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การพัฒนามาตรฐานรหัสเครื่องมือแพทย์

ความเป็นมา

สำนักนโยบายและยุทธศาสตร์ สำนักงานปลัดกระทรวงสาธารณสุข มีบทบาทหน้าที่ในการบริหารจัดการข้อมูล พัฒนาคุณภาพข้อมูลและสารสนเทศสุขภาพ ให้สามารถนำไปใช้ในการวางแผนงานด้านสุขภาพต่างๆ ได้อย่างมีประสิทธิภาพ เพื่อการสร้างสุขภาพที่ดีให้กับประชาชนไทย ดังนั้นจึงต้องการข้อมูลที่ถูกต้อง ครบถ้วน มีความหมาย และทันกาล ฉะนั้น ระบบบริหารจัดการข้อมูลทางการแพทย์และสุขภาพที่ดี จำเป็นต้องอาศัยฐานรากของข้อมูลเป็นสำคัญ เช่น รหัสมาตรฐานด้านสุขภาพต่าง ๆ และสำนักนโยบายและยุทธศาสตร์ ได้รับอนุมัติให้จัดตั้งศูนย์มาตรฐานรหัสและข้อมูลสุขภาพแห่งชาติ ซึ่งอยู่ในความรับผิดชอบของกลุ่มภารกิจด้านข้อมูลข่าวสารและสารสนเทศสุขภาพ โดยมีภารกิจหลักในการพัฒนามาตรฐานรหัสด้านสุขภาพ นั้น

ในการนี้ สำนักนโยบายและยุทธศาสตร์ จะดำเนินการพัฒนาและจัดทำมาตรฐานรหัสเครื่องมือแพทย์ให้มีมาตรฐานกลาง เพื่อประโยชน์ในการประสานและเชื่อมโยงข้อมูลได้ในระดับประเทศ ทำให้การบริหารจัดการในระบบสุขภาพมีประสิทธิภาพยิ่งขึ้น ซึ่งในปัจจุบันนี้ในแต่ละหน่วยงานมีความหลากหลายในการใช้รหัสเครื่องมือแพทย์ ทำให้ไม่สามารถเชื่อมโยงข้อมูลได้ ดังนั้น สำนักนโยบายและยุทธศาสตร์ จึงดำเนินการพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์เพื่อการเชื่อมโยงข้อมูล โดยได้รับงบประมาณสนับสนุนจาก แผนงานพัฒนาระบบข้อมูลข่าวสารสุขภาพแห่งชาติ สำนักงานกองทุนสนับสนุนการสร้างเสริมสุขภาพ

การดำเนินการพัฒนา

แต่งตั้งคณะทำงานพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์ ประกอบด้วยผู้เชี่ยวชาญและหน่วยงานภาคเครือข่ายที่เกี่ยวข้อง จำนวน 2 คณะ (รายละเอียดเพิ่มเติมภาคผนวก)

โดยคณะทำงานพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์ มีบทบาทและหน้าที่ ดังนี้

1. ศึกษาและวิเคราะห์รหัสเครื่องมือแพทย์ที่มีอยู่ในต่างประเทศและในประเทศไทย และหน่วยงานที่เกี่ยวข้อง
2. พิจารณาแนวทางการดำเนินการพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์ที่เหมาะสมสำหรับการใช้งานในประเทศไทย
3. พัฒนา ปรับปรุง และจัดทำร่างมาตรฐานกลางรหัสเครื่องมือแพทย์
4. พิจารณาแนวทาง พร้อมข้อเสนอแนะระบบและกลไกในการบำรุงรักษารหัสมาตรฐานกลางเครื่องมือแพทย์ ต่อไปในอนาคต
5. อื่น ๆ ที่เกี่ยวข้อง

ผลการพัฒนามาตรฐานรหัสเครื่องมือแพทย์

1. การกำหนดรหัสเครื่องมือแพทย์

การกำหนดรหัสเครื่องมือแพทย์ได้ใช้แนวคิดตามหลักการกำหนดรหัสเครื่องมือแพทย์ของ Universal Medical Device Nomenclature System (UMDNS) โดยได้มีการกำหนดแบ่งความเฉพาะทางออกเป็น 32 กลุ่มประเภท ดังนี้

กลุ่มที่ 1	Anesthesiology
กลุ่มที่ 2	Bioterrorism and Emergency Preparedness
กลุ่มที่ 3	Cardiology
กลุ่มที่ 4	Cardiothoracic Surgery
กลุ่มที่ 5	Clinical Engineering
กลุ่มที่ 6	Clinical Laboratory
กลุ่มที่ 7	Dentistry
กลุ่มที่ 8	Emergency Medicine
กลุ่มที่ 9	Gastroenterology
กลุ่มที่ 10	Gynecology
กลุ่มที่ 11	Health Facility
กลุ่มที่ 12	Home Care
กลุ่มที่ 13	Implants
กลุ่มที่ 14	Intensive Care Unit
กลุ่มที่ 15	Internal Medicine
กลุ่มที่ 16	Materials Management
กลุ่มที่ 17	Nephrology
กลุ่มที่ 18	Neurology
กลุ่มที่ 19	Neurosurgery
กลุ่มที่ 20	Nursing Services
กลุ่มที่ 21	Obstetrics
กลุ่มที่ 22	Ophthalmology
กลุ่มที่ 23	Orthopedics
กลุ่มที่ 24	Otolaryngology
กลุ่มที่ 25	Pathology
กลุ่มที่ 26	pediatrics
กลุ่มที่ 27	Physical Medicine

กลุ่มที่ 28	Proctology
กลุ่มที่ 29	Pulmonary Medicine
กลุ่มที่ 30	Radiology
กลุ่มที่ 31	Surgery
กลุ่มที่ 32	Urology

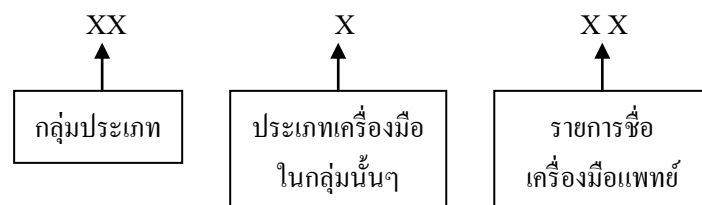
2. หลักการและแนวทางการกำหนดมาตรฐานรหัสเครื่องมือแพทย์

หลักการและแนวทางการกำหนดรหัสเครื่องมือแพทย์ ได้ใช้หลักการตามทฤษฎีการเข้ารหัส (Encoding) โดยมีขั้นตอนการกำหนดรหัสดังนี้

1. การกำหนดลำดับชั้นของข้อมูล (Hierarchy) และการจัดกลุ่ม
2. การกำหนดโอกาสที่เป็นไปได้ของกลุ่ม และกลุ่มใหม่ที่อาจเกิดขึ้นในอนาคต
3. การกำหนดรหัสกลุ่ม
4. การกำหนดโอกาสที่เป็นไปได้ของรหัสเครื่องมือแพทย์ และเครื่องมือแพทย์ใหม่ที่อาจเกิดขึ้นในอนาคต
5. การกำหนดรหัสเครื่องมือแพทย์

3. โครงสร้างและหลักการเรียงลำดับมาตรฐานรหัสเครื่องมือแพทย์

1. จัดแบ่งตามกลุ่ม 32 กลุ่มประเภท
2. โครงสร้างตัวรหัสมีกการกำหนดตัวเลขเป็น 5 หลัก ดังนี้
 - 2 หลักแรก จัดแบ่งตามกลุ่มประเภท (01, 02,.....32)
 - หลักที่ 3 ประเภทของรหัสเครื่องมือแพทย์ในกลุ่มนั้นๆ
 - หลักที่ 4-5 รายการชื่อเครื่องมือแพทย์ต่างๆ โดยเรียงตามลำดับตามประเภทของเครื่องมือต่างๆ ดังนี้

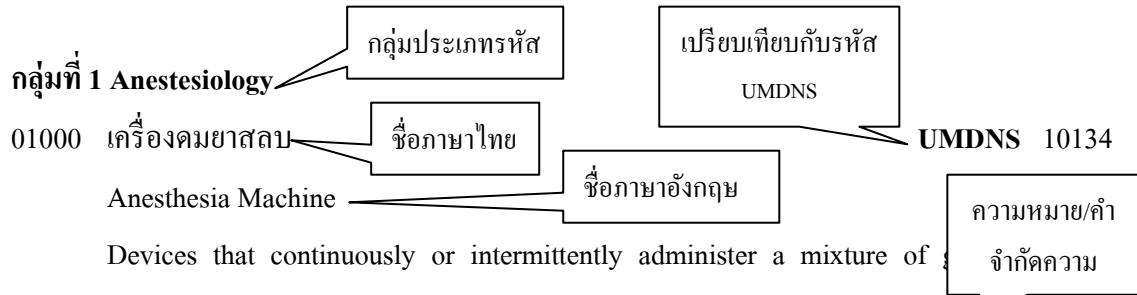


3. มีชื่อรหัสเครื่องมือแพทย์ทั้งภาษาไทยและภาษาอังกฤษ พร้อมความหมาย/คำจำกัดความ
4. มีรายการเปรียบเทียบกับรหัส UMDNS

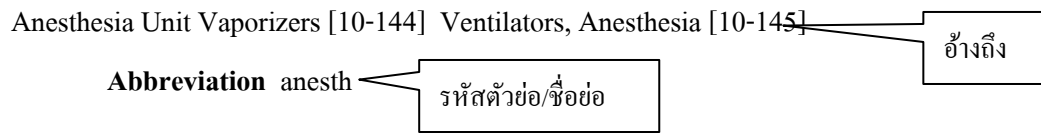
5. ความหมาย/คำจำกัดความ มีการอ้างอิง ของรหัส GMDN

6. มีรหัสตัวย่อ/ชื่อย่อ

4. ตัวอย่างการกำหนดรหัส โครงสร้างและการเรียงลำดับมาตรฐานรหัสเครื่องมือแพทย์



Devices that continuously or intermittently administer a mixture of nitrous oxide, and the vapor of a volatile liquid such as halogenated hydrocarbon, varying the proportion of gases in order to control the patient's level of consciousness. These devices are also designed to facilitate spontaneous, controlled, or assisted ventilation with these gas mixtures. An anesthesia system is typically comprised of four basic subsystems: a gas supply and control circuit, a breathing and ventilation circuit, a scavenging system, and a set of system function and breathing circuit monitors (e.g., inspired oxygen concentration, breathing circuit integrity). Also included in some anesthesia systems are a number of monitors and alarms that indicate levels and variations of several physiologic variables and parameters associated with cardiopulmonary function and/or gas and agent concentrations in breathed-gas mixtures. **Related Terms:**



