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WOUND CARE AND HYPERBARIC MEDICINE

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Phone: +1-561-776-6066

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EDITORIAL STAFF
Best Publishing Company
Jaclyn Mackey, Publisher
jmackey@bestpub.com

MAGAZINE PRODUCTION
Lorraine Fico-White
lorraine@bestpub.com
Diana Robinson
diana@bestpub.com

ADVERTISING/SPONSORSHIPS
info@bestpub.com

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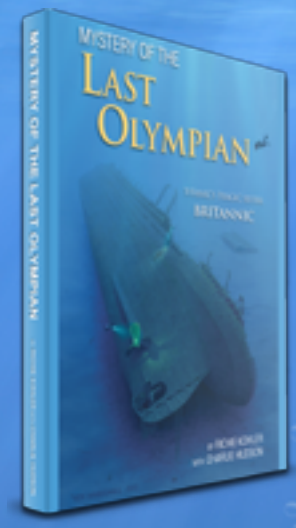

MYSTERY OF THE LAST OLYMPIAN: *Titanic*'s Tragic Sister *Britannic*

by Richie Kohler with Charlie Hudson

For 100 years the mystery surrounding the sinking of *Titanic*'s tragic sister *Britannic* was a riddle waiting to be solved. This book gives you a firsthand account as Richie Kohler takes readers on the intriguing journey from the rise of the magnificent Olympians to the ship's fateful sinking in 1916. He then moves forward in time through multiple expeditions, beginning with the great Jacques Cousteau, who located the wreck of the ocean liner in 1975. Each successive team of divers who risked their lives uncovered new clues, but it was not until 2009 that Kohler and his dive partner definitively pinpointed the secret that had eluded everyone before then.

Join Kohler, host of the History Channel's *Deep Sea Detectives* and featured in the bestselling book *Shadow Divers,* as he solves the *Mystery of the Last Olympian*.

"In Richie Kohler's new book, the same drive for adventure that captivated my father comes alive as Kohler rediscovers the mysteries surrounding the ship's fateful demise. Their journey spans across past and present, honoring the legacy of an unsinkable ship and the determination of those who risked, or even lost, their lives in the search to uncover its secrets."

~ Jean-Michel Cousteau, explorer, environmentalist, educator, and producer

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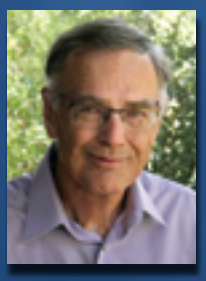
THE CHOICE: *A Story of Survival*

by Monte Anderson

As three friends drove across the Navajo Reservation in northern Arizona after backcountry skiing in Colorado, they talked about their lives. Then one said, "I really shouldn't be alive today."

David Scalia's astounding story occurred in 1982, when a scuba equipment failure caused a devastating accident, but he had a scrapbook documenting everything that happened. He suffered incalculable damage to his body for more than 12 grueling hours. Days later, he was given a profound choice — to live or to die. Almost unbelievable, this is his true story — and it involves some friends and colleagues you may know, including Dr. Gregory Adkisson, Dr. Tom Neuman, and Dr. Paul Phillips.



About the Author: Monte Anderson completed a medical residency at Creighton University and continued his studies with subspecialty training in gastroenterology and hepatology as an army officer at Fort Sam Houston in San Antonio, Texas. After his discharge from the military, most of his career was happily devoted to the Mayo Clinic in Arizona. Feeling that true tales tend to be more compelling than fiction, he has always preferred reading nonfiction, especially since something is always learned in the process. *The Choice: A Story of Survival*, his first effort outside of scientific writing, is nonfiction.

"Dr. Monte Anderson makes his debut in nonmedical writing with The Choice: A Story of Survival and does so with a splash. The nonfiction book relates the fascinating story of his friend's 1982 diving accident near a remote island in Mexico. Dr. Anderson's recounting of the details reflects his tremendous investigative ability, as well as the diver's will to survive."

~ Neil B. Hampson, MD, author of *Cherry Red*

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In This Issue…

To begin a new year of *WCHM*, we welcome both new and returning contributors in the fields of hyperbaric medicine and wound care to share their valuable and insightful expertise.

We welcome back Gretchen Dixon as she once again provides her insight and expertise with billing and coding issues, this time regarding claims paid without supporting clinical documentation. Welcome to Johanna Legaspi, coauthor of this article, as she adds her valuable expertise and insights as well.

Our Clinic in Focus section features Abbott Northwestern Hospital Hyperbaric Oxygen Therapy Clinic in Minneapolis, Minnesota. If you are a part of an exceptional hyperbaric or wound care center, contact us today (*info@bestpub.com*) to be our next featured clinic.

Dr. Enoch Huang, incoming UHMS president at the closing of the 2016 UHMS, discusses the benefits of a UHMS membership for both new members to the field of hyperbaric medicine as well as established and existing experts. UHMS will be celebrating their 50th anniversary next year.

We also welcome back Dr. Jay Shah as he continues his popular Q & A sessions on wound care. This issue provides us with a sneak peek at the new *Wound Care Certification Study Guide 2nd edition*. Presales of this new edition have begun, so reserve your copy today.

Speaking of 50th anniversaries, Happy 50th Anniversary to Best Publishing Company as it continues to publish quality textbooks, study guides, manuals, and nonfiction books in the hyperbaric medicine, wound care, and diving industries.

Please send your comments, articles, industry information, press releases, and updates to *info@bestpub.com*. Share *WCHM* magazine with your colleagues and clients. Add your clinic to our Map of Wound Care and HBO Centers (*www.bestpub.com*).

