** Chronic osteomyelitis with draining sinus, unspecified site
- M86.411** Chronic osteomyelitis with draining sinus, right shoulder
- M86.412** Chronic osteomyelitis with draining sinus, left shoulder
- M86.419** Chronic osteomyelitis with draining sinus, unspecified shoulder
- M86.421** Chronic osteomyelitis with draining sinus, right humerus
- M86.422** Chronic osteomyelitis with draining sinus, left humerus
- M86.429** Chronic osteomyelitis with draining sinus, unspecified humerus
- M86.431** Chronic osteomyelitis with draining sinus, right radius and ulna
- M86.432** Chronic osteomyelitis with draining sinus, left radius and ulna
- M86.439** Chronic osteomyelitis with draining sinus, unspecified radius and ulna
- M86.441** Chronic osteomyelitis with draining sinus, right hand
- M86.442** Chronic osteomyelitis with draining sinus, left hand
- M86.449** Chronic osteomyelitis with draining sinus, unspecified hand
- M86.451** Chronic osteomyelitis with draining sinus, right femur
- M86.452** Chronic osteomyelitis with draining sinus, left femur
- M86.459** Chronic osteomyelitis with draining sinus, unspecified femur
- M86.461** Chronic osteomyelitis with draining sinus, right tibia and fibula
- M86.462** Chronic osteomyelitis with draining sinus, left tibia and fibula
- M86.469** Chronic osteomyelitis with draining sinus, unspecified tibia and fibula
- M86.471** Chronic osteomyelitis with draining sinus, right ankle and foot
- M86.472** Chronic osteomyelitis with draining sinus, left ankle and foot
- M86.479** Chronic osteomyelitis with draining sinus, unspecified ankle and foot
- M86.48** Chronic osteomyelitis with draining sinus, other site
- M86.49** Chronic osteomyelitis with draining sinus, multiple sites
- M86.50** Other chronic hematogenous osteomyelitis, unspecified site
- M86.511** Other chronic hematogenous osteomyelitis, right shoulder
- M86.512** Other chronic hematogenous osteomyelitis, left shoulder
- M86.519** Other chronic hematogenous osteomyelitis, unspecified shoulder
- M86.521** Other chronic hematogenous osteomyelitis, right humerus
- M86.522** Other chronic hematogenous osteomyelitis, left humerus
- M86.529** Other chronic hematogenous osteomyelitis, unspecified humerus
- M86.531** Other chronic hematogenous osteomyelitis, right radius and ulna
- M86.532** Other chronic hematogenous osteomyelitis, left radius and ulna
- M86.539** Other chronic hematogenous osteomyelitis, unspecified radius and ulna
- M86.541** Other chronic hematogenous osteomyelitis, right hand
- M86.542** Other chronic hematogenous osteomyelitis, left hand
- M86.549** Other chronic hematogenous osteomyelitis, unspecified hand
- M86.551** Other chronic hematogenous osteomyelitis, right femur
- M86.552** Other chronic hematogenous osteomyelitis, left femur
- M86.559** Other chronic hematogenous osteomyelitis, unspecified femur
- M86.561** Other chronic hematogenous osteomyelitis, right tibia and fibula
- M86.562** Other chronic hematogenous osteomyelitis, left tibia and fibula