5. ข้อเสนอแนะแนวทางการดำเนินงานต่อไป

5.1 นำรหัสเครื่องมือแพทย์ชุดนี้ไปทดลองใช้ เพื่อนำผลการทดลองมาปรับปรุง

แก้ไข

5.2 ควรแปลรหัสเครื่องมือแพทย์เป็นภาษาไทย

รหัสเครื่องมือแพทย์

กลุ่มที่ 1 Anesthesiology

01000 เครื่องดมยาสลบ

UMDNS 10134

Anesthesia Machine

Devices that continuously or intermittently administer a mixture of gases (oxygen, nitrous oxide, and the vapor of a volatile liquid such as halogenated hydrocarbon), varying the proportion of gases in order to control the patient's level of consciousness. These devices are also designed to facilitate spontaneous, controlled, or assisted ventilation with these gas mixtures. An anesthesia system is typically comprised of four basic subsystems: a gas supply and control circuit, a breathing and ventilation circuit, a scavenging system, and a set of system function and breathing circuit monitors (e.g., inspired oxygen concentration, breathing circuit integrity). Also included in some anesthesia systems are a number of monitors and alarms that indicate levels and variations of several physiologic variables and parameters associated with cardiopulmonary function and/or gas and agent concentrations in breathed-gas mixtures. **Related Terms:** Anesthesia Unit Vaporizers [10-144] Ventilators, Anesthesia [10-145]

Abbreviation anesth

01001 เครื่องดมยาสลบพร้อมเครื่องช่วยหายใจ

UMDNS 10145

Anesthesia Unit With Ventilator

Ventilators designed to use positive pressure to deliver a prescribed mixture of respiratory and anesthetic gases and vapors to the patient's lungs during surgical procedures that require general anesthesia; the mixture is produced by the anesthesia unit. Many anesthesia ventilators are time-cycled devices that have only one mode of operation, but some incorporate other modes (e.g., synchronized intermittent mandatory ventilation). Anesthesia ventilators are usually less complex than critical care ventilators. Most anesthesia units include these ventilators either as an integral part or as an optional device. **Related Terms:** Anesthesia Units [10-134]

Abbreviation aneven

01002 เครื่องล้าง-ฆ่าเชื้อเครื่องดมยาสลบและเครื่องช่วยหายใจ

UMDNS 17671

Anesthetic/Respiratory Apparatus Decontaminate

A washing machine for decontamination and disinfect (chemically and / or thermally) reusable medical devices. Some do have built-in drying features as well. [GMDN = Washer, decontamination = 17671]

Abbreviation appdec

01003 รถเข็นเตรียมอุปกรณ์ดมยาสลบ UMDNS 10636

Anesthetic Carts

Carts including drawers, shelves, and compartments appropriate for organizing the storage of instruments, anesthetic agents, drugs, airways, and other reusable and consumable supplies readily available for anesthesia procedures. These carts have a work surface that can be easily cleaned and provide an area to lay out items such as a laryngoscope and blades, tracheal tubes or other airways, and precordial and esophageal stethoscopes that may be required in a case. Anesthesia carts are mostly used to hold items (e.g., drugs, tools, instruments) that are not regularly stored in large quantities in the operating room cabinets or anesthesia unit.

Related Terms: Tables, Instrument, Anesthesia [13-951]

Abbreviation carane

01004 เครื่องควบคุมการดูดมลภาวะ (ในการดมยาสลบ) UMDNS 10142

Anesthesia Unit Scavenging System

A device that connect between the expiratory valve or port of a breathing circuit and the extraction system enabling the waste anaesthetic, exhaled, or other trace gasses to be removed under controlled conditions from the work environment and channelled outside of the building. Fillers or absorbers may be required to clean the remove gasses before discharging to the atmosphere. This device is a module to the anaesthesia system.

[GMDN = Anaesthesia system modue, gas scavenger = 34849]

Abbreviation scasys

01005 โต๊ะวางอุปกรณ์ดมยาสลบ UMDNS 13951

Anesthetic Tables

Instrument tables including an appropriate (e.g., metal, plastic) top surface usually supported by a movable swivel caster base. Most tables include shelves, drawers, and instrument trays. These tables are designed for the anesthetic's use during general anesthetist surgical procedures.

Abbreviation tabane

01006 เครื่องช่วยหายใจใช้กับเครื่องดมยาสลบ UMDNS 10145

Ventilator for Anesthesia Unit

Ventilators designed to use positive pressure to deliver a prescribed mixture of respiratory and anesthetic gases and vapors to the patient's lungs during surgical procedures that require general anesthesia; the mixture is produced by the anesthesia unit. Many anesthesia ventilators are time-cycled devices that have only one mode of operation, but some incorporate other modes (e.g., synchronized intermittent mandatory ventilation). Anesthesia ventilators are usually less complex than critical care ventilators. Most anesthesia units include these ventilators either as an integral part or as an optional device.

Abbreviation venane

01100 เครื่องเฝ้าติดตามความเข้มข้นของออกซิเจนและคาร์บอนไดออกไซด์ทางผิวหนัง

UMDNS 17996

Transcutaneous pCO₂/ pO₂ Monitor

Bedside monitors designed to continuously measure the partial pressure of carbon dioxide (tcpCO₂), oxygen (tcpO₂), or both at the skin surface. These monitors may use either two separate sensors or one combined tcPO₂/tcPCO₂ sensor that consist of a modified pH electrode, a single O₂ cathode and heated reference electrode, a membrane, and an electrolyte enclosed in a shielded container; some monitors include a third sensor to measure the pH in the blood. Monitoring tcPO₂ and tcPCO₂ is useful to avoid hyperoxemia and hypoxemia, to assess surgical patients, and for continuous evaluation of the respiratory and metabolic status of patients.

Abbreviation oxymon

01101 ชุดเครื่องวัดแรงดัน

UMDNS 14119

Pressure Transducer

A device that converts pressure into electrical signals for display by a patient monitor. This transducer can be reused. [GMDN = Transducer, pressure, reusable = 14119]

Abbreviation pretra

01200 ชุดเครื่องช่วยหายใจชนิดใช้มือบีบ

UMDNS 17591

Ambubag

Manual pulmonary resuscitators designed for repeated use. These resuscitators are suitable for sterilization using an appropriate procedure (e.g., autoclave, ethylene oxide). **Related Terms:** Analyzers, Physiologic, Body Composition, Hydrostatic Weighing [18-778]

Abbreviation ambbag

01201 รถเข็นทำการพยาบาลฉุกเฉิน

UMDNS 10647

Emergency Carts

Carts including drawers and compartments designed for organizing the storage and transportation of equipment, instruments, and accessories appropriate for emergency cardiopulmonary resuscitation procedures. These carts typically include a defibrillator, an electrocardiogram (ECG) monitor, a pulmonary resuscitator, an oxygen tank, a backboard for external cardiac compression, surgical supplies, and drugs. Resuscitation carts are usually placed in strategic locations in the hospital and are fully prestocked and ready for use by the emergency medical team.

Abbreviation careme

01202 เครื่องผสมอากาศกับออกซิเจน

UMDNS 12876

Oxygen Blender

Devices used to mix compressed air and oxygen to achieve oxygen concentrations of 21% to 100% at either high- or low-output flows; typically, the device receives air and oxygen from the hospital gas pipeline or from other compressed gas sources. Oxygen-air proportioners are usually equipped with a pressure-regulating mechanism. The mixed gas output can be passed through a humidifier or nebulizer and delivered to patients at flows ranging from 1 L/min to more than 100 L/min using ventilators, tracheostomy tubes, endotracheal tubes, oxygen tents, oxygen hoods, or masks.

Abbreviation oxyben

กลุ่มที่ 2 Bioterrorism and Emergency Preparedness

02000 นาฬิกาจับเวลาทางพยาธิ

UMDNS 14053

Timers

Instruments designed for accurate measurement of a length of time. These instruments typically consist of a mechanical, electromechanical, or electronic (e.g., quartz oscillator) time measuring unit with an analog or digital display. Timers are primarily intended to measure the duration of a given procedure, such as the application of diagnostic or therapeutic radiation (e.g., radiography, fluoroscopy, radiotherapy, phototherapy) and the performance of clinical (e.g., resuscitation, anesthesia, dialysis) and/or laboratory procedures; timers are also used during inspection and/or calibration of medical equipment. Many timers use display signals (e.g., alarms) to show that a preestablished period of time has ended. Some devices may include appropriate attachments to control the operation of other devices following a program; clinical timers are frequently an integral part of medical and/or laboratory devices.

Abbreviation timers

กลุ่มที่ 3 Cardiology

Monitor, cardio

03000 เครื่องวัดปริมาณเลือดออกจากหัวใจ

UMDNS 20174

Cardiac Output Monitor

Bedside monitors designed to be used (either as a component of a physiologic monitoring system or as a stand-alone unit) with related devices to acquire, measure, and process information for the purposes of intermittently measuring and/or continuously monitoring cardiac output (the amount of blood pumped out by the ventricles in a given period of time). Typical functions of a cardiac output bedside monitor include intermittent measurement and/or calculation and display of the cardiac output curve(s), cardiac output index, blood temperature, stroke volume, and systemic vascular resistance. Some monitors may provide continuous cardiac output monitoring features, additional intermittent or continuous hemodynamic monitoring features, or

other functions, such as measurement of venous oxygen saturation. **Related Terms:** Cardiac Output Units [10-613]

Abbreviation co-mon

03001 โมดูลวัดปริมาณโลหิตออกจากหัวใจ UMDNS x
Cardiac Output Module

A plug-in unit , typically used in a multiparameter patient monitors, which designed to measure cardiac output (the volume of blood pumped by the heart per minute) The device will typically be used bedside. **[GMDN = Patient monitor module, cardiac output = 36561]**

Abbreviation modcop

03002 โมดูลตรวจคลื่นหัวใจด้วยไฟฟ้า UMDNS x
EKG Module ECG/EKG module

A plug-in unit , typically used in a multiparameter patient monitors, for the detection and recording of electrocardiogram (ECG) signals; this is sometimes combined with arrhythmia analysis. **[GMDN = Patient monitor module, electrocardiograph = 36349]**

Abbreviation modekg

03003 เครื่องเฝ้าติดตามการทำงานของหัวใจและ UMDNS 16764
ระบบไหลเวียนโลหิตชนิดCompact
Patient Monitor, Compact

Bedside monitors designed to measure and display blood pressure, either using invasive or external (noninvasive) sensors. These devices include sensors, a processor, and a display. Blood pressure monitors display the values of the electrical signals from the sensor as maximum and minimum values of blood pressure (i.e., systolic and diastolic pressures); most monitors also display a mean pressure calculated from the measured values using an algorithm. Invasive techniques typically use a transducer attached at the distal tip of a catheter inserted directly into a vessel, usually an artery (e.g., radial artery); noninvasive measurements use transducers placed over an artery, typically on the patient's arm, or using plethysmographic methods. Some blood pressure monitors can display pulse rate either simultaneously or alternatively.