We look forward to hearing from you!

Lorraine Fico-White
Managing Editor, *WCHM* Magazine

WCHM
WOUND CARE AND HYPERBARIC MEDICINE

Providers: Are You Practicing Mismatching?

Claims Paid Without Supporting Clinical Documentation

By Gretchen Dixon, MBA, RN, CCS, AHIMA ICD-10-CM/PCS Trainer, CPCO; and
Johanna Legaspi, MBA, CPC, CPMA, AHIMA ICD-10-CM/PCS Trainer

Many people have been congratulating each other on how well the transition to the ICD-10 coding system has proceeded with little adjustments. From a compliance viewpoint, however, there is concern over the quality of clinical documentation supporting billed ICD-10-CM codes. Questions to ponder are: What is the true realization from post-October 1, 2015, if an external audit is conducted? Are you absolutely comfortable your clinical documentation (key source supporting medical necessity of provided services) supports the ICD-10-CM code you selected? Guess what we discovered? *Overall, only 43% of clinical documentation actually supported billed/reported ICD-10 codes.*

Mismatching Issue

We conducted a retrospective review of more than 200 providers who select their own ICD-10 codes reported on claims. The review included more than 1,500 claims with more than 3,800 ICD-10-CM diagnoses codes covering a multitude of provider specialties and subspecialties from small to large practices. In our process, clinical documentation details were compared with billed/reported ICD-10 codes.

Initially, we assessed the overview of providers' ICD-10-CM documentation education, noting all of the providers during the implementation and transition phase had attended or participated in some type of formal and informal ICD-10 documentation and coding education based on general information followed with a specialty-focused education. Education continued through specialty physician champions as well as clinical documentation specialists and/or coding liaisons during medical staff meetings or during patient rounds. The self-learning education methods were tracked to ensure 100% participation for all practices.

As this audit project began, we had some questions about the educational content for coding in general and then specifically related to ICD-10-CM as follows:

1. Did the providers receive any overall information regarding Official Guidelines for Coding and Reporting?
2. Did the providers understand how to apply the ICD-10-CM Official Guidelines for Coding and Reporting?
3. Do the providers understand clinical documentation for ICD-10-CM requires additional details to support accurate code selection?
4. Do the providers understand the specificity available with ICD-10-CM codes and how each ICD-10-CM code supports a patient's level of acuity, intensity of services, and complexity of care for each encounter?
5. Why do providers continue to code medical conditions that no longer exist as if the condition is an acute or ongoing condition?

Our answers to each question were more negative than positive. For demonstration purposes only, the chart below notes some of the common specialties we found to have an accuracy rate below 50%. *Where does your specialty fall in the accuracy rate?* Do you know? Maybe not.

Table 1. General overview of specialties with accuracy rates below 50%

SPECIALTY	ACCURACY RATE
Ophthalmology	8%
Vascular Surgery	10%
Plastic Surgery	22%
Cardiothoracic Surgery	24%
Endoscopy	30%
Radiation Oncology	30%
Orthopedics	30%
Psychiatry	38%
ED Pediatrics	39%
Pulmonary Medicine	43%
Neurology	48%

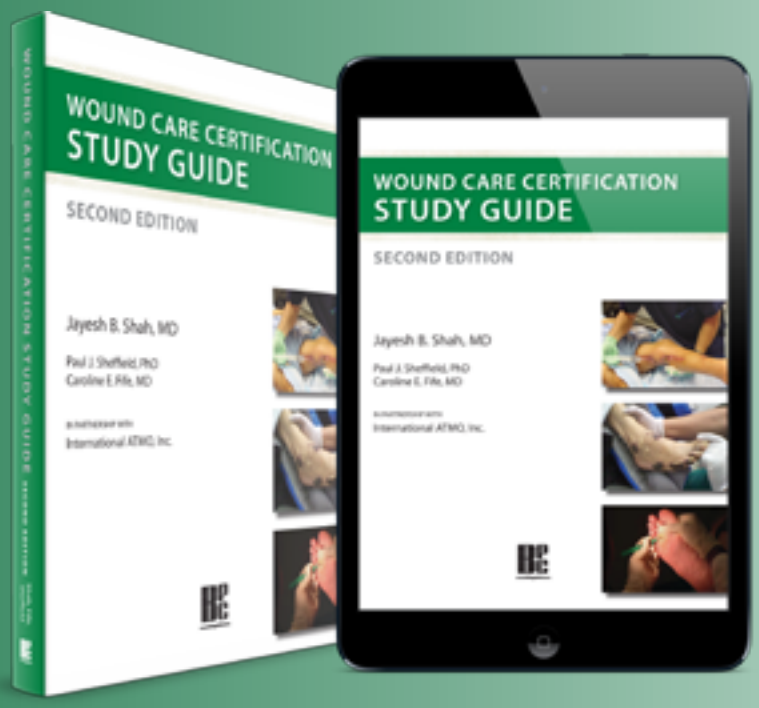
WOUND CARE CERTIFICATION STUDY GUIDE
SECOND EDITION

DR. JAYESH SHAH, in partnership with **DR. PAUL SHEFFIELD** of International ATMO and **DR. CAROLINE FIFE** of Intellicure, has created the perfect tool for anyone studying to take a wound certification exam — AAWM, APWCA, CWCN, NAWC, and more.

Now in its second edition, the *Wound Care Certification Study Guide* is fully updated with the latest clinical practices and regulatory and reimbursement information. Drs. Shah, Sheffield, and Fife, along with numerous contributing authors who are considered experts in the field of wound care, have collaborated to create the best possible study resource for these important examinations. The content focuses on key information that wound care certifying agencies consider important in their examinations, with self-assessment questions at the conclusion of each chapter to help participants identify areas of comprehension and concepts that require further study.