M86.569 Other chronic hematogenous osteomyelitis, unspecified tibia and fibula
M86.571 Other chronic hematogenous osteomyelitis, right ankle and foot
M86.572 Other chronic hematogenous osteomyelitis, left ankle and foot
M86.579 Other chronic hematogenous osteomyelitis, unspecified ankle and foot
M86.58 Other chronic hematogenous osteomyelitis, other site
M86.59 Other chronic hematogenous osteomyelitis, multiple sites
M86.60 Other chronic osteomyelitis, unspecified site
M86.611 Other chronic osteomyelitis, right shoulder
M86.612 Other chronic osteomyelitis, left shoulder
M86.619 Other chronic osteomyelitis, unspecified shoulder
M86.621 Other chronic osteomyelitis, right humerus
M86.622 Other chronic osteomyelitis, left humerus
M86.629 Other chronic osteomyelitis, unspecified humerus
M86.631 Other chronic osteomyelitis, right radius and ulna
M86.632 Other chronic osteomyelitis, left radius and ulna
M86.639 Other chronic osteomyelitis, unspecified radius and ulna
M86.641 Other chronic osteomyelitis, right hand
M86.642 Other chronic osteomyelitis, left hand
M86.649 Other chronic osteomyelitis, unspecified hand
M86.651 Other chronic osteomyelitis, right thigh
M86.652 Other chronic osteomyelitis, left thigh
M86.659 Other chronic osteomyelitis, unspecified thigh
M86.661 Other chronic osteomyelitis, right tibia and fibula
M86.662 Other chronic osteomyelitis, left tibia and fibula
M86.669 Other chronic osteomyelitis, unspecified tibia and fibula
M86.671 Other chronic osteomyelitis, right ankle and foot
M86.672 Other chronic osteomyelitis, left ankle and foot
M86.679 Other chronic osteomyelitis, unspecified ankle and foot
M86.68 Other chronic osteomyelitis, other site
M86.69 Other chronic osteomyelitis, multiple sites
M86.8x0 Other osteomyelitis, multiple sites
M86.8x1 Other osteomyelitis, shoulder
M86.8x2 Other osteomyelitis, upper arm
M86.8x3 Other osteomyelitis, forearm
M86.8x4 Other osteomyelitis, hand
M86.8x5 Other osteomyelitis, thigh
M86.8x6 Other osteomyelitis, lower leg
M86.8x7 Other osteomyelitis, ankle and foot
M86.8x8 Other osteomyelitis, other site
M86.8x9 Other osteomyelitis, unspecified sites
S35.511A Injury of right iliac artery, initial encounter
S35.512A Injury of left iliac artery, initial encounter
S35.513A Injury of unspecified iliac artery, initial encounter
S45.001A Unspecified injury of axillary artery, right side, initial encounter
S45.002A Unspecified injury of axillary artery, left side, initial encounter
S45.009A Unspecified injury of axillary artery, unspecified side, initial encounter
S45.011A Laceration of axillary artery, right side, initial encounter
S45.012A Laceration of axillary artery, left side, initial encounter
S45.019A Laceration of axillary artery, unspecified side, initial encounter
S45.091A Other specified injury of axillary artery, right side, initial encounter
S45.092A Other specified injury of axillary artery, left side, initial encounter
S45.099A Other specified injury of axillary artery, unspecified side, initial encounter
S45.101A Unspecified injury of brachial artery, right side, initial encounter
S45.102A Unspecified injury of brachial artery, left side, initial encounter