Abbreviation moncom

Pacemaker

03300 เครื่องกระตุ้นหัวใจ UMDNS 11132
Defibrillators

Cardiac electrical stimulators that apply brief high-voltage electroshocks to the heart. These stimulators are used to restore normal rhythm and contractile function in patients who are experiencing

ventricular fibrillation or ventricular tachycardia that is not accompanied by a palpable pulse. Some defibrillators may also be used to correct certain noncritical dysrhythmias (called synchronized defibrillation or cardioversion), using relatively low-level discharges synchronized to the patient's ECG waveform. **Related Terms:** Defibrillator/Cardioverters [18-502] Defibrillator/Pacemakers [18-501] Defibrillators, External [18-499] Defibrillators, External, Automated [17-116] Defibrillators, External, Manual [11-134] Defibrillators, External, Manual, Line-Powered-Only [11-137] Defibrillators, External, Semiautomated [18-500] Defibrillators, External, Telephonic [17-579] Defibrillators, Implantable [16-652] Monitors [20-168] Stimulators, Electrical, Cardiac [18-484] Testers, Defibrillator [11-127]

Abbreviation defrib

03301 เครื่องกระตุ้นหัวใจพร้อมภาคติดตามบันทึกการทำงานของหัวใจ **UMDNS 11127**

Defibrillator / Monitoring / Recorder

Testers designed to assess the performance of cardiac defibrillators. These testers usually can measure, evaluate, display, and/or record a set of defibrillator parameters and/or waveforms, such as defibrillation and cardioversion energy, peak voltage and current, and synchronization of cardioversion. Defibrillator testers typically consist of an electronic unit including a display, measuring devices (e.g., energy, voltage, time), and appropriate sensors; some testers can simulate human electrocardiographic signals and arrhythmia waveforms to verify the monitoring capabilities of the defibrillators. Testers intended for external defibrillator frequently include test sequence protocols to test both semi- and fully automatic defibrillators

Abbreviation defrib-m

03302 เครื่องกระตุ้นหัวใจพร้อมชุดควบคุมจังหวะการเต้นของหัวใจ **UMDNS 18501**

Defibrillator /Pacemaker

Defibrillators [11-132]: Cardiac electrical stimulators that apply brief high-voltage electroshocks to the heart. These stimulators are used to restore normal rhythm and contractile function in patients who are experiencing ventricular fibrillation or ventricular tachycardia that is not accompanied by a palpable pulse. Some defibrillators may also be used to correct certain noncritical dysrhythmias (called synchronized defibrillation or cardioversion), using relatively low-level discharges synchronized to the patient's ECG waveform.

Abbreviation defrib-p

Defibrillator

03400 เครื่องตรวจคลื่นไฟฟ้าหัวใจ **UMDNS 11407**

Electrocardiography

ไม่มี Definition

Abbreviation ekg

03401 เครื่องตรวจคลื่นไฟฟ้าหัวใจพร้อมวิเคราะห์ผล **UMDNS 16231**
Electrocardiography with Analytic Report
ไม่มี Definition
Abbreviation ekgana

03402 เครื่องบันทึกคลื่นไฟฟ้าหัวใจแบบพกพา **UMDNS 12388**
Holter Recorder/Hotter ECG/Ambulatory ECG
Data tape recorders that include chest surface electrodes and an electrocardiograph amplifier. There are two basic type of recorders: real time and retrospective (according to the point at which analysis is performed). These recorders are commonly used in ambulatory patients to detect transient ventricular arrhythmias, after myocardial infarction, or for detecting other heart origin diseases. **Related Terms:** Recorders, Tape, Data, Electrocardiography, Continuous [16-009] Recorders, Tape, Data, Electrocardiography, Even[18-352] Recorders, Tape, Data, Electrocardiography, Ventricular Function [18-003]
Abbreviation holrec

ECG

03600 เครื่องช่วยการเต้นของหัวใจชนิด 2 ห้องแบบใช้ภายนอกชั่วคราว **UMDNS 12911**
Dual Chamber Temporary Cardiac Pacemaker
Pacemakers designed to apply a repetitive electrical stimulus to regulate the rhythm of the heart. These stimulators include electronic circuitry that produces electrical pulses and senses the cardiac activity; they may be line powered, or battery powered either using internal batteries or through attached modular batteries. Pacemakers can deliver the electrical stimulus either in fixed-rate mode (asynchronous), demand mode (synchronous), or both. They may apply their stimulus to only one of the heart chambers (most frequently to the ventricle), but some pacemakers pace both the ventricle and the atrium (dual chamber or universal pacing). These stimulators are used to restore normal heart rate, inducing depolarization and stimulating myocardial contraction when the hearts own pacing or conduction systems have been impaired. **Related Terms:** Pacemakers, Cardiac, External [18-497] Pacemakers, Cardiac, External, Invasive Electrode [18-498] Pacemakers, Cardiac, External, Invasive Electrode, Transesophageal [17-494] Pacemakers, Cardiac, External, Invasive Electrode, Transvenous [12-912] Pacemakers, Cardiac, External, Noninvasive Electrode [16-516]
Abbreviation pacmak

03601 เครื่องช่วยการเต้นของหัวใจชนิด 1 ห้องแบบใช้ภายนอกชั่วคราว **UMDNS 12911**
Single Chamber Temporary Cardiac Pacemaker
Pacemakers designed to apply a repetitive electrical stimulus to regulate the rhythm of the heart. These stimulators include electronic circuitry that produces electrical pulses and senses the cardiac activity; they may be line powered, or battery powered either using internal batteries or through attached modular

batteries. Pacemakers can deliver the electrical stimulus either in fixed-rate mode (asynchronous), demand mode (synchronous), or both. They may apply their stimulus to only one of the heart chambers (most frequently to the ventricle), but some pacemakers pace both the ventricle and the atrium (dual chamber or universal pacing). These stimulators are used to restore normal heart rate, inducing depolarization and stimulating myocardial contraction when the hearts own pacing or conduction systems have been impaired. **Related Terms:** Pacemakers, Cardiac, External [18-497] Pacemakers, Cardiac, External, Invasive Electrode [18-498] Pacemakers, Cardiac, External, Invasive Electrode, Transesophageal[17-494] Pacemakers, Cardiac, External, Invasive Electrode, Transvenous [12-912] Pacemakers, Cardiac, External, Noninvasive Electrode [16-516]Pacemakers, Cardiac, Implantable [12-913] Pacemakers, Cardiac, Implantable, Resynchronization [20-375] Stimulators, Electrical, Cardiac [18-484]

Abbreviation pacmak-s

Other

03700 เครื่องตรวจการทำงานของหัวใจโดยใช้คลื่นเสียงความถี่สูง UMDNS 11385

Echocardiograms

Cardiographs used for recording ultrasonic waves directed through the heart and reflected backwards (i.e., echoed). These cardiographs use a transducer that transmits and receives the ultrasonic waves, reproducing the sound characteristics in a diagram (echocardiogram). They are used for studying the structure, position, and motion of the heart and neighboring tissue.

Abbreviation echo-c

03701 เครื่องทดสอบสมรรถภาพร่างกายและ UMDNS 17723
หัวใจขณะออกกำลังกายพร้อมอุปกรณ์

Exercise Stress Test

Stress exercise physiologic monitoring systems designed to evaluate the cardiac response of a person to physical stress while the individual is performing exercise on a treadmill or a bicycle ergometer. These systems usually include an exercise machine, an electrocardiograph with appropriate electrodes, computing capabilities, a display, a recorder, and a printer (e.g. laser, Deskjet). Typically, the patient performs the test following a protocol that gradually increases his or her work (e.g., increasing the speed of a treadmill) while the electrocardiographic signal is monitored; the data is analyzed, and a report is printed. Some systems can automatically determine heart rate, analyze the ST-segment trend, and detect arrhythmias. Cardiac stress exercise monitoring systems are used mostly to diagnose and monitor the course of coronary artery diseases.

Abbreviation exetes

03702 เครื่องเพิ่มความดันเลือดภายในหลอดเลือดแดงใหญ่ UMDNS 10846

Intra- Aortic Baloon Pump

Circulatory assist units that produce mechanical counterpulsation to reduce the afterload to the heart and increase coronary and cerebral blood flow. These devices consist of an inflatable balloon catheter, which is placed in the aorta attached to an external unit that includes a pneumatic system, regulating the automated inflation and deflation of the balloon in synchronism with the cardiac cycle; they include monitors of the physiologic parameters of the patient (e.g., heart rate, arterial pressure) and also of balloon pressure and volume. The inflated intra-aortic balloon forces the blood toward the heart during each diastolic phase of the cardiac cycle. Intra-aortic balloon circulatory assist units are used to improve cardiovascular functioning during cardiac failures that constitute life-threatening emergencies. **Related Terms:** Catheters, Vascular, Intra-Aortic Balloon [10-725]

Abbreviation 03702

03703 แผ่นรองช่วยชีวิตผู้ป่วย UMDNS 10608

CPR Boards

ไม่มี Definition

Abbreviation cprboa

03704 ชุดปฏิบัติการกู้ชีวิต UMDNS 13363

Cardio Pulmonry Resuscitator Set

Resuscitators that combine in units the capabilities to restore the cardiac function and provide ventilation to a patient who is apneic or exhibits inadequate respiration and is simultaneously under cardiac arrest. These resuscitators apply mechanical compression cyclically to the cavity between the sternum and the vertebral column, producing a compression of the sternum up to five centimeters (two inches), forcing the heart to eject blood; pulmonary resuscitation is performed by using an integral pneumatic pulmonary resuscitator, typically applying time-cycled ventilation. Cardiopulmonary resuscitators are used as a substitute of manual external cardiac compression to prevent fatigue of emergency personnel and to provide a better consistency in the applied force and rate of compression to ventilation ratio of 5:1. These resuscitators may be used during emergencies involving cardiopulmonary arrest if an oxygen cylinder or an oxygen-piped wall outlet is present; they can also be used during patient transportation in ambulances.

Abbreviation c-pres

03705 เครื่องฉีดสีดูการทำงานของหัวใจ UMDNS 15284

Angiographic Contrast Injector

Contrast media injectors designed to inject the contrast media through a small catheter into the vascular system for angiographic studies. These devices typically consist of automated electromechanical

injectors with syringes that may be either reusable, disposable, or both; pneumatic mechanism are less frequently used. Angiographic contrast media injectors are capable of delivering with the pressure, flow range, and volume required for angiographic studies, some injectors can synchronize the delivery with the electrocardiographic cycle and/or the x-ray generator. They are used in procedures to examine the coronary and renal arteries, the great vessels and the vasculature of the heart, brain, abdominal organs, and extremities.

Related Terms: Syringes, Plunger, Contrast Media, Angiography [15-286]

Abbreviation anginj

03706 จักรยานทดสอบสมรรถภาพร่างกายและออกกำลังกาย

UMDNS 10383

Leg Ergometer

Ergometers designed to measure the work (i.e., the amount of force multiplied by the distance over which the force is applied) or rate of work (i.e., power) performed by the leg muscles while pedaling a static bicycle (that is usually an integral part of the ergometer) under controlled conditions. Bicycle ergometers determine work and power by measuring the force exerted during pedaling (e.g., using mechanical or electromagnetic brakes) and the speed of the pedals of the static bicycle; the bicycle imposes a workload that is independent of the body weight. Bicycle ergometers are used in tests intended to determine whether patients have cardiovascular or pulmonary diseases; they are frequently used in tests that include use of a stress exercise physiologic monitoring system. Ergometers attached to examination/treatment tables with a cycling mechanism for pedaling in a supine or, less frequently, seated position are also available. **Related Terms:** Analyzers, Physiologic, Metabolic Rate, Oxygen/Carbon Dioxide Based, Stress Exercise [17-895] Exercisers, Bicycle [10-385]

Abbreviation legerg

03707 20168 (ไม่มีข้อมูล)

กลุ่มที่ 4 Cardiothoracic Surgery

04000 ชุดดูดของเหลวและเลือดจากช่องปอดชนิดติดผนัง

UMDNS 10218

Thoracic Suction Unit,Wall

Aspirators designed to provide suction to evacuate large volumes of gas, body fluids, or other foreign materials that accumulate between the lung and chest wall (i.e., pleural space). These aspirators are typically a self-contained mobile or portable unit including a high-volume, low-vacuum pump, a multiple container and water seal collection system, and a pressure gauge, all of which are mounted in a single stand or portable unit. The pump evacuates accumulated fluids through tubes inserted surgically in the chest wall and connects to drainage tubes that empty into a graduated collection system; two separated chest tubes must be inserted to remove liquids and gases. Thoracic aspirators are used to evacuate gas and body fluids after thoracic surgery,

penetrating chest wounds, barotrauma, and tracheal or bronchial rupture; they are also used to drain purulent effusions and to evacuate blood from the mediastinal space following cardiac bypass surgery.