This all-inclusive study guide includes:

- Thirty-three informative chapters that review the core principles candidates need to know to obtain wound care certification
- New chapter on hyperbaric oxygen therapy by Yvette Hall, Patricia Rios, and Jay Shah
- Added section on PQRS and quality reporting by Dr. Caroline Fife
- A full-length post-course exam complete with answers and explanations
- Comprehension questions with detailed answers at the end of each chapter
- More than 200 color photos, tables, and diagrams
- Clinical pathways with best practice recommendations for the practitioner
- New chapter on hyperbaric oxygen therapy and added section on PQRS and quality reporting
- Guidance on how to choose the certification



"It was my pleasure to review the second edition of the Wound Care Certification Guide. I found the chapters to be well written and organized, building upon the science of wound healing while including practical clinical applications and sample questions. This text should be useful to all wound care professionals, including the novice and expert alike. It will certainly be an important adjunct for anyone preparing for board examinations."

— Robert J. Snyder, DPM, MSc, CWS; Professor and Director of Clinical Research, Barry University SPM; Past President, Association for the Advancement of Wound Care; Past President, American Board of Wound Management

"The manuscript is the result of a monumental amount of work. I congratulate all involved."

— Terry Treadwell, MD, FACS; Medical Director, Institute for Advanced Wound Care

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Where Do We Begin To Fix the Mismatching?

CMS has given providers a year from October 1, 2015, as somewhat of a grace period to fine-tune coding skills as noted in their Clarifying Question and Answer Document (Reference 2) on how ICD-10 codes need to be selected. Careful reading of this document will provide the provider/coder a resource to understand the necessity to select an ICD-10-CM code using all of the required characters to provide the highest level of specificity for the medical condition.

CMS and the healthcare industry use the accuracy rate of 95% as a guideline for any person performing coding and/or billing activities. Therefore, this is the goal everyone needs to be aiming toward. With accuracy rates below 50%, however, start with the following steps:

- Focus on your specialty's most common specific ICD-10-CM selected codes.
  - — Select the top five diagnoses.
  - — Educate/discuss the specific elements within the five diagnoses that need to be clinically documented.
  - — Develop documentation hint tools to improve the clinical information allowing for an improved ICD-10-CM code selection.
- Conduct a prebilling review by your coder comparing each provider's clinical documentation with selected ICD-10-CM codes.
  - — Benchmark with an initial review of 5-10 claims/encounters per provider.
    - Use the findings for documentation improvement as starting points.
    - Set a goal to increase the accuracy of each ICD-10 code selection supported by clinical documentation.
- Continue with internal reviews focusing on clinical documentation and accuracy of ICD-10-CM code selection improvement.
  - — If the accuracy rate is below 70%:
    - Identify the top three issues with coding and/or clinical documentation.
    - Provide specific specialty education.
    - Develop clinical documentation education for the provider.
  - — If the determined accuracy goal rates are not improving toward at least 85%, then the focus may need to be specific to the group of providers or to a specific provider.
    - Collaboration with a physician champion and coder liaison may be necessary to ensure specific documentation/coding weaknesses are addressed in a timely manner and corrected.
  - — Establishing a timeline for ongoing monitoring with education flexibility is a must to ensure competency of ICD-10-CM code selection is supported by clinical documentation.
- Select diagnoses from the Problem List that often are not the reason for the encounter.
- Ensure all providers authenticate/append a signature including date for every encounter whether through the electronic health record or handwritten.

Challenge to Diminish Compliance Risk

Accurate code selection and clinical documentation compliance is a challenge in all healthcare settings, while inaccuracy can place the organization at risk from all directions, especially with external auditing organizations. No organization wants to suffer regulatory fines or civil and criminal penalties along with a damaging reputation. Therefore, focus on your coding accuracy to achieve documentation and coding compliance and anticipate financial benefits. The benefits really have not changed in years and include the following:

- Overcoding creates a compliance risk with the possibility of fraudulent submission of claims.
  - — Per the OIG: Civil Monetary Penalties (CMP) consist of treble damage per claim amount plus from $5,000 up to $10,000 per claim to begin.
- Undercoding creates a financial risk of losing money when documentation supports a more accurate code for the provided service.
- Decrease the amount of time and effort of reworking rejected claims or having to write-off costs of service.

Mismatching Coding and Documentation

It is our recommendation to conduct proactive activities to possibly mitigate high-compliance risk liabilities:

- Validate that each encounter has been authenticated by the provider.
  - — Handwritten clinical documentation must include a legible signature and credentials and be dated.
    - If the signature is not legible, a sample of the provider's signature needs to be entered into a logbook with the provider's printed name, credentials, and date of entry.
    - Refer to the CMS issued Transmittal 327 on March 16, 2010, titled "Signature Guidelines for Medical Review Reporting." This transmittal reference is located in the Resources section at the end of this article with the specific website.

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- Establish policies and procedures for routine audits to ensure ICD-10-CM codes are supported with detailed clinical documentation.
  — Review the correct use of the Problem List.
    - Add new problems.
    - Update problem list at each visit as necessary, and move to the inactive/past medical history resolved problems such as:
      — Medical problems resolved but have clinical importance
      — Surgical procedures
    - Signs and symptoms are only temporary and should be replaced with a refined diagnosis when workups are completed.
    - Minor complaints do not belong on the problem list.
    - Nonproblems do not belong on the problem list.
- Develop a process to evaluate and identify the accuracy rate for overall clinic, office, and department and accuracy rate per provider.
- Develop clinical documentation education to be given to providers based on findings from each review period as designated by the reviewer. The goal is to ensure that the accuracy rate of selecting ICD-10-CM coding improves toward the goal of 95%.
- Maintain reports documenting compliance with the Policies and Procedures.

