



# ECRI

The Most Trusted  
Voice in Healthcare

## UMDNS



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# The Most Trusted Voice in Healthcare

Tens of  
Thousands of  
**MEMBERS**

Health systems, medical  
providers, government  
agencies, payers, &  
other organizations

## **MISSION**

**Advancing effective,  
evidence-based  
healthcare  
globally**

A Trusted  
**INDEPENDENT**  
Voice

Evidence-based assurance to  
improve the safety, quality,  
and cost effectiveness of  
care across all healthcare  
settings.

# 51 Years of Safe and Effective Healthcare

## SERVING TENS OF THOUSANDS OF MEMBERS GLOBALLY

Hospitals, Health Systems,  
Government Agencies,  
Payers, Insurers

## INDEPENDENT TESTING & EVALUATION LAB

The only independent  
medical device testing  
and evaluation lab in  
North America and  
Asia Pacific

## PATIENT SAFETY ORGANIZATION

Listed by the U.S.  
Department of Health  
& Human Services  
and now one of the  
largest in the U.S

## EVIDENCE-BASED PRACTICE CENTER

Designated as an  
Evidence-Based Practice  
Center by the U.S. Agency  
for Healthcare Research  
& Quality

**“The country’s most respected independent laboratory for testing medical products”**

**The New York Times**

# Universal Medical Device Nomenclature System

- ❖ Created by ECRI in 1971
- ❖ The purpose of UMDNS is to facilitate identifying, processing, filing, storing, retrieving, transferring, and communicating data about medical devices.
- ❖ Continually maintained and updated by ECRI.
- ❖ Part of the National Library of Medicine's Unified Medical Language System (UMLS) since 1991

# SCOPE OF UMDNS

Covers (almost) everything found in a healthcare facility inventory

## Includes:

- ❖ Capital equipment
- ❖ Supplies
- ❖ Consumables
- ❖ Laboratory equipment
- ❖ Genetic tests
- ❖ Reagents
- ❖ Software
- ❖ Furniture
- ❖ Purchased Services
- ❖ Home use devices

Excludes Drugs

# About UMDNS

- The December 2021 UMDNS contains
  - 12,998 Concepts
  - 30,587 terms

# About UMDNS

## Controlled Vocabulary

Facilitates identifying, processing, filing, storing, retrieving, transferring, and communicating data.

# UMDNS Components





# UMDNS Components: Codes



**CODES**

- Unique 5-digit numeric code corresponds to Concept
- Assigned sequentially
- No inherent meaning

# UMDNS Components: Concept Definitions

- ❖ Formal definition for each concept
- ❖ Constructed in a standardized way
- ❖ Describe the device and its intended purpose
- ❖ Help to prevent ambiguity, redundancy or overlapping of concepts for similar devices

# UMDNS Components: Terms

Terms are search words that help users find the Concept they need

## One-to-one

Band Aids

See: Adhesive Strips [10026]