Abbreviation sucpip-t

04001 เครื่องดูดของเหลวจากช่องทรวงอก

UMDNS 10218

Thoracic Suction

Aspirators designed to provide suction to evacuate large volumes of gas, body fluids, or other foreign materials that accumulate between the lung and chest wall (i.e., pleural space). These aspirators are typically a self-contained mobile or portable unit including a high-volume, low-vacuum pump, a multiple container and water seal collection system, and a pressure gauge, all of which are mounted in a single stand or portable unit. The pump evacuates accumulated fluids through tubes inserted surgically in the chest wall and connects to drainage tubes that empty into a graduated collection system; two separated chest tubes must be inserted to remove liquids and gases. Thoracic aspirators are used to evacuate gas and body fluids after thoracic surgery, penetrating chest wounds, barotrauma, and tracheal or bronchial rupture; they are also used to drain purulent effusions and to evacuate blood from the mediastinal space following cardiac bypass surgery.

Abbreviation thosuc

04100 เครื่องทำให้หัวใจหยุดเต้น

UMDNS 11700

Fibrillators

Electric or electronic devices designed to induce fibrillation of the heart. These devices include cardiac and/or intracardiac electrodes and a power unit that can deliver a variable electric output of several volts (typically up to 12 volts) at low frequencies (e.g., 50, 60, 85 Hz); they may be line or battery operated. Fibrillators are used for controlled fibrillation of the heart during open heart surgery or in electrophysiology studies to test the effectiveness of therapy by intentionally inducing fibrillation in patients who normally have cardiac arrhythmias.

Abbreviation fibril

04200 เครื่องปรับอุณหภูมิเลือดขณะผ่าตัดหัวใจ

UMDNS 17206

Heater - Cooler Machine

Warming / cooling units designed to warm or cool the patient by extracorporeal heat exchange with the patient's perfused blood during heart-lung bypass procedures. These units consist of a central device including a cooling system (similar to a household refrigerator), a heating element, and pumps for heating and circulating liquid to a heat exchanger; the heat exchanger controls the blood and/or cardioplegic solution temperature during the entire cardiovascular procedure (e.g., induces hypothermia, warms the blood). Some heart-lung bypass units incorporate both the heat exchanger (which may be disposable) and the heating/cooling unit (i.e., the mixer) as integral parts.

Abbreviation heacoo

04201 เครื่องปอดหัวใจเทียม UMDNS 11969

Heart-Lung Machine

Equipment that provide temporary external circulatory support to the cardio-pulmonary functions, by oxygenating the body's venous supply of blood and pumping it back into the arterial system; bypass units can perform circulation oxygenation, and filtration of the blood. These units are usually assembled in a console, which main components consist of an arterial pump, a backup arterial pump, one or two suction pumps, an arterial vent pump, a cardioplegia pump, and a backup unit; the console also includes some disposable components such as an oxygenator/heat exchanger, a cardiotomy reservoir, blood filters, and tubing. Heart-lung bypass units are mostly used during open heart surgery, bypassing the heart to facilitate surgery on the organ (e.g. , cardiac valve replacement, coronary artery bypass grafting); they are also used for extracorporeal membrane oxygenation inpatients with severe respiratory disorders. **Related Terms:** Circulatory Assist Units, Cardiac [10-840] Detectors, Air Bubble/Foam, Heart-Lung Bypass Unit [15-010] Detectors, Fluid Level, Heart-Lung Bypass Unit [15-011] Prostheses, Heart [13-152] Pumps, Extracorporeal Perfusion[13-203]

Abbreviation healun

กลุ่มที่ 5 Clinical Engineering (ไม่มีข้อมูล)

กลุ่มที่ 6 Clinical Laboratory

Centrifuge

06000 เครื่องปั่นแยกส่วนประกอบโลหิตพร้อมระบบควบคุมอุณหภูมิ UMDNS 18265

Centrifuge, Refrigerated

Low-speed tabletop centrifuges which are refrigerated to cool the rotor chamber.

Abbreviation cenref

06001 เครื่องปั่นแยกปฏิกิริยาน้ำเหลือง UMDNS 10778

Centrifuge, Serofuge

Laboratory devices that apply centrifugal force to a specimen (e.g., suspended cells in a liquid), causing its separation according to component density. Centrifuge basic components are an electric motor, a shaft, and a rotor on which the centrifuge head turns. The two most common designs of rotors are fixed angle and horizontal or swinging bucket. Most centrifuges can operate with several interchangeable heads. Centrifugation of body fluids, commercial reagents, or mixtures of both with other additives is one of several sample preparation steps commonly required in the clinical laboratory before measuring analytes in a patient sample. The use of basket-style heads and draining-chamber inserts in some centrifuge models allows the continuous introduction of materials to be separated into the centrifuge until the basket is full (i.e., intermittent-flow mode); this mode is used to separate suspensions and emulsions.

Abbreviation censer

06002 เครื่องปั่นแยกสาร

UMDNS 10778

Centrifuges

Laboratory devices that apply centrifugal force to a specimen (e.g., suspended cells in a liquid), causing its separation according to component density. Centrifuge basic components are an electric motor, a shaft, and a rotor on which the centrifuge head turns. The two most common designs of rotors are fixed angle and horizontal or swinging bucket. Most centrifuges can operate with several interchangeable heads. Centrifugation of body fluids, commercial reagents, or mixtures of both with other additives is one of several sample preparation steps commonly required in the clinical laboratory before measuring analytes in a patient sample. The use of basket-style heads and draining-chamber inserts in some centrifuge models allows the continuous introduction of materials to be separated into the centrifuge until the basket is full (i.e., intermittent-flow mode); this mode is used to separate suspensions and emulsions.

Abbreviation centri

06003 เครื่องปั่นฮีมาโตคริต

UMDNS 10779

Centrifuge, Microhematocrit

High-speed tabletop centrifuges used to determine the ratio of the red cell volume to the whole blood volume expressed as a decimal, a fraction, or a percentage. These centrifuges usually operate in the range of 10,000 to 25,000 rpm and typically generate a relative centrifugal force of at least 10,000 gravities to efficiently pack cells in a short time (3 to 5 minutes). Microhematocrit centrifuges require a smaller sample size than the sample used in low-speed conventional centrifuges (macrohematocrit method). The hematocrit hematological test is used in diagnosing blood loss and a number of conditions, including erythrocyte count above or below normal.

Abbreviation cenvpc

Freezers

06100 เครื่องแช่แข็งตัวอ่อน

UMDNS 15583

Freezer

Equipment designed to maintain a thermally insulated compartment at temperatures below the freezing point of water (i.e., 0 degrees Celsius [32 degrees Fahrenheit]). This equipment is used mostly to rapidly freeze and store perishable substances. Freezers used in healthcare facilities are usually dedicated equipment manufactured with appropriate technical characteristics, such as range of temperature, size, shelving, accuracy, reliability, and configuration according to specific uses (e.g., in clinical laboratories, blood banks, pharmacies); standard devices for general use (e.g., food preservation) are also used. **Related Terms:** Refrigerators[13-315]

Abbreviation freeze

06101 ตู้แช่แข็งเก็บชีวสารที่อุณหภูมิต่ำ

UMDNS 15145

Deep Freezer

Freezers designed to store laboratory products and samples. These freezers are usually made with a corrosion-resistant (typically stainless steel) interior, minimizing the risk of adulteration, contamination, and/or corrosion of contents; automatic defrost capability; and sensors, controls, monitors, recorders, and alarms for dependable long-term storage. Laboratory freezers are typically available in three different temperature ranges: standard, from 0 to -20 or -30 degrees Celsius (32 to -4 or -22 degrees Fahrenheit); ultralow, from -40 to -90 degrees Celsius (-40 to -130 degrees Fahrenheit); and cryogenic, reaching temperatures of -130 degrees Celsius (-192 degrees Fahrenheit) or lower. Programmed (e.g., linear rate) or manual control of the freezing rate is possible in most laboratory freezers; some freezers are designed for flammable materials and/or include explosion-proof capabilities. A wide variety of capacity and freezer configurations are available, including upright, undercounter, and walk-in models. Freezers, Laboratory, Cryogenic [22-070] Freezers, Laboratory, Cryogenic, Electromechanical [22-072] Freezers, Laboratory, Cryogenic, Liquid Nitrogen [22-073] Freezers, Laboratory, Cryogenic, Vapor Phase Nitrogen [22-074] Freezers, Laboratory, Explosion-Proof [22-064] Freezers, Laboratory, Flammable Material [22-063] Freezers, Laboratory, Multiuse [22-054]

Abbreviation deefre

Refrigerators

06200 ตู้เย็นใช้สำหรับเก็บเลือด

UMDNS 15171

Blood Bank Refrigerator

Refrigerators designed to store blood bank products and samples, such as reagents, plasma, and red blood cells for short periods at temperatures typically between 1 and 8 degrees Celsius (34 and 45 degrees Fahrenheit). The temperature is frequently set at 4 degrees Celsius (39 degrees Fahrenheit). These refrigerators typically consist of a chamber made with a corrosion-resistant (typically stainless steel) interior, minimizing the risk of adulteration, contamination, and/or corrosion of contents; internal shelving appropriate for storage, easy location, and handling (e.g., rotating shelves, pull-out drawers) of blood bank products (typically blood bags); a compressor, condenser, evaporator, and tubing; sensors, controls, monitors, a temperature recording chart, and alarms for dependable long-term storage following blood bank standards; and an emergency power supply for the refrigerator and alarm.

Abbreviation refrib

Laboratory (ไม่มีข้อมูล)

Incubators

06300 เครื่องตรวจระดับแอลกอฮอล์ในเลือด

UMDNS 15089

Blood Alcohol Analyzer

Laboratory analyzers used to determine the alcohol (usually ethanol) concentration in body fluids (e.g., serum, urine). The concentration of ethyl alcohol in whole blood is commonly expressed as percent by weight or volume (%w/v) or as grams per deciliter (g/dl). Most dedicated laboratory alcohol analyzers are based on gas chromatography or enzymatic oxidation and photometric measurement techniques. These devices are frequently used as supporting evidence of alcohol intoxication.

Abbreviation anaalc

06301 เครื่องวิเคราะห์เกี่ยวกับการแข็งตัวของเลือด UMDNS 15098

Automatic Coagulation Analyzer

Laboratory blood coagulation analyzers that process batches of specimens, adding reagents and specimens automatically. These analyzers may include ultrafiltration devices to separate plasma from the blood cells, but most of them require previous centrifugation of the sample to obtain plasma samples. Automated blood coagulation analyzers include an incubation container (e.g., a test tube), timing devices, a clot formation detector (e.g., turbidimeter, nephelometer, spectrophotometer), and computerized capabilities for sample handling and data management. Automated blood coagulation analyzers are used in laboratories with heavy workloads.