Examples

The following are examples from a few provider specialty services with mismatching ICD-10 codes and clinical documentation.

Radiotherapy side effects/complication code selection

Radiotherapy ICD-10-CM code selection involves a convoluted path through the ICD-10-CM coding manual, beginning with a "must" understanding of each code's description and directions for selecting the most accurate code. Understanding Official Guidelines for Coding and Reporting is imperative to selecting the most accurate ICD-10-CM code.

At issue is the crosswalk of ICD-9-CM 990: effects of radiation, unspecified, which takes the coder to ICD-10-CM code T66.XXXA — radiation sickness, unspecified, initial encounter. Since this in an inappropriate ICD-10-CM code selection, there is no need to provide detail to the 7th character. Below is how ICD-10-CM code T66 (requiring a 7th character) appears in the coding manual:

T66 Radiation sickness, unspecified (7th character required)[1]
Excludes1 specific adverse effects of radiation, such as:
Burns — go to category T20-T31
Leukemia — go to category C91-C95
Radiation gastroenteritis and colitis — go to category K52.0
Radiation pneumonitis — go to category J70.0
Radiation-related disorders of the skin and subcutaneous tissue — go to the category L55-L59 *[L59 will be the family code to select]*
Radiation sunburn — go to category L55.7

The appropriate 7th character is to be added to code T66:
A Initial encounter
D Subsequent encounter
S Sequela

According to the excerpt from 2016 Official Guidelines for Coding and Reporting[2]

Section 1 — Conventions, General Coding Guidelines and Chapter Specific Guidelines, Subsection: 12.a. notes the below directions for a coder to follow and understand:

12. Excludes Notes
The ICD-10-CM has two types of excludes notes. Each type of note has a different definition for use, but they are all similar in that they indicate that codes excluded from each other are independent of each other.

a. **Excludes1:** A type 1 Excludes note is a pure excludes note. It means "NOT CODED HERE!" *An Excludes1 note indicates that the code excluded should never be used at the same time as the code above the Excludes1 note.* An Excludes1 is used when two conditions cannot occur together, such as a congenital form versus an acquired form of the same condition.

Therefore, the coder interpreting this directional needs to reference the ICD-10-CM code family of L55-L59. *The correct ICD-10-CM family would be L59.* Other disorders of skin and subcutaneous tissue related to radiation with two choices to select from are:

L59.8: Other specified disorders of the skin and subcutaneous tissue related to radiation or

L59.9: Disorder of the skin and subcutaneous tissue related to radiation, unspecified (this may be the only option based on a third-party payer's unique policies and procedures for billing).

Surgical Care of various specialties was audited as noted in the above chart. The following is a sample of clinical documentation and code selection weaknesses:

- **Plastic Surgery** — Scenario: Female patient has right breast cancer and is requesting a consultation premastectomy regarding a right breast mastectomy with reconstruction. The provider ICD-10-CM billed the following codes without supporting clinical documentation evidence:
  — N64.89: Other specified disorders of breast
  — Z85.3: Personal history of malignant neoplasm of breast
  — Z90.11: Acquired absence of the right breast and nipple
  — **Not Coded: C50.911:** *Malignant neoplasm of unspecified site of the right female breast is supported by clinical documentation*
- **Pediatric Surgery** — Scenario: History of cervical lymphadenitis, resolved with treatment using antibiotic and steroid regime. Presents for follow-up noted "without any evidence of lymphadenitis." Return to office as needed. The provider billed the following ICD-10-CM code without supporting clinical documentation evidence the lymph nodes were still enlarged:
  — R59.0: Localized enlarged lymph nodes
  — **Missed Code Z09:** *Encounter for FU examination after completed treatment for conditions other than malignant neoplasm*

Orthopedics clinical documentation in ICD-10-CM requires several elements to be documented. The majority of code selections identified were for unspecific ICD-10-CM codes, thus missing these specific elements. The following ICD-10-CM elements for selection of follows were missing on the majority of claims reviewed:

- Acuity (Acute, Chronic)
- Anatomical specific location
- Etiology
- Laterality — Right, Left, Bilateral
- Episode of care is the same as the type of encounter (initial, subsequent, sequela)

Examples Coding Selection:

- M41.9: Scoliosis, unspecified (missing type, age related and anatomical location)
  - — **Correct code M41.124:** *Adolescent idiopathic scoliosis, thoracic region is based on detailed documentation*
- M25.519: Pain in unspecified shoulder (laterality)
  - — **Correct code M25.511:** *Pain in right shoulder based on documentation*

Radiation Oncology ICD-10-CM clinical documentation needs to include specific details related to the neoplasm under treatment or post-treatment monitoring. The following ICD-10 example may provide you with the level of clinical documentation that is necessary to support ICD-10 codes.

- A female had invasive lobular carcinoma of the upper-outer quadrant of the right breast, which was removed with a right mastectomy. Also, the patient had completed the chemotherapy regime and was now ready to begin radiotherapy. The condition is still under active treatment and requires an active condition code.
  - — The billed ICD-10 code was **C50.919**: Malignant neoplasm of unspecified site of unspecified female breast
  - — **Missed ICD-10-CM code C50.411:** *Malignant neoplasm of upper-outer quadrant of right female breast*
  - — **Missed ICD-10-CM code Z92.21:** *Personal history of antineoplastic chemotherapy*
  - — **Missed ICD-10-CM code Z90.11:** *Acquired absence of right breast and nipple*

Proactiveness Begins Now

Be proactive now, and get out of the mismatching process by recognizing and understanding the nuances of ICD-10CM diagnosis code selection. Augment in detail your clinical documentation to support your selected ICD-10-CM diagnosis code to its highest level of specificity. Your coding data will then accurately support your patient's level of acuity and intensity of services with complexity of care reported on claims to your insurers, accurately reflect patient care, professional profiles, etc.