## One-to-Many

Dedicated MRI Units

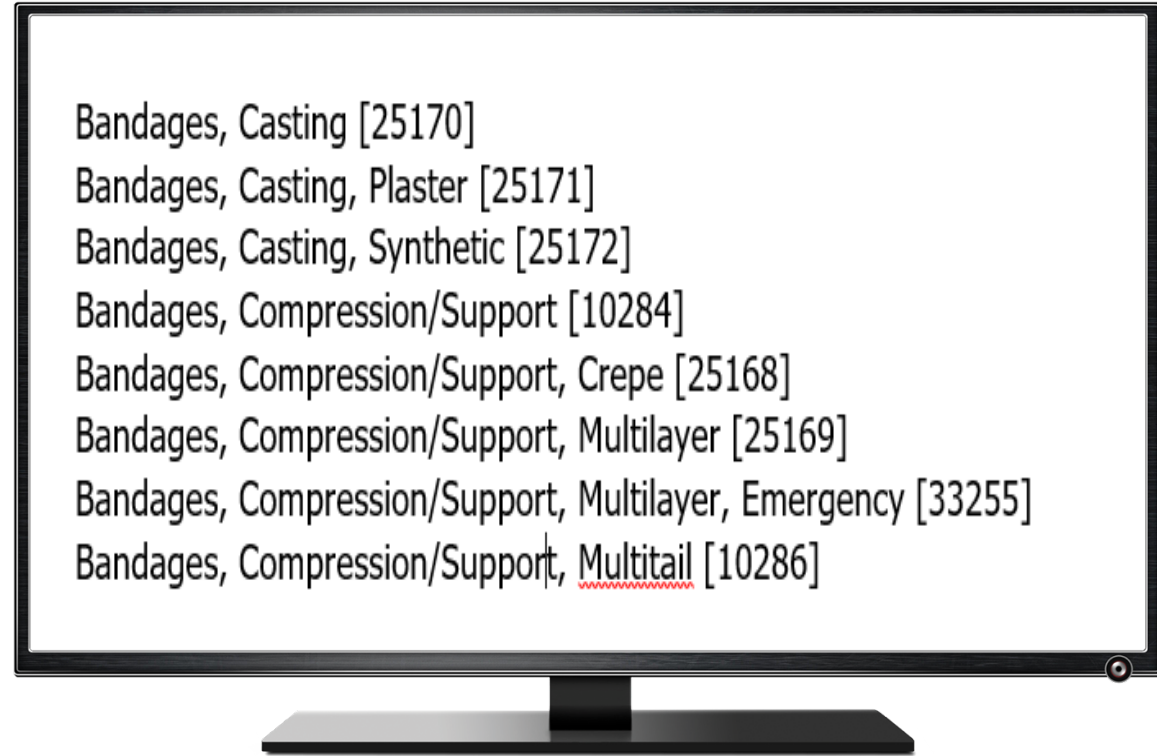
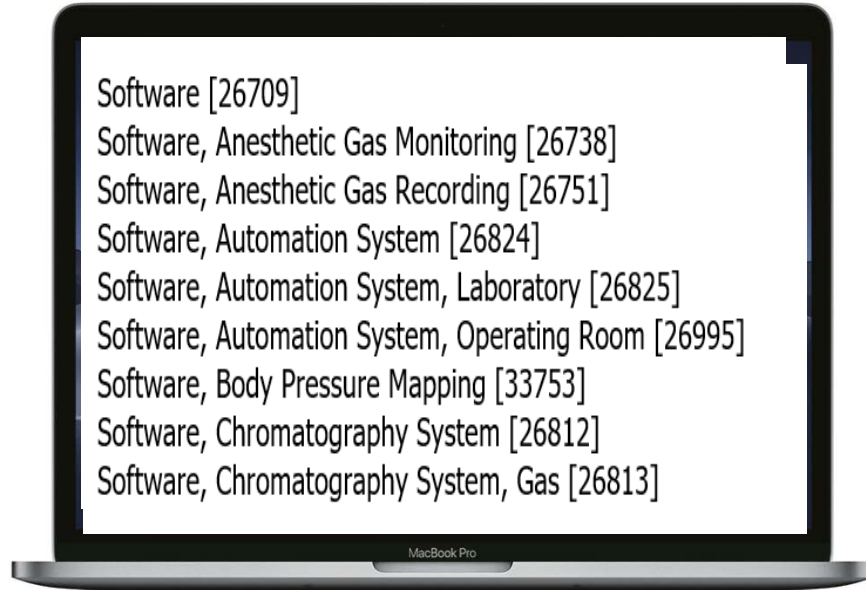
Use More Specific Term See:

Scanning Systems, Magnetic Resonance Imaging, Extremity [18109]

Scanning Systems, Magnetic Resonance Imaging, Mammographic [18110]

Scanning Systems, Magnetic Resonance Imaging, Neonatal Head [39679]

# Hierarchy



# Users and Uses

- More than 3,000 licensees in more than 100 countries (many more individual users)
- **Regulatory agencies**
- **Government agencies**
- **WHO**
- **Private health systems**
- **Healthcare facilities**
- **NGO's**

# Users and Uses – Regulatory Agencies

- Asian Medical Device Nomenclature System
  - Administered by the Medical Device Control Office – Department of Health, The Government of the Hong Kong Special Administrative Region
    - 100% compatible with UMDNS
    - Updated monthly
  
- Other examples:
  - Argentina
  - Chile
  - Iran
  - Israel
  - Jordan
  - Panama
  - Poland

# Users and Uses: Internal

- ❖ ECRI

- ❖ UMDNS is the backbone of all ECRI's device-related systems, products, and publications

- ❖ Groundwork for linking UDI with UMDNS

## UMDNS Summary:

- ❖ Created, owned, maintained, and continuously updated by ECRI
- ❖ Used world-wide
- ❖ Emerging technologies – barometer of technology evolution world-wide
- ❖ No-cost license for non-commercial use of UMDNS will be available in near future
  - ❖ Example: most regulatory and inventory use cases qualify as non-commercial\*  
(\*Commercial use requires a paid license. Example: imbedding UMDNS into a product/software that will be resold or used at cost)
- ❖ Collaborating with WHO and other nomenclature agencies on feasibility study
  - ❖ Reviewed pilot mapping; re-assigned 99 of 125 UMDNS “mismatches”
- ❖ User feedback a critical input



# Questions

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Q?