Abbreviation anacoa

06302 เครื่องตรวจหาระดับยาในเลือดและปัสสาวะ UMDNS 16298

Drug Analyzers

Clinical chemistry laboratory analyzers designed to perform multiple laboratory tests with complete automation of several steps (e.g., specimen processing, measurements) of whole process, providing a standardized method of obtaining accurate and reproducible chemical concentration values. These analyzers may be used to examine general and specific chemistries (e.g., albumin, protein, alcohol), electrolytes (e.g., sodium, potassium), and drugs of abuse, as well as to perform other clinical laboratory analyses. **Related Terms:** Analyzers, Laboratory, Clinical Chemistry, Automated, Centrifugal [16-300] Analyzers, Laboratory, Clinical Chemistry, Automated, Continuous-Flow [16-301] Analyzers, Laboratory, Clinical Chemistry, Automated, Discrete [16-299]

Abbreviation anadru

06303 เครื่องตรวจวัดปริมาณแก๊สในเลือดพร้อมอุปกรณ์ UMDNS 18617

Blood Gas Analyzer

Laboratory analyzers that measure concentrations of gases in samples of plasma, serum, or whole blood. These analyzers are used for measuring partial pressure of carbon dioxide (PCO₂) and oxygen (PO₂), usually in arterial whole blood specimens, using two different sets of electrodes. Some laboratory blood gas analyzers also calculate other parameters, such as oxygen total content (ctO₂) and bicarbonate (HCO₃⁻). They

may also perform electrolyte and/or hematologic determinations (e.g., hematocrit). Blood gas analyzers are used to determine oxygen/carbon dioxide exchange in patient diagnosis and regulation of therapy.

Abbreviation anagas-b

06304 เครื่องมือวิเคราะห์ส่วนประกอบของเลือด **UMDNS 17740**

Hematological Analyzer

Laboratory analyzers designed for determining the morphology of the blood and blood-forming cells. These analyzers are used to perform complete blood counts, determine hemoglobin concentration, to evaluate the adhesion of cells to one another (aggregation), detect abnormalities in the process to complete normal blood clotting (coagulation), and/or perform ABO grouping and subgrouping, Rh and other red cell phenotyping, and antibody detection.

Abbreviation anahem

06305 เครื่องวิเคราะห์สารเคมีในเลือดแบบอัตโนมัติ **UMDNS 16298**

Blood Chemistry Analyzer, Automatic

Clinical chemistry laboratory analyzers designed to perform multiple laboratory tests with complete automation of several steps (e.g., specimen processing, measurements) of whole process, providing a standardized method of obtaining accurate and reproducible chemical concentration values. These analyzers may be used to examine general and specific chemistries (e.g., albumin, protein, alcohol), electrolytes (e.g., sodium, potassium), and drugs of abuse, as well as to perform other clinical laboratory analyses. **Related Terms:** Analyzers, Laboratory, Clinical Chemistry, Automated, Centrifugal [16-300] Analyzers, Laboratory, Clinical Chemistry, Automated, Continuous-Flow [16-301] Analyzers, Laboratory, Clinical Chemistry, Automated, Discrete [16-299]

Abbreviation analys

06306 เครื่องวัดค่าออสโมลาริตี เลือด, ปัสสาวะ **UMDNS 12842**

Osmolarity Analyzer

Clinical laboratory measuring instruments designed to determine a solution's osmotic pressure, a variable related to the particle concentration (i.e., osmolality) of an aqueous solution such as body fluid, including whole blood, plasma, serum, and urine. These readings are used to determine levels of solute concentrations that control the movement of solutes throughout body tissues. Two main types of osmometers (freezing point and vapor-pressure osmometers) intended to measure small-particle osmolality (i.e., crystalloids such as glucose or urea, ions such as sodium or chlorine) are available; osmometers intended to measure osmolality due to molecules of a greater mass (i.e., colloids) and particles with a mass greater than 30,000 atomic mass units (i.e., Daltons) such as serum proteins are also available (i.e., colloid osmometers, also known as oncometers). An abnormal ratio between the osmolality values for urine and serum can indicate renal disease, diabetes insipidus, or secretion of abnormal levels of antidiuretic hormone; water and electrolyte

imbalances are also present in patients with acute poisoning and shock trauma.Osmometers, Colloid [12-800]
Osmometers,Freezing Point[23-793] Osmometers, Vapor Pressure [23-794]

Abbreviation anaosm

06307 เครื่องตรวจหาโปรตีน **UMDNS** 15090

Protein Analyzer

Analyzers used to detect and quantify primary and secondary amino acids in physiologic fluids (e.g., plasma, urine). Amino acid analyzers generally use ion-exchange or reversed-phase high-pressure liquid chromatography techniques. Most dedicated laboratory amino acid analyzers are automated. These analyzers are typically used in the clinical laboratory to monitor treatment of inborn metabolism errors and other genetically produced disorders in protein metabolism (e.g., phenylketonuria).

Abbreviation anapro

06308 เครื่องตรวจวิเคราะห์สารและตะกอนในปัสสาวะ **UMDNS** 16378

Urine Analyzer

Laboratory urine analyzers that, once the urine is placed in the analyzer, are dispensed onto the dipstick. The results are then determined and a report is generated with minimal involvement of technicians. In addition to analyte detection, some of these analyzers, can measure the specific gravity of the urine specimen and/or examine urinary sediments using intelligent microscope techniques, so the final report includes the results of the chemical analysis, the specific gravity, and the microscopic analysis.

Abbreviation anauri

06309 เครื่องนับเม็ดเลือดและนับแยกชนิดเม็ดเลือดขาวอัตโนมัติ **UMDNS** 17741

Automatic Cell Count and Differential Count

Hematology analyzers that perform the analysis with minimal involvement of technicians and with complete automation of sampling and dilution, cell counting, and red blood cell indices determination; some include closed-tube sampling to automatically extract the blood sample from the phlebotomy tube. Most of these analyzers are based on fluorescence quantification and cytometry techniques or on electrical impedance (Coulter) techniques. Some automated hematology analyzers perform a three-part white blood cell differential count, while most of these devices provide a five-part count, differentiating all five types of normal white blood cells. Automated cell-counting hematology analyzers may include reticulocyte analysis capabilities. These analyzers are intended for medium- or large-size hospitals or large reference laboratories.

Abbreviation celana-w

06310 ชุดเครื่องมือทำไอไลซ่า

UMDNS 18627

Elisa Machine

Laboratory blood coagulation analyzers used to evaluate the adhesion of platelets to one another. These analyzers activate the aggregation process by adding an aggregating agent, such as adenosine diphosphate (ADP) or ristocetin. Platelet aggregation analyzers use optical density (turbidmetric), electrical impedance, or bioluminescence measuring methods. Usually, these analyzers require previous sample preparation, including centrifugation, to obtain platelet-rich plasma (PRP) and platelet-poor plasma (PPP) samples; but, some analyzers that use the impedance method of analysis can use whole blood. Platelet aggregation analyzers are used to distinguish between different types of platelet dysfunction (e.g., deficiency in platelet release substances, poor platelet adhesion to injured tissue).

Abbreviation elisam

06311 เครื่องตรวจการทำงานของเกร็ดเลือดอัตโนมัติ

UMDNS 15104

Platelet Aggregator Analyzer

Laboratory blood coagulation analyzers used to evaluate the adhesion of platelets to one another. These analyzers activate the aggregation process by adding an aggregating agent, such as adenosine diphosphate (ADP) or ristocetin. Platelet aggregation analyzers use optical density (turbidmetric), electrical impedance, or bioluminescence measuring methods. Usually, these analyzers require previous sample preparation, including centrifugation, to obtain platelet-rich plasma (PRP) and platelet-poor plasma (PPP) samples; but, some analyzers that use the impedance method of analysis can use whole blood. Platelet aggregation analyzers are used to distinguish between different types of platelet dysfunction (e.g., deficiency in platelet release substances, poor platelet adhesion to injured tissue).

Abbreviation pltagg

06312 เครื่องตรวจน้ำตาลในเลือด

UMDNS 16488

Glucometer

Point-of-care whole blood analyzers dedicated to measuring the concentration of glucose in capillary blood. Some units can also use venous and/or arterial blood. Most of these analyzers use reflectance photometry methods (i.e., the amount of light produced by an LED and reflected from a reagent-impregnated test pad that has reacted with the blood sample is measured) or electrochemical methods (i.e., electric current is measured when glucose oxidase converts glucose to gluconic acid on a blood-dampened reagent strip). Some blood glucose analyzers are capable of cholesterol-level determination for screening purposes. These glucose analyzers are used for health professionals and diabetic patients to manage diabetes and to test for transient high or low glucose levels (e.g., during surgery); they are also used in sports medicine. **Related Terms:** Monitors, Personal, Glucose [20-184] Photometers, Filter, Reflectance [16-531]

Abbreviation glumet

06313 ตู้บเพาะเชื้อคาร์บอนไดออกไซด์ UMDNS 12112
Carbondioxide Incubator

A closed or semiclosed chamber in which the environment can be controlled and kept constant. This will typically be used for; 1. premature babies; 2 laboratory purposes. [GMDN = Incubator, (specify) = 12112]

Abbreviation co2inc

06314 ตู้บเพาะเชื้อ UMDNS 12112
Incubators

A closed or semiclosed chamber in which the environment can be controlled and kept constant. This will typically be used for; 1. premature babies; 2 laboratory purposes. [GMDN = Incubator, (specify) = 12112]

Abbreviation incuba

06315 ตู้เก็บเกร็ดเลือดพร้อมเครื่องเขย่า UMDNS 12112
Platelet Agitator and Incubator

A closed or semiclosed chamber in which the environment can be controlled and kept constant. This will typically be used for; 1. premature babies; 2 laboratory purposes. [GMDN = Incubator,(specify) = 12112]

Abbreviation pltcab

Other

06400 เครื่องชั่งนน.ทางพยาธิ UMDNS 10261
Balances

Measuring instruments designed to determine the mass of a body, using the force of gravity on the body (weight) as a basis for comparison. The result read from the balance is generally taken as a measure of the quantity weighed; corrective calculations are done only in exceptional cases. In practice, most balances measure in grams, although other units such as ounces and grains are also used. Balances are mostly used for clinical laboratory measurements; they are usually placed on a vibration-free workbench. **Related Terms:** Balances, Electronic[10-263] Balances, Electronic, Analytic [18-449] Balances, Electronic, Microanalytic [18-451] Balances,Electronic,Precision[18-450]Balances,Mechanical[10-264] Balances, Mechanical, Analytic [18-453] Balances,Mechanical,Microanalytic[18-454]Balances, Mechanical, Precision [18-452] Scales [13-455]

Abbreviation balance

06401 เครื่องชั่งอิเล็กทรอนิกส์ UMDNS 18449
Analytical Electronic Balance

Electronic balances designed for weighing with a high degree of accuracy and precision. These balances typically have a weighing range of up to 200 g (some are capable of measuring up to 300 or 400 g), with a readability of 0.01 to 0.1 mg and a reproducibility of 0.1 mg or better. Analytic electronic balances

usually include an integrated or separate weighing chamber, and some have motorized doors.

RelatedTerms:Balances,Mechanical,Analytic[18-453]

Abbreviation elebal

06402 ตู้เตรียมยาเคมีบำบัด **UMDNS** 12021

Chemotherapy Prepasin Hood

Cabinets, Biological Safety [15-698] Enclosures that provide a confined environment, usually airtight, allowing the performance of procedures isolated from the general environment. Hoods may be used to provide medical treatments (e.g., oxygenation), to isolate patients, or to perform laboratory procedures that involve toxic or infectious materials. Some hoods provide special environmental or ventilation capabilities (e.g., oxygen atmosphere, laminar air flow).