NOTE: It is imperative to understand clinical documentation and ICD-10-CM code selections are under the microscope from many different levels. CMS and some third-party payers have already identified ICD-10 coding and documentation risks at this early stage after the transition. Although claims are being paid, the challenge is to ensure each provider's clinical documentation is accurate and complete, thus supporting

each ICD-10-CM code selected for reporting (billing and data use).

Takeaways

1. Take action by performing oversight prebilling review of ICD-10-CM codes selected by providers, and determine if their clinical documentation supports the ICD-10-CM code selection.
2. Understand the clinical documentation details required for the top 10 diagnoses to obtain the highest level of specificity for each ICD-10-CM code.
3. Engage ICD-10-CM subject matter experts (coders, CDIS, ICD-10 trainers) for support of coding questions.
4. Institute an incremental goal toward reaching the industry's coding accuracy of 95% consistently.

Notes

[1]Optum 360, ICD-10-CM Professional for Hospitals 2016 Coding Manual, pg. 1129 ICD-10 code T66

[2]Optum 360, ICD-10-CM Professional for Hospitals 2016 Coding Manual, Official Guidelines for Coding and Reporting pg. 3 Subsection 12.a.

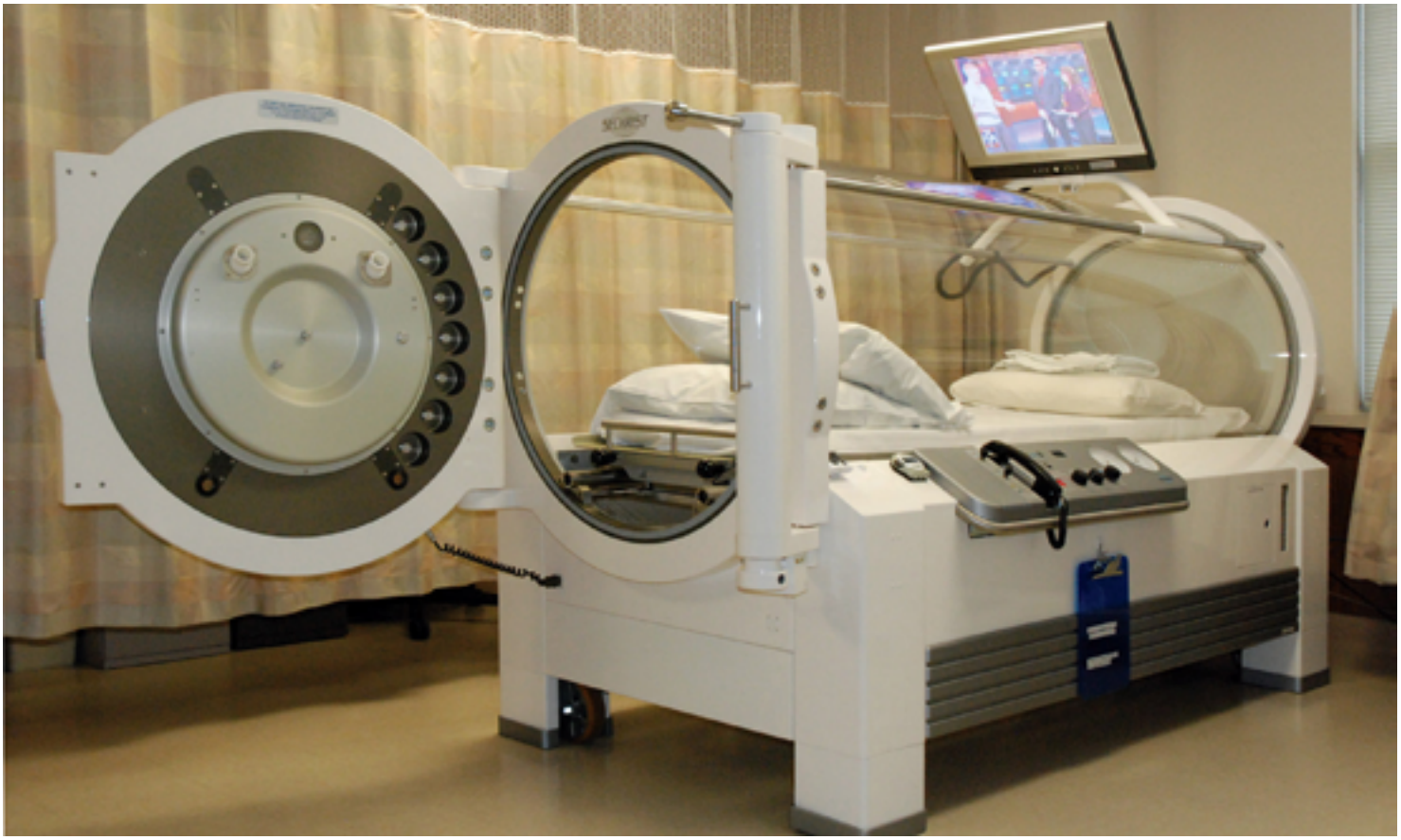
Resources

1. Department of Health and Human Services. ICD-10-CM/PCS The Next Generation of Coding; 2015 June. Available at: https://www.cms.gov/Medicare/Coding/ICD10/downloads/ICD-10Overview.pdf
2. CMS Questions and Answers Related to the July 6, 2015 CMS/AMA Joint Announcement and Guidance Regarding ICD-10 Flexibilities. Refer to the specific questions 3, 4, 6, 7. Available at: https://www.cms.gov/Medicare/Coding/ICD10/Clarifying-Questions-and-Andwers-Related-to-the-July-6-2015-CMS-AMA-Joint-Announcement.pdf
3. CMS Transmittal 327. Signature Guidelines for Medical Review Purposes; 2010 March 16. Available at: https://www.cms.gov/Regulations-and-Guidance/Guidance/Trandmittals/downloads/r327pi.pdf
4. Optum 2016 ICD-10-CM Professional Coding Manual
5. CMS ICD-10-CM 2016 Official Guidelines for Coding and Reporting website. Available at: https://www.cms.gov/Medicare/Coding/ICD10/Downloads/2016-ICD-10-CM-Guidelines.pdf
6. OIG–A Road for New Physicians: Fraud and Abuse Laws. Available at: http://oig.hhs.gov/compliance/physician-education/01laws.asp ■

About the Authors

GRETCHEN DIXON, MBA, RN, CCS, is the owner of Professional Compliance Strategies (PCS), LLC, and consults on outpatient departments and physician services. She has provided revenue-cycle compliance audits of services with a focus on wound care department operations for more than 10 years. She holds several credentials including an MBA in healthcare management, an RN with a practicing license in New York, and 23 multistate licensure from Virginia, AHIMA Certified Coding Specialist (CCS), AHIMA ICD-10-CM/PCS Approved Trainer, and is an AAPC Certified Professional (Healthcare) Compliance Officer. A longtime internal healthcare auditor, Dixon identifies issues through audits of D, C, B (documentation, coding and billing) of provided services. The outcome of each audit determines the topics of education to be provided to the staff and physicians, as she proactively believes education is the key to having complete, accurate, and consistent documentation supporting reimbursement for billed services. If you are interested in her services, contact Dixon at gmdixon@cox.net or call 1-615-210-7476.