S45.109A Unspecified injury of brachial artery, unspecified side, initial encounter
S45.111A Laceration of brachial artery, right side, initial encounter
S45.112A Laceration of brachial artery, left side, initial encounter
S45.119A Laceration of brachial artery, unspecified side, initial encounter
S45.191A Other specified injury of brachial artery, right side, initial encounter
S45.192A Other specified injury of brachial artery, left side, initial encounter
S45.199A Other specified injury of brachial artery, unspecified side, initial encounter
S45.201A Unspecified injury of axillary or brachial vein, right side, initial encounter
S45.202A Unspecified injury of axillary or brachial vein, left side, initial encounter
S45.209A Unspecified injury of axillary or brachial vein, unspecified side, initial encounter
S45.211A Laceration of axillary or brachial vein, right side, initial encounter
S45.212A Laceration of axillary or brachial vein, left side, initial encounter
S45.219A Laceration of axillary or brachial vein, unspecified side, initial encounter
S45.291A Other specified injury of axillary or brachial vein, right side, initial encounter
S45.292A Other specified injury of axillary or brachial vein, left side, initial encounter
S45.299A Other specified injury of axillary or brachial vein, unspecified side, initial encounter
S47.1xxA Crushing injury of right shoulder and upper arm, initial encounter
S47.2xxA Crushing injury of left shoulder and upper arm, initial encounter
S47.9xxA Crushing injury of shoulder and upper arm, unspecified arm, initial encounter
S57.00xA Crushing injury of unspecified elbow, initial encounter
S57.01xA Crushing injury of right elbow, initial encounter
S57.02xA Crushing injury of left elbow, initial encounter
S57.80xA Crushing injury of unspecified forearm, initial encounter
S57.81xA Crushing injury of right forearm, initial encounter
S57.82xA Crushing injury of left forearm, initial encounter
S67.20xA Crushing injury of unspecified hand, initial encounter
S67.21xA Crushing injury of right hand, initial encounter
S67.22xA Crushing injury of left hand, initial encounter
S67.30xA Crushing injury of unspecified wrist, initial encounter
S67.31xA Crushing injury of right wrist, initial encounter
S67.32xA Crushing injury of left wrist, initial encounter
S67.40xA Crushing injury of unspecified wrist and hand, initial encounter
S67.41xA Crushing injury of right wrist and hand, initial encounter
S67.42xA Crushing injury of left wrist and hand, initial encounter
S67.90xA Crushing injury of unspecified part(s) of unspecified wrist, hand and fingers, initial encounter
S67.91xA Crushing injury of unspecified part(s) of right wrist, hand and fingers, initial encounter
S67.92xA Crushing injury of unspecified part(s) of left wrist, hand and fingers, initial encounter
S75.001A Unspecified injury of femoral artery, right leg, initial encounter
S75.002A Unspecified injury of femoral artery, left leg, initial encounter
S75.009A Unspecified injury of femoral artery, unspecified leg, initial encounter
S75.011A Minor laceration of femoral artery, right leg, initial encounter
S75.012A Minor laceration of femoral artery, left leg, initial encounter
S75.019A Minor laceration of femoral artery, unspecified leg, initial encounter
S75.021A Major laceration of femoral artery, right leg, initial encounter
S75.022A Major laceration of femoral artery, left leg, initial encounter
S75.029A Major laceration of femoral artery, unspecified leg, initial encounter
S75.091A Other specified injury of femoral artery, right leg, initial encounter
S75.092A Other specified injury of femoral artery, left leg, initial encounter
S75.099A Other specified injury of femoral artery, unspecified leg, initial encounter
S77.00xA Crushing injury of unspecified hip, initial encounter
S77.01xA Crushing injury of right hip, initial encounter
S77.02xA Crushing injury of left hip, initial encounter
S77.10xA Crushing injury of unspecified thigh, initial encounter
S77.11xA Crushing injury of right thigh, initial encounter