Abbreviation chehoo

06403 ตู้ดูดกำจัดไอสารเคมี **UMDNS** 12022

Fume Hood

Clinical laboratory hoods designed to confine and exhaust materials that may be flammable, irritating, corrosive, toxic, infectious (or potentially infectious), or otherwise noxious. Most hoods exhaust the contaminated air to the outside, but some filter the air and recirculate it into the laboratory. Chemical fume hoods are intended to remove vapors, gases, mists, aerosols, and other particulate materials, as well as fumes reducing workers exposure.

Abbreviation fumhoo

06500 เครื่องวัดความถ่วงจำเพาะของปัสสาวะ **UMDNS** 15169

Refractometers

Measuring instruments used to determine the ratio of the velocity of light in a vacuum to the velocity of light in another medium (i.e., index of refraction).

Abbreviation refrac

06600 เครื่องมืออุ่นเลือดและของเหลว **UMDNS** 10447

Blood Fluid Warmer

Warming units designed for in-line heating of banked blood, blood products, and intravenous (IV) solutions from about 4 degrees Celsius to near body temperature (e.g., 35 to 37 degrees Celsius) before infusion. These units usually include a disposable bag or coil of tubing and a heat exchanger (e.g., dry heat, radio-frequency, circulating fluid, water bath); some units include temperature controls and/or alarms. Usually, the blood or solution is warmed as it passes through the bag or tubing that is exposed to the heat exchanger. Blood/solution warming units are typically mounted on an IV pole between the infusion bag and the patient's

venous line; they are used to minimize adverse thermal reactions in the patient. Some units are also used to heat irrigation solutions for use in arthroscopy, laparoscopy, and other procedures. **Related Terms:** Blood Administration Sets [10-421] Coils/Pouches, Blood Warming [16-845] Infusion Pumps, High-Flow, Warming [17-907]

Abbreviation blower

06601 เครื่องตรวจวัดปริมาณโลหะหนัก **UMDNS 15079**

Atomic Absorption Spectrophotometer

Spectrophotometers in which the analytical determination of elements is based on the absorption of radiation by free atoms. The atom cloud necessary for atomic absorption measurements is produced by supplying sufficient thermal energy to the sample (typically using an air-acetylene flame or an electrically heated graphite furnace) to dissociate its chemical components into free atoms. These instruments include a light source (usually hollow cathode lamps), an atom source, a monochromator, a photomultiplier to measure the absorbed light, appropriate electronics to process the detector signal and a means to display the results. Atomic absorption spectrophotometers may be used on body fluids and tissues to determine electrolytes, essential trace elements, and metals used in therapy and to monitor for exposure to industrial and environmental pollutants. **Related Terms:** Syringes, Plunger, Contrast Media, Angiography [15-286]

Abbreviation atospe

06602 เครื่องดูดปล่อยของเหลวแบบอัตโนมัติ **UMDNS 15166 15663**

Auto Pipette

Laboratory devices designed to transfer programmed volumes of solution from one container to another container (e.g., microtiter plates). These pipettors typically consist of automated (e.g., electronic) or semi-automated devices that can dispense very low, predetermined volumes (typically from 0.1 microliter to several milliliters); some include disposable tips. Pipettors are used in clinical laboratories to improve the precision of measurements and lessen the possibility of cross-contamination among samples.

Abbreviation autpip

06603 เครื่องย้อมสไลด์แบบอัตโนมัติ **UMDNS 15599**

Automatic Stainer

Slide Stainers, Hematology [15-182] : Slide stainers that automate the staining of peripheral blood and other hematologic smears to facilitate laboratory microscope differential counts using Wright's stain, a Romanowsky stain. The operator inserts slides into a carrier and selects a time or programmed procedure. Linear transport slide stainers have a transport arm that moves baskets of slides into and out of parallel reagent vessels. Robotic arm stainers allow the user to program the stainer to move the robotic arm carrying the slides to the desired bucket. Centrifugal stainers spray reagents onto slides placed in a rotating carousel and uses

centrifugal force to remove excess reagents and dry the slides. Linear transport and triaxial arm stainers are microprocessor controlled. The centrifugal slide stainer is controlled by a microprocessor that regulates the amount of stain and wash solution sprayed onto the slide and centrifugation time and speed. Platen stainers apply reagents by capillary action. Slides are placed in grooves on conveyor spirals and moved face down along a platform.

Abbreviation autsta

06604 เครื่องตรวจระดับบิลิรูบิน

UMDNS 15109

Bilirubinometers

Instruments designed to measure the concentration of bilirubin in the blood. **Related Terms:** Bilirubinometers, Cutaneous [16-166]

Abbreviation bilmet

06605 ตู้ปลอดเชื้อ

UMDNS 15698

Biosafety Cabinet with Laminar Air Flow

Cabinets designed as a partial or total containment enclosure for safe manipulation of moderate and/or high-risk microorganisms and other biological hazardous materials (i.e., they offer biological safety). These cabinets typically produce a vertical laminar flow; they are available in three general types (class I, II, and III) according to their performance characteristics and applications. Class I cabinets protect the operator and the environment but not the product; class II cabinets protect the operator, the product, and the environment; and class III cabinets offer the maximum degree of protection to the product, operator, and environment. Biological safety cabinets are used for handling of cell cultures and human pathogens (e.g., bacteria, virus, parasites) and other biohazardous materials, extreme toxic agents (e.g., chemotherapy drugs), and also for tissue culture and tumorvirus work. **Related Term :** Hoods [12-021]

Abbreviation biocab

06606 เครื่องนับเม็ดเลือดด้วยมือ

UMDNS 11996

Hand Blood Counter

Cell-counting hematology analyzers designed for manual blood cell counting and analysis procedures. These instruments consist of a glass block with a depression of definite depth, the floor of which is ruled off into squares (counting chamber). Blood cells are counted with the aid of a microscope in the known volume between the ruled squares and the cover glass. **Related Terms:** Cytometers, Manual [15-112]

Abbreviation blocou

06607 เครื่องกรองเลือด

UMDNS 15039

Blood Purifier

Devices used to perform hemodialysis, a treatment whereby blood is passed through an extracorporeal hemodialyzer that allows the transfer of substances by diffusion and convection for the purpose of decreasing biochemical abnormalities as well as fluid, electrolyte, and acid-base imbalances.

Related Terms: Detectors, Air Bubble/Foam, Hemodialysis Unit [11-219] Detectors, Blood Leakage, HemodialysisUnit[20-752] Detectors, Fluid Level, Hemodialysis Unit [20-750] Dialysate Delivery Systems [15-575] Hemodialysis Units, Continuous Replacement Therapy [23-428] Hemodialysis Units, Continuous Replacement Therapy, Renal [23-426] Hemofiltration Units [15-039]

Abbreviation blopur

06608 เครื่องปั่นล้างเซลล์อัตโนมัติ

UMDNS 15114/ 21162

Automatic Cell Washer

Washers designed for automatic removal of dirt and/or stains (i.e., washing) from laboratory glass or quartz cuvettes (i.e., cells). These washers typically include a plastic enclosure, a filtering flask, and a hose for connection to a vacuum system. Cuvette washers perform a cycle of operations typically including a cleaning spray washing, rinsing, and circulation of dry air for drying the cuvette; frequently a final wash with acetone is used to eliminate any water droplets. They are used in clinical laboratories to clean cuvettes (cells) before reuse.

Abbreviation celwas

06609 ชุดเคำตั้งแชมเบอร์

UMDNS 15566

Counting Chambers

Completely enclosed rooms, spaces, or cavities that are kept at a quickly established, controlled, and maintained environment to protect the materials, patients, animals, plants, or substances contained within them from outside contaminants, interference, or conditions. They typically consist of main chambers, transfer chambers, microprocessors, a series of audible and visual alarms to alert operators to altered conditions, compressors, air filters, vacuum pumps, valves, quick response systems, view ports for observation, monitors/controls, and air-lock systems. They also consist of series of compressors, pumps, and controls to create and maintain a specific environment regulated by a programmed microprocessor. Depending on the type of chamber, they are used in pharmaceuticals, laboratories, aeromedical training, emergency medicine, clinical use, experimental science, infection control, hematology, and pathology. Cabinets [10-526] Pass-Throughs [20-655]

Abbreviation coucha

06610 เครื่องตัดชิ้นเนื้อแช่แข็ง

UMDNS 15157

Cryotome

Microtomes contained in a temperature-controlled stainless steel cabinet called a cryostat. The cryostat microtome allows microtomists to section frozen tissue specimens for histopathologic analysis. The microtome, tissue specimen, and knife are housed in a thermostatically controlled chamber insulated with polyurethane foam. The operator passes the specimen through an opening in the chamber and places it on a refrigerated holder near the microtome. The microtome freezes the specimen with an aerosol-propelled freezing agent before placing it in the chamber or inserts it into an optional quick-freezing specimen holder or polyglycol matrix.

Abbreviation crytom

06611 เครื่องวิเคราะห์ปริมาณและแยกชนิดของเซลล์ภูมิคุ้มกันตามแบบอัตโนมัติ UMDNS 16867

Flow Cytometer

Automated cytometers in which cells are dispersed in fluid suspension and flow one at a time through a narrow beam of light, typically from a laser. Each cell generates optical signals that are measured and analyzed. These cytometers include a cell transportation system, a laser for cell illumination, photodetectors for signal detection, and a computer-based management system. **Related Terms:** Analyzers, Laboratory, Hematology, Cell Counting, Reticulocyte [18-261] Cytometers, Automated, Flow, Sorting [16-503]

Abbreviation cytmnet

06612 เครื่องวิเคราะห์หาความเข้มข้นของโปรตีน, เอนไซม์

UMDNS 15129

Densitometers

Measuring instruments used to determine the amount of mass per unit of volume. By extension, the term is also applied to the measurement of any unit per unit of volume, area, or length. Some densitometers can also determine the ratio of the density of a substance to the density of a standard substance (usually water) at a specific temperature, measuring the specific gravity. **Related Terms :** Densitometers, Bone [17-152] Densitometers, Bone, Isotope [18-846] Densitometers, Bone, Isotope, Dual-Photon Absorptiometry [17-150] Densitometers, Bone, Isotope, Single-Photon Absorptiometry [17-151] Densitometers, Bone, Ultrasonic [18-382] Densitometers, Bone, X-Ray [17-540] Densitometers, Bone, X-Ray, Dual-Energy Absorptiometry [17-747] Densitometers, Bone, X-Ray, Single-Energy Absorptiometry [17-748] Densitometers, Laboratory [18-844] Densitometers, Laboratory, Liquid [18-845] Densitometers, Laboratory, Liquid, Urine [15-310] Densitometers, Laboratory, Scanning Light [16-905] Densitometers, X-Ray Film [16-548]