JOHANNA S. LEGASPI MBA, CPC, CPMA, is a senior consultant at Hayes Management Consulting with more than 10 years of healthcare auditing experience. She holds credentials from AAPC as a certified professional coder and a certified professional medical auditor, is certified in EpicCare Ambulatory, and has been trained using MDAudit Professional Program. Legaspi performs ICD-10 clinical documentation readiness by analyzing clinical diagnosis based on documentation. She has developed and documented project team procedures for implementing system changes and other tasks. She has developed relationships with providers and staff to ensure a smooth transition into their EMR operations.



CLINIC IN FOCUS

Abbott Northwestern Hospital Hyperbaric Oxygen Therapy Clinic

Continuing our series of interviews featuring outstanding hyperbaric and wound care centers around the world, we spotlight in this issue the Abbott Northwestern Hospital Hyperbaric Oxygen Therapy Clinic in Minneapolis, Minnesota.

What are the most common indications treated at your clinic?

- Diabetic foot ulcer
- Radiation-related soft tissue injury including radiation cystitis
- Osteoradionecrosis
- Chronic refractory bone infection
- Failed flap or graft
- Deep soft tissue infection

What is the most memorable treatment success story that has come out of your clinic?

A young man with type 1 diabetes presented with spontaneous deep foot ulcer that was complicated with deep soft tissue and bone infection. Initially, amputation was considered. Using hyperbaric oxygen treatment (HBOT) in conjunction with debridement, wound care and antibiotics, however, he healed completely.

A 66-year-old female with a history of rheumatoid arthritis and Felty's syndrome presented with a nonhealing ulcer on her left leg caused by a trauma. She failed multiple treatment options including debridement, different wound dressings, antibiotics, anti-inflammatories and vein-closure procedure. She finally healed with skin graft following HBOT that prepared the wound bed before the procedure.

Do you work with a management company?
We do not work with a management company.

If you had to pick two things to attribute your clinic's success to, what would it be?

- We use a multidisciplinary approach with experienced staff involving vascular medicine, vascular surgery, general surgery, plastic surgery, infectious disease, and internal medicine.
- We monitor our outcome and use data for better patient care.

Are there any additional questions you'd like to answer, or any other information about your clinic you'd like to showcase?

- We published our HBOT outcome data in *Annals of Vascular Surgery* (*Ann Vasc Surg.* 2015 Feb; 29(2): 206-14).
- We published another peer-review paper related to the indications of HBOT (*J Wound Care.* 2014 Oct; 23(10 Suppl):S18-22).
- We have provided excellent service to the metropolitan and suburban areas with very memorable success stories. ■

CLINIC DETAILS

Clinic Name: Abbott Northwestern Hospital Hyperbaric Oxygen Therapy Clinic

Location: 800 East 28th Street, Suite W4300, Minneapolis, MN 55407

Website: http://www.allinahealth.org/Abbott-Northwestern-Hospital/Services/Hyperbaric-oxygen-therapy

Phone: 612-863-9774

How long in business: 7 years

How many chambers: 3

Chamber types: Sechrist 3200

How many physicians/nurses/CHTs: 11 physicians, 3 nurses, 2 CHTs, 3 hyperbaric assistants

Medical director: Dr. Nedaa Skeik, MD, vascular medicine

Date of UHMS accreditation: n/a

The Benefits of UHMS Membership

By Enoch Huang, MD

The Undersea and Hyperbaric Medical Society (UHMS) is the oldest and most prominent scientific organization dedicated to the field of undersea and hyperbaric medicine (UHM). We represent physicians, nurses, allied health professionals and basic science researchers in the advancement of scientific and clinical knowledge in the specialty. Founded in 1967, we are celebrating our 50th anniversary next year.