- S77.12xA** Crushing injury of left thigh, initial encounter
- S77.20xA** Crushing injury of unspecified hip with thigh, initial encounter
- S77.21xA** Crushing injury of right hip with thigh, initial encounter
- S77.22xA** Crushing injury of left hip with thigh, initial encounter
- S85.001A** Unspecified injury of popliteal artery, right leg, initial encounter
- S85.002A** Unspecified injury of popliteal artery, left leg, initial encounter
- S85.009A** Unspecified injury of popliteal artery, unspecified leg, initial encounter
- S85.011A** Laceration of popliteal artery, right leg, initial encounter
- S85.012A** Laceration of popliteal artery, left leg, initial encounter
- S85.019A** Laceration of popliteal artery, unspecified leg, initial encounter
- S85.091A** Other specified injury of popliteal artery, right leg, initial encounter
- S85.092A** Other specified injury of popliteal artery, left leg, initial encounter
- S85.099A** Other specified injury of popliteal artery, unspecified leg, initial encounter
- S87.00xA** Crushing injury of unspecified knee, initial encounter
- S87.01xA** Crushing injury of right knee, initial encounter
- S87.02xA** Crushing injury of left knee, initial encounter
- S87.80xA** Crushing injury of unspecified lower leg, initial encounter
- S87.81xA** Crushing injury of right lower leg, initial encounter
- S87.82xA** Crushing injury of left lower leg, initial encounter
- S97.00xA** Crushing injury of unspecified ankle, initial encounter
- S97.01xA** Crushing injury of right ankle, initial encounter
- S97.02xA** Crushing injury of left ankle, initial encounter
- S97.101A** Crushing injury of unspecified right toe(s), initial encounter
- S97.102A** Crushing injury of unspecified left toe(s), initial encounter
- S97.109A** Crushing injury of unspecified toe(s), initial encounter
- S97.111A** Crushing injury of right great toe, initial encounter
- S97.112A** Crushing injury of left great toe, initial encounter
- S97.119A** Crushing injury of unspecified great toe, initial encounter
- S97.121A** Crushing injury of right lesser toe(s), initial encounter
- S97.122A** Crushing injury of left lesser toe(s), initial encounter
- S97.129A** Crushing injury of unspecified lesser toe(s), initial encounter
- S97.80xA** Crushing injury of unspecified foot, initial encounter
- S97.81xA** Crushing injury of right foot, initial encounter
- S97.82xA** Crushing injury of left foot, initial encounter
- T57.3x1A** Toxic effect of hydrogen cyanide, accidental (unintentional), initial encounter
- T57.3x2A** Toxic effect of hydrogen cyanide, intentional self-harm, initial encounter
- T57.3x3A** Toxic effect of hydrogen cyanide, assault, initial encounter
- T57.3x4A** Toxic effect of hydrogen cyanide, undetermined, initial encounter
- T58.01xA** Toxic effect of carbon monoxide from motor vehicle exhaust, accidental (unintentional), initial encounter
- T58.02xA** Toxic effect of carbon monoxide from motor vehicle exhaust, intentional self-harm, initial encounter
- T58.03xA** Toxic effect of carbon monoxide from motor vehicle exhaust, assault, initial encounter
- T58.04xA** Toxic effect of carbon monoxide from motor vehicle exhaust, undetermined, initial encounter
- T58.11xA** Toxic effect of carbon monoxide from utility gas, accidental (unintentional), initial encounter
- T58.12xA** Toxic effect of carbon monoxide from utility gas, intentional self-harm, initial encounter
- T58.13xA** Toxic effect of carbon monoxide from utility gas, assault, initial encounter
- T58.14xA** Toxic effect of carbon monoxide from utility gas, undetermined, initial encounter
- T58.2x1A** Toxic effect of carbon monoxide from incomplete combustion of other domestic fuels, accidental (unintentional), initial encounter
- T58.2x2A** Toxic effect of carbon monoxide from incomplete combustion of other domestic fuels, intentional self-harm, initial encounter
- T58.2x3A** Toxic effect of carbon monoxide from incomplete combustion of other domestic fuels, assault, initial encounter

- T58.2x4A** Toxic effect of carbon monoxide from incomplete combustion of other domestic fuels, undetermined, initial encounter
- T58.8x1A** Toxic effect of carbon monoxide from other source, accidental (unintentional), initial encounter
- T58.8x2A** Toxic effect of carbon monoxide from other source, intentional self-harm, initial encounter
- T58.8x3A** Toxic effect of carbon monoxide from other source, assault, initial encounter
- T58.8x4A** Toxic effect of carbon monoxide from other source, undetermined, initial encounter
- T58.91xA** Toxic effect of carbon monoxide from unspecified source, accidental (unintentional), initial encounter
- T58.92xA** Toxic effect of carbon monoxide from unspecified source, intentional self-harm, initial encounter
- T58.93xA** Toxic effect of carbon monoxide from unspecified source, assault, initial encounter
- T58.94xA** Toxic effect of carbon monoxide from unspecified source, undetermined, initial encounter
- T65.0x1A** Toxic effect of cyanides, accidental (unintentional), initial encounter
- T65.0x2A** Toxic effect of cyanides, intentional self-harm, initial encounter
- T65.0x3A** Toxic effect of cyanides, assault, initial encounter
- T65.0x4A** Toxic effect of cyanides, undetermined, initial encounter
- T66.xxxA** Radiation sickness, unspecified, initial encounter
- T70.20xA** Unspecified effects of high altitude, initial encounter
- T70.29xA** Other effects of high altitude, initial encounter
- T70.3xxA** Caisson disease [decompression sickness], initial encounter
- T79.0xxA** Air embolism (traumatic), initial encounter
- T80.0xxA** Air embolism following infusion, transfusion and therapeutic injection, initial encounter
- T85.613A** Breakdown (mechanical) of artificial skin graft and decellularized allodermis, initial encounter
- T85.623A** Displacement of artificial skin graft and decellularized allodermis, initial encounter
- T85.693A** Other mechanical complication of artificial skin graft and decellularized allodermis, initial encounter
- T86.820** Skin graft (allograft) rejection
- T86.821** Skin graft (allograft) (autograft) failure
- T86.822** Skin graft (allograft) (autograft) infection
- T86.828** Other complications of skin graft (allograft) (autograft)
- T86.829** Unspecified complication of skin graft (allograft) (autograft)
- T87.0x1** Complications of reattached (part of) right upper extremity
- T87.0x2** Complications of reattached (part of) left upper extremity
- T87.0x9** Complications of reattached (part of) unspecified upper extremity
- T87.1x1** Complications of reattached (part of) right lower extremity
- T87.1x2** Complications of reattached (part of) left lower extremity
- T87.1x9** Complications of reattached (part of) unspecified lower extremity
- T87.2** Complications of other reattached body part