Abbreviation denmet

- 06613 เครื่องวางแผ่นยาด้านจุลชีพมาตรฐาน UMDNS 16273
 Disc Dispensers
 A manually operated device that is used to store and subsequently dispense antimicrobial susceptibility disks onto agar or other culture medium. [GMDN = **Dispensers, disk, antimicrobial susceptibility test = 35733**]
Abbreviation disdis
- 06614 เครื่องวิเคราะห์ลำดับการเรียงตัวของสารพันธุกรรมแบบอัตโนมัติ UMDNS 18236
 Automatic DNA Sequencer
 An automatic analytical equipment for determining genetic sequence of DNA in biogenetic laboratory. (ข้อมูลที่เพิ่มเติมคำนิยามให้เอง)
Abbreviation dnaseq
- 06615 เครื่องแยกสารด้วยไฟฟ้าพร้อมอุปกรณ์ UMDNS 15138
 Electrophoresis Set
 Systems designed to separate mixtures of ionic solutes by the differences in their rate of migration in an applied electric field. These systems usually include an electrophoresis chamber, support media, a temperature control unit (for cooling and/or heating), a densitometer, and a power supply; the procedures require the use of reagents. Some of these systems can perform the operations automatically (e.g., apply samples to the gels, perform the electrophoresis, scan the gels, print the results) and include computerized data processing capabilities; other, less expensive systems are manually operated and configured using separate modules. Electrophoresis systems may perform one or more electrophoresis procedures, such as zone electrophoresis, gel electrophoresis, and isoelectric focusing electrophoresis. They are useful for separation and assessment of most solutes of interest in clinical chemistry, including proteins in serum, plasma, urine, cerebrospinal fluid, and other body fluids and tissues. Electrophoresis Systems, Capillary [18-547]
Abbreviation electr
- 06616 หม้อต้ม Flask UMDNS 15030
 Flasks
 A narrow - necked bottle made of glass or plastic which used in laboratories
Abbreviation flask
- 06617 เครื่องวัดความเข้มแสง UMDNS 15141
 Fluoro Lite Meter
 Filter photometers that determine the emission of electromagnetic radiation from a substance at one wavelength after the substance has absorbed radiation at another wavelength. These instruments usually

determine the presence of fluorescent compounds by placing the sample in a beam of light (most frequently ultraviolet), where fluorescent compounds are excited, emitting visible light. Their principal components are a stable light source (e.g., a mercury vapor lamp), a dispersing filter that removes visible light from the excited beam, a sample cuvette (glass for excited wavelengths above 320 nm, otherwise quartz), a secondary filter that removes scattered light from the beam, and usually a photomultiplier tube as a detector. **Related Terms:** Analyzers, Laboratory, Immunoassay, Fluorimetric [16-218]

Abbreviation flupho

06618 เครื่องสกัดแยกน้ำยา

UMDNS 15142

Automatic Fraction Collector

A small container for medical treatment purposes used to collect fluids, gas or other materials from the human body. This may also be for specimen or sample purposes. [GMDN = Collector, (specify) = 10941]

Abbreviation fracol

06619 เครื่องแก๊สโครมาโตกราฟพร้อมอุปกรณ์

UMDNS 15120

Gas Chromatograph with Accessories

Chromatography systems in which the separation process is accomplished by forcing a gaseous mixture of analytes as the mobile phase (e.g., an inert gas, such as nitrogen or helium) through a column of the stationary phase. Separation of solutes in the mixture is based on the relative differences in their vapor pressures and their interaction with the stationary phase. A basic gas chromatograph consists of a gas reservoir and flow control device, an injector, the separation column, an oven, an online detector (sometimes a mass spectrometer), and, usually, a computer.

Abbreviation gaschr

06620 เครื่องทำความสะอาดด้ามจับกรอพื้น

UMDNS 15198

Handpiece Cleaning and Lubricating Machine

Decontamination Units [20-576] : Devices designed for decontamination by physical removal, chemical decontamination, or both. These devices are usually intended for decontamination of chemical-warfare agents, toxic industrial materials, radiation-contaminated materials, and/or biological agents. The units typically include decontaminant-agent delivery system, decontaminant containers, and controls (e.g., temperature, pressure); they may also include mixers, hoses, and other auxiliary devices appropriate for the type of decontamination performed. Decontamination units are mainly intended to decontaminate equipment, but some units can be used for personnel decontamination.

Abbreviation hancle

- 06621 เครื่องแยกส่วนประกอบของโลหิตแบบอัตโนมัติ UMDNS 17106
Automatic Blood Components Separators
A device used to separate blood components from serum.
Abbreviation hemsep
- 06622 เครื่องบดปั่นทางพยาธิวิทยา UMDNS 17124
Homogenizers
เครื่องผสม
Abbreviation homogi
- 06623 เตาไฟฟ้า UMDNS 16287
Hot Plate
ไม่มี Definition
Abbreviation hotpla
- 06624 เครื่องจ่ายของเหลว UMDNS 16274
Liquid Dispensers
A device that is intended dispense a fluid. It may be designed for general-purpose use (dispensing a range of liquids) or to be used for a dedicated liquid. [GMDN = Dispenser, Liquid, (specify) = 37425]
Abbreviation liquis
- 06625 เครื่องกวนสารละลายด้วยแท่งแม่เหล็ก UMDNS 15651
Magnetic Stirrer
A glass or plastic rod used to move round and round in liquid, etc. in order to mix it thoroughly.
Abbreviation magsti
- 06626 เครื่องจ่ายอาหารเลี้ยงเชื้ออัตโนมัติ UMDNS 11283
Automatic Media Dispenser
Devices intended to deliver a controlled portion or unit of a substance, material, or fluid with some degree of accuracy. The degree of accuracy (e.g., dose) varies depending on the object being dispensed and the design of the dispenser. **Related Terms** : Dispensers, Alloy, Dental [16-196] Dispensers, Antibiotic Sensitivity Disk [16-273] Dispensers, Brush [11-284] Dispensers, Disinfecting Spray, Powered[23-494] Dispensers, Fluid [11-285] Dispensers, Ice [15-912] Dispensers, Liquid, Laboratory [16-274] Dispensers, Mercury, Dental [16-473]Dispensers, Paraffin [15-134] Dispensers, Slide [15-135] Dispensers, Soap [15-827]
Abbreviation medpen

06627 ตู้อบชนิดความถี่ไมโครเวฟ UMDNS 17847

Microwave Oven

Microwave Oven

Abbreviation micove

06628 กล้องจุลทรรศน์ UMDNS 12536

Microscopes

Instruments designed to obtain a magnified image of small objects and reveal details of structure not otherwise distinguishable by the naked eye. A variety of microscopes are available according to the technique used to magnify the samples and the device's intended use. The three main types of microscopes are (1) light microscopes in which the specimen is viewed by being placed in a light path (which may be white light composed of all visible wavelengths, ultraviolet light, or, less frequently, infrared light), for laboratory or surgical use; (2) electron microscopes, in which electrons are used instead of light for illumination, forming an image for viewing on a fluorescent screen or by photography, allowing for a greater magnification and resolution than is possible with the light microscope, for observing cellular and molecular structures; (3) scanning microscopes, in which a monochromatic light source delivered from a scanning laser is used. The performance of scanning-laser microscopes in terms of optical resolution, depth contrast, and sensitivity of detection is reportedly better than in conventional light microscopes. **Related Terms :** Microscopes, Light, Examination, Dermatology [17-719] Microscopes, Light, Examination, Microscopes, Light, Examination, Otorhinolaryngology [18-293] Microscopes, Light, Laboratory [15-156] Microscopes, Light, Laboratory, Brightfield [18-284]

Abbreviation micros

06629 เครื่องผสม UMDNS 15590

Mixers

A device designed for the specific purpose of mixing two or more mediums into a homogenous mixture to be applied in some kind of treatment, diagnosis or research. The device cen mix solids, liquids, or gases, and even a combination of these. **[GNDN = Mixer, (specify)]**

Abbreviation mixer

06630 เครื่องวัดความเป็นกรดด่าง UMDNS 15164

PH-Meter

A device used to precisely measure the acid-base status of almost any material. This device contains a probe that is inserted into a material of unknown pH value. The probe is sensitive to hydrogen ion concentration to a pH value which is shown to the operator via a meter or digital display. Some models include a temperature

probe that indicates the temperature probe that6 indicates the temperature of a solution. [GMDN = ANALYSER, pH = 15164]

Abbreviation ph-met

06631 กล้องโพราไลต์ **UMDNS** 18286

Polarize Microscope

Laboratory light microscopes in which the use of polarized light enhances contrast and makes visible details otherwise difficult to see, especially in the analysis of anisotropic or birefringent specimens. As a result of destructive interference contrast or color results, they can provide information on the condition and structure of the specimen. Some polarized light microscopes can also be configured for Brightfield and/or phase-contrast observation. These microscopes are used in microbiology (fungi are birefringent), cytology (wet mounts) and in urinalysis (birefringent crystals such as uric acid).

06632 เครื่องหมุนสาย **UMDNS** 15173

Rotators

เครื่องเขย่าสารละลาย

Abbreviation rotato

06633 เครื่องเขย่าผสม **UMDNS** 15178

Shakers

Baths, Water, Shaker [16-772] : Large volume reservoirs for temperature controlled liquid bath with smoothly operating shaking mechanisms. They are designed for a variety of reactions requiring either, or both, agitation and incubation—enzyme reactions, bacterial incubations, tissue cultures, fermentations, extractions, dialyses, etc.

Abbreviation shaker

06634 เครื่องอุ่นของเหลว **UMDNS** 10447

Solution Warmer

A device used to heat banked blood, blood products, and intravenous solutions prior to infusion. The heating can be typically applied directly to the bag or via a special set or plastic tubing coil. [GMDN = Warmer, blood / solution = 10447]

Abbreviation solwar

06635 เครื่องสเปกโตรโฟโตมิเตอร์ **UMDNS** 15601

Spectrophotometers

ไม่มี Definition

Abbreviation spectr

- 06636 เครื่องเขย่าผสมสำหรับหลอดทดลอง UMDNS 16384
 Tube Mixer
 หลอดผสมเลือด
Abbreviation tubmix
- 06637 เครื่องทำลายเชื้อด้วยแสงอุลตราไวโอเลต พร้อมอุปกรณ์ UMDNS 12284
 Ultraviolet Light Germicidal
 Ultraviolet (UV) lights intended to reduce the concentration of airborne droplet nuclei that carry live microorganisms. Typically UV lights consist of one or more low-pressure mercury vapor tubes similar in appearance to fluorescent light tubes. These lights are typically used to prevent spread of pathogens.
Abbreviation uv-lig
- 06638 เครื่องล้างและอบเครื่องแก้วแบบอัตโนมัติ UMDNS 15196
 Automatic Glassware Washer
 A washing machine for decontamination and disinfect (chemically and / or by heat) reusable laboratory utensil, e.g. cuvettes, bottles, containers, glass, beakers or test tubes. Some do have built-in drying features as well. [GMDN = Washer, decontamination, labware = 37037]
Abbreviation wasgla
- 06639 เครื่องล้างไปเป็ด UMDNS 15197
 Pippet Cleaner
 A washing machine for decontamination and disinfect (chemically and / or by heat) reusable laboratory utensil, e.g. cuvettes, bottles, containers, glass, beakers or test tubes. Some do have built-in drying features as well. [GMDN = Washer, decontamination, labware = 37037]
Abbreviation waspip
- 06640 อ่างน้ำควบคุมอุณหภูมิ UMDNS 15108
 Water Bath
 Baths used to increase, decrease, or hold constant the temperature of bodies or vessels immersed in the water. **Related Terms:** Baths, Water, Laboratory [16-861] Baths, Water, Molded Plastic Splint [17-526] Baths, Water, Plasma-Thawing [16-796] Baths, Water, Shaker [16-772]
Abbreviation watbat
- 06641 เครื่องกลั่นน้ำ UMDNS 15136
 Water Distillator
 ไม่มี Definition

Abbreviation watdis

06642 เครื่องทำน้ำบริสุทธิ์

UMDNS 15612

Water Purifier

Decontamination Systems [20-585] : Systems designed for decontamination of chemical agents, including mustard (H agent), nerve agents such as VX and the G series (e.g., tabun [GA], sarin [GB]), and toxic industrial materials; biological agents; and/or nuclear material contaminants. These systems usually consist of several separate but interacting units (e.g., pumps, applicators, heaters, sprayers) that can deliver appropriate products (e.g., water, gases, decontaminants, steam). They perform decontamination by physical removal and/or chemical neutralization of contaminants from the surface of equipment. Decontamination systems are mainly used for decontamination of large outdoor equipment and vehicles; specialized systems that decontaminate multiple garments and personal gear or the effects of dispersive (blast) contaminant artifacts are also available.