The mission of the UHMS has evolved over time. While we were once a purely scientific society focused on research and academic pursuits, we have broadened our scope to address the more pressing concerns of our membership: the mechanics and politics of the practice of UHM. We are shouldering the burden of defending practice patterns to agencies that seek to reduce the reimbursement of our services, while also educating a new workforce that has had less formal training in the field. With the support of UHMS staff, a tireless cadre of volunteer clinicians has tackled the intricacies of these new responsibilities while balancing these extracurricular duties with their day jobs. We have found, however, that with each new mission-driven initiative comes a concomitant need for increased infrastructure and administrative time.

With multiple demands on medical professionals' attention and finances, one must ask what the benefit is of joining yet another professional medical society. The underlying question — *"What's in it for me?"* — can often be a difficult exercise when calculating the return on investment of another annual membership fee. In considering the field of UHM, not every physician is as invested in the field as another. Many practitioners are new to the field and have only a limited familiarity with regulatory, safety and reimbursement concerns. Others practice UHM only part-time and rely on the effort of more vested members of the field to lay the groundwork and do the heavy lifting with regard to protecting their interests.

A recent survey of nearly 2,000 physicians who billed for supervision of hyperbaric oxygen therapy revealed that only 16% were members of the UHMS. It also revealed that nearly 60% of UHMS members were older than 55 years of age. Even more surprising is that only 30% of practitioners who had been in the field for five years or less were UHMS members. This poses the question: "Why have our newer colleagues not joined the society?" The answers can only be that they are either unaware of our existence, unaware of the benefits of being a member, or feel that the efforts of the society are not worthy of their support.

One might argue the value of the UHMS is the greatest for those who are newest to the field because of the tangible benefits to its members. We provide the following tools for the practitioner to gain additional knowledge and expertise:

- access to the MEDFAQs program, a compendium of more than 50 of the most commonly asked clinical-, safety- and reimbursement-related questions, answered by leading experts in the field
- discounted registration for live courses throughout the year, taught by leading educators and experts in diving medicine, clinical hyperbaric medicine and wound care
- discounted rates on more than 50 hours of online hyperbaric-related educational content to meet continuing medical education (CME) and maintenance of certification (MOC) requirements

The UHMS has many publications that are essential components of any hyperbaric practitioner's library:

- the 13th edition of the *Hyperbaric Oxygen Therapy Indications Manual*, which details all the literature related to the UHMS-approved indications for hyperbaric oxygen therapy
- the 2nd edition of the *Guidelines for Hyperbaric Facility Operations*
- the bimonthly scientific journal *Undersea and Hyperbaric Medicine*, which now offer members free PDF downloads of all of its articles

- the Society's newsletter, *Pressure*, which updates members on developments in the field

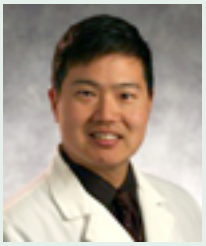
There are many intangible benefits of being a member of the UHMS, however, that are just as important — including, but not limited to, educational initiatives focused on preserving our payment system for hyperbaric medicine, raising funds for research and public policy initiatives, networking, and establishing best practices in safety and operational procedures.

The UHMS is constantly working behind the scenes to advance and protect the field of UHM. Our accreditation program is designed to ensure the highest standards of practice on a facility level, and our new Certification of Added Qualification program is intended to fill a gap between the 40-hour introduction to hyperbaric medicine course and the gold standard of American Board of Medical Specialties (ABMS) certification in UHM. We are developing clinical practice guidelines to define best practices in UHM, and we have created reportable quality measures to allow clinicians to submit their outcomes to CMS.

I encourage you to consider supporting the organization that is working on your behalf by joining or renewing your membership. It is only through the financial support of our members and the hard work of our leaders that the UHMS is able to accomplish these tasks.

The UHMS has several regional chapters in the United States, and these are a great forum to introduce yourself to colleagues and peers in your region. You can choose to become involved in one of the 19 committees that the UHMS relies on to carry out its mission, submit an abstract to be presented at the Annual Scientific Meeting every June, or even seek election to the UHMS board of directors. Whatever your interests are, we welcome your engagement in the betterment of our Society and the field of undersea and hyperbaric medicine. Find out more at *www.uhms.org*. ■

About the Author



An active UHM reviewer, former chair of the UHMS Clinical Practice Guidelines Oversight Committee, and current chair of the Graduate Medical Education Committee, **ENOCH HUANG** is the incoming president of the UHMS at the close of the 2016 Annual Scientific Meeting.

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InterContinental Hotel, Milwaukee, Wisconsin
April 01, 2016 4:15 PM – April 03, 2016 12:00 AM
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https://www.uhms.org/index.php?option=com_civicrm&task=civicrm/event/info&reset=1&id=52

2016 UHMS ANNUAL SCIENTIFIC MEETING
Tropicana Las Vegas Casino Hotel Resort, Las Vegas
June 08, 2016 8:00 AM – June 11, 2016 5:30 PM
For more information/registration:
https://www.uhms.org/annual-scientific-meeting/registration.html