RELATED POLICIES

Preauthorization via Web-Based Tool for Procedures

PUBLISHED

Provider Update, November 2015
 Provider Update, January 2015
 Provider Update, September 2012
 Provider Update, September 2011
 Provider Update, December 2010
 Provider Update, January 2010
 Policy Update, October 2007
 Policy Update, October 2006
 Policy Update, January 2006
 Policy Update, May 2004

REFERENCES

Bennett M, Best TM, Babul S, Taunton J, Lepawsky M. *Hyperbaric oxygen therapy for delayed onset muscle soreness and closed soft tissue injury* (Cochrane Review). The Cochrane Library, Issue 1, 2006.

Blue Cross Blue Shield Association Medical Policy Reference. Policy 2.01.04 - Hyperbaric Oxygen Pressurization (HBO)/. Reviewed with literature search/ February 2010.

Carson S, McDonagh M, Russman B et al. *Hyperbaric oxygen therapy for stroke: a systematic review of the evidence*. Clinical Rehab;2005;19(8):819-33.

Cianci P MD. *Advances in the treatment of the diabetic foot: Is there a role for adjunctive hyperbaric oxygen therapy?* Wound Repair & Regeneration Jan/Feb 2004;12:1:2-11.

Garcia-Covarrubias L MD, Mcswain N E Jr MD, Van Meter K MD, Bell R M MD. *Adjuvant Hyperbaric Oxygen Therapy in the Management of Crush Injury and Traumatic Ischemia: An Evidence-Based Approach*. American Surgeon Feb 2005;71: 2:144-151.

Raman G, Kupelnick B, Chew P, Lau J. *A horizon scan: Uses of hyperbaric oxygen therapy*. Technology Assessment Report. Prepared by the Tufts-New England Medical Center Evidence Based Practice Center for the Agency for Healthcare Research and Quality (AHRQ). Rockville, MD: AHRQ; October 5, 2006. Available at: <http://www.cms.hhs.gov/determinationprocess/downloads/id42TA.pdf>.

Rossignol DA, Rossignol LW, Smith S, Schneider C, Logerquist S, Usman A, Neubrandner J, Madren EM, Hintz G, Grushkin B, and Mumpers EA. *Hyperbaric treatment for children with autism: a multicenter, randomized, double-blind, controlled trial*. Biomedical Central Pediatrics;2009;9:21.

Rusyniak DE, Kirk MA, May JD, Kao LW, Brizendine EJ, Welch JL, Cordell WH, Alonso RJ. *Hyperbaric Oxygen Therapy in Acute Ischemic Stroke Results of the Hyperbaric Oxygen in Acute Ischemic Stroke Trial Pilot Study*. Stroke;2003;34;571-574.

Technology Assessment: A Horizon Scan: Uses of Hyperbaric Oxygen Therapy. Agency for Healthcare Research and Quality October 6, 2006

Weaver LK, Hopkins RO, Chan KJ, et al. *Hyperbaric Oxygen for Acute Carbon Monoxide Poisoning*. New England Journal of Medicine; October 3, 2002;347:14:1057-1067.

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