GULF COAST CHAPTER MEETING
Searle Center DUMC, Durham, North Carolina
Washington Duke Hotel
Aug. 25, 2016 8:00 AM – Aug. 27, 2016 4:00 PM
Skill Lab: Aug. 25; General Meeting: Aug. 26-27
For more information/registration:
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MEDICAL EXAMINER OF DIVERS
Loews Hotel, New Orleans, Louisiana
Sept. 15, 2016 8:00 AM – Sept. 18, 2016 12:00 AM
For more information/registration:
https://www.uhms.org/index.php?option=com_civicrm&task=civicrm/event/info&reset=1&id=56

NORTHEAST CHAPTER MEETING
Springfield Marriott, Springfield, Massachusetts
Sept. 23, 2016 12:00 PM – Sept. 25, 2016 12:00 PM
For more information/registration:
https://www.uhms.org/index.php?option=com_civicrm&task=civicrm/event/info&reset=1&id=88

UHMS-NOAA PHYSICIANS TRAINING IN DIVING MEDICINE
NOAA Dive Center, Seattle, Washington
Hotel Accommodations: TBA, Seattle, Washington
Oct 17, 2016 9:42 AM – Oct 28, 2016 12:00 AM
For more information/registration:
https://www.uhms.org/index.php?option=com_civicrm&task=civicrm/event/info&reset=1&id=97

PACIFIC CHAPTER MEETING
Wyndham Bayside, San Diego, California
Oct. 28, 2016 8:00 AM – Oct. 29, 2016 5:00 PM
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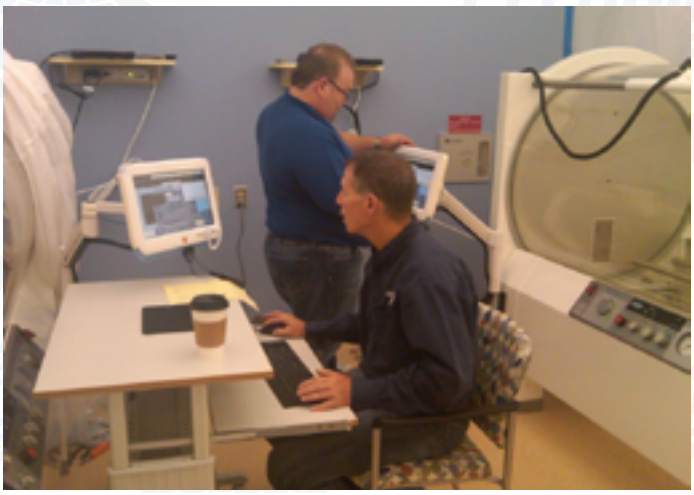

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Offloading Diabetic Foot Ulcers Q&A

By Jayesh B. Shah, MD, CWSP, UHM

In anticipation of the publication and current presales of the *Wound Care Certification Study Guide, Second Edition*, we offer a sneak peek of several questions and answers from "Chapter 20: Offloading Diabetic Foot Ulcers – Orthotics" by Elias R. Cheleuitte, DPM, FACFAS.

QUESTIONS

1. **Which is a common etiology of diabetic foot ulcerations?**
   a) repetitive microtrauma
   b) peripheral neuropathy
   c) areas of high pressure
   d) all of the above

2. **Which modality is best suited for forefoot plantar diabetic ulceration?**
   a) healing sandal
   b) cam walker
   c) integrated prosthetic and orthotic system (IPOS)
   d) PO shoe

3. **Which is the highest risk factor for diabetic foot ulceration?**
   a) poor glycemic control
   b) increased plantar pressure
   c) loss of plantar sensation
   d) PVD

4. **Which modality is considered the gold standard in offloading diabetic foot ulcerations?**
   a) total contact cast
   b) healing sandal
   c) CROW device
   d) PO shoe

5. **All of the following factors require consideration before choosing an offloading modality except:**
   a) location of ulceration
   b) patient functional capabilities
   c) patient insulin dependency
   d) vascular studies

ANSWERS

1. d) A common etiology of diabetic foot ulcerations is usually repetitive microtrauma at areas of high pressure in patients with peripheral neuropathy.
2. c) An integrated prosthetic and orthotic system (IPOS) is best suited to offload diabetic forefoot ulceration. The healing sandal and cam walker are also used to offload diabetic ulcers; however, IPOS is best suited for offloading diabetic forefoot ulcers. The PO shoe is not able to offload forefoot ulcers.
3. c) Loss of protective sensation in the plantar foot (neuropathy) is the highest risk factor for the diabetic foot ulcer.
4. a) Total contact casting (TCC) is considered the gold standard for offloading diabetic foot ulcers.
5. c) Before choosing an offloading device, it is important to look at the location of the ulcer, the functional capabilities of the patient, and the patient's vascular status. Insulin dependency is not a factor in the choice of an offloading device.

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About the Author

JAYESH B. SHAH, MD, CWSP, UHM, is president of South Texas Wound Associates, PA, and of TIMEO2 Healing Concepts, LLC, both in San Antonio, Texas. His degrees include an MBBS (bachelor of medicine and surgery) from Maharaja Sayajirao University in Baroda, India, and an MD in internal medicine from St. Luke's Roosevelt Hospital, Columbia University, New York. He is board certified in internal medicine and in undersea and hyperbaric medicine and certified in wound management and in hyperbaric medicine.

Shah has more than 18 years' experience in wound care and hyperbaric medicine practice and more than 12 years' experience as program director for continuing medical education courses. He currently serves as the medical director for the Northeast Baptist Wound Healing Center. An adjunct professor in the Department of Family and Community Medicine at the University of Texas Health Science Center, Shah is coeditor of the *Wound Care Certification Study Guide, First Edition* (published by Best Publishing Company). He created the WoundDoctor app for smartphones and authored 19 chapters on various wound topics in four books in addition to more than 30 scientific articles on wound care and hyperbaric medicine.

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