Related Terms:Chambers, Decontamination [20-589] Decontaminants [20-552] Decontamination Kits [20-567] Decontamination Units [20-576] Modular Medical Facilities, Mobile, Personnel Shower/Decontamination [20-341] Modular Medical Facilities, Stationary, Personnel Shower/Decontamination [20-340] Purified Water Storage/Delivery Systems, Laboratory [23-425] Sanitizers [13-444] Washer/Decontamination Units [17-671] Washers [15-198] Water Purification Systems [15-612]

Abbreviation watpur

06643 เครื่องเพาะเชื้อในสภาวะไร้ออกซิเจน

UMDNS 17014

Anarobic Culture System

A substance used to maintain a viability of suspected micro-organisms contained in a specimen in an oxygen-free environment when specimen processing cannot be immediately performed or when it is in transit from the specimen collection area to the laboratory. [GMDN = Culture medium, transport, anaerobic = 33355]

Abbreviation anacul

06644 ชุดเจาะคูดน้ำคร่ำเพื่อตรวจสภาวะทารกในครรภ์

UMDNS 15274

Amniocentesis Set

Prepackaged collections (either custom or standard) of the equipment and supplies intended for use in the transabdominal perforation of the uterus to obtain amniotic fluid.

กลุ่มที่ 7 Dentistry

Chair, Dentistry

07000 เก้าอี้ทันตกรรมสนาม **UMDNS** 10792

Mobile Dental Chair

Examination/treatment chairs designed to facilitate dental examination, treatment, and/or minor surgical procedures. These chairs are typically adjustable up to a height that allows the healthcare staff to perform procedures while standing; the chairs usually include head- and armrests, a reclining back that may be tilted from a vertical to a horizontal or near-horizontal position, and rotating capabilities to facilitate examination and/or treatment. The chairs may be mechanically operated or hydraulic or electrically powered; some chairs can be programmed for several standard positions. Dental examination and/or treatment devices (e.g., lights, irrigation) may be partially or completely attached as integral components of the chair or may stand separately as self-supported, wall-mounted, or ceiling-suspended units (i.e., dental delivery units); dental delivery systems including a suspended patient chair are also available.

Abbreviation dencha

Handpieces

07100 หัวกรอพื้นความเร็วสูง **UMDNS** 11161

High Speed Handpiece

Handpieces designed to operate dental rotary instruments, such as dental burs and polishers. They are used in procedures to remove tooth structures, polish dental restorations, clean teeth, and other dental procedures. Dental handpieces are driven by connection to a power source, either a pneumatic (compressed air) system or an electric motor. **Related Terms:** Burs, Dental [10-521] Dental Air Abrasion Units [18-597]

Abbreviation hanpie-h

07101 หัวกรอพื้นความเร็วต่ำ **UMDNS** 11161

Low Speed Handpiece

Handpieces designed to operate dental rotary instruments, such as dental burs and polishers. They are used in procedures to remove tooth structures, polish dental restorations, clean teeth, and other dental procedures. Dental handpieces are driven by connection to a power source, either a pneumatic (compressed air) system or an electric motor. **Related Terms:** Burs, Dental [10-521] Dental Air Abrasion Units [18-597]

Abbreviation hanpie-l

07200 Dental Hand Instruments, Endodontic **UMDNS** 16662

Dental Hand Instruments, Endodontic

Apex Locators, Endodontic [16-355]: Electronic devices designed to accurately locate the apex (i.e., apical foramen) of a tooth root. Operation of these instruments is based on the constant relationship of

electrical resistance (impedance) between the periodontium and the oral mucosa. Several accurate methods are used, including measuring the voltage gradient, measuring the ratio of impedance at different frequencies, as well as a completely automatic method known as Root ZX. Some devices can display the length of the root canal. Apex locators are used in endodontic procedures to determine the length of the root canal that is needed and to determine perforations and their communication with the periodontal membrane. Some devices are a component of a dental handpiece, used to stop its rotation upon reaching the apex.

Abbreviation denend

07201 เครื่องมือผ่าตัดในช่องปาก **UMDNS 16666**

Dental Surgery Instrument Set

Broaches, Dental, Endodontic [16-411] : Dental broaches designed to enlarge the root canal. An endodontic broach is often one of the first instruments used to perform an endodontic procedure. These devices typically are thin, flexible, manual, handheld instruments with a tapered and pointed working end. They are smooth or, more frequently, have a series of sharply pointed barbed projections curved backward and obliquely and have a handle. Barbed broaches are used primarily to remove intact pulp tissue, while smooth root-canal broaches are also used as explorers.

Abbreviation denora

07202 Dental Hand Instruments, Orthodontic **UMDNS 16664**

Dental Hand Instruments, Orthodontic

Broaches, Dental, Endodontic [16-411] : Dental broaches designed to enlarge the root canal. An endodontic broach is often one of the first instruments used to perform an endodontic procedure. These devices typically are thin, flexible, manual, handheld instruments with a tapered and pointed working end. They are smooth or, more frequently, have a series of sharply pointed barbed projections curved backward and obliquely and have a handle. Barbed broaches are used primarily to remove intact pulp tissue, while smooth root-canal broaches are also used as explorers.

Abbreviation denort

07203 Dental Hand Instruments, Periodontal **UMDNS 16665**

Dental Hand Instruments, Periodontal

Broaches, Dental, Endodontic [16-411] : Dental broaches designed to enlarge the root canal. An endodontic broach is often one of the first instruments used to perform an endodontic procedure. These devices typically are thin, flexible, manual, handheld instruments with a tapered and pointed working end. They are smooth or, more frequently, have a series of sharply pointed barbed projections curved backward and obliquely and have a handle. Barbed broaches are used primarily to remove intact pulp tissue, while smooth root-canal broaches are also used as explorers.

Abbreviation denper

07204 ชุดทันตกรรมหัตถการ UMDNS 16663

Dental Operative Set

Apex Locators, Endodontic [16-355]: Electronic devices designed to accurately locate the apex (i.e., apical foramen) of a tooth root. Operation of these instruments is based on the constant relationship of electrical resistance (impedance) between the periodontium and the oral mucosa. Several accurate methods are used, including measuring the voltage gradient, measuring the ratio of impedance at different frequencies, as well as a completely automatic method known as Root ZX. Some devices can display the length of the root canal. Apex locators are used in endodontic procedures to determine the length of the root canal that is needed and to determine perforations and their communication with the periodontal membrane. Some devices are a component of a dental handpiece, used to stop its rotation upon reaching the apex.

Abbreviation denman

07900 Aspirators, Dental UMDNS 10212

Aspirators, Dental

Aspirators used by dentists, dental assistants, and orthodontists during oral examinations and oral or orthodontic surgery to evacuate saliva, tooth debris, blood, water, and other materials from the oral cavity by means of suction. Typically, they are long and slender and are constructed of flexible plastic or stainless steel.

Abbreviation aspdn

07901 เครื่องเหวี่ยงโลหะ UMDNS 10662

Casting Machine

A device used in the dental laboratory for casting various kinds of technology. [GMDN = Casting Units, Dental laboratory = 34911]

Abbreviation casmac

07902 ชุดเครื่องมือทำครอบฟันโลหะเด็ก UMDNS 11058

Ped Dental Crown Set

Total dental crown prostheses designed for temporary (usually no more than a few weeks) restoration of a natural crown of a tooth by fitting around the remains of the tooth, covering the entire natural crown surface, and affixing to the surrounded tooth. These crowns are typically preformed devices made of plastics (e.g., cellulose acetate, polycarbonate) or nonprecious metals (e.g., aluminum); they are usually fixed to the tooth using self-adhesive or light-curing resins. Dedicated crowns are available in a variety of sizes and shapes for anterior teeth (e.g., incisors, canines) and posterior teeth (e.g., premolars and molars). Temporary total crowns are mainly intended for use as a restoration during dental treatments and/or until a permanent prosthesis is available. **Related Terms:** Denture Anchors [16-396]

Abbreviation dencro

- 07903 เครื่องกรอตัดกระดูกและฟันความเร็วสูง UMDNS 11329
Surgical Micromotor
Drills, Biopsy [11-330] : Drills designed to excise a small section of bone or cartilage for microscopic examination.
Abbreviation denmic
- 07904 เก้าอี้ทันตแพทย์ UMDNS 11164
Dental Stool
Height adjustable stools that include a seat and an adjustable backrest appropriate for operator use during long dental procedures; those used by dental assistants also include a long armrest that can be appropriately adjusted. The backrest can also be used as a siderest or abdominal rest. These stools usually include a four- or five-caster base, and some include locking casters and pneumatic mechanisms (possibly foot controlled) for height adjustment. Some dental stools are attached to the dental chair so they can revolve 270 degrees around the chair and retracted close to the chair when not in use.
Abbreviation densto
- 07905 เครื่องดูดเลือดและน้ำลายแรงสูงชนิดเคลื่อนที่ได้ UMDNS 10212
Dental Mobile Suction Unit
Aspirators used by dentists, dental assistants, and orthodontists during oral examinations and oral or orthodontic surgery to evacuate saliva, tooth debris, blood, water, and other materials from the oral cavity by means of suction. Typically, they are long and slender and are constructed of flexible plastic or stainless steel.
Abbreviation densuc-m
- 07906 ชุดเทรย์พิมพ์ปาก UMDNS 16350
Dental Tray Set
Horseshoe shaped receptacles made of metal or other suitable material used to carry the impression material to the mouth, to confine the material in opposition to the surfaces to be recorded, and to control the impression material while it sets to form the impression.
Abbreviation dentra
- 07907 ยูนิตทำฟัน UMDNS 11165
Dental Units
Equipment combined in a single unit designed to deliver dental care. These units typically combine all the fundamental devices needed to provide dental services, such as handpieces, lights, and cuspidors; they also include the supplies needed for their operation, such as compressed air, suction, electricity, and water. Dental delivery units are frequently available as stand-alone units, but some units are attached to a dental chair. Dental

delivery units are the main component of dental systems that may also include x-ray devices, cabinets, stools, sterilization units, and other ancillary equipment. **Related Terms:** Cabinets, Treatment, Dentistry [10-532]

Dental Air Abrasion Units [18-597]

Abbreviation denuni

07908 เครื่องเอ็กซเรย์ทางทันตกรรม **UMDNS** 13269

Dental X-ray Unit

Radiographic units designed for dental and/or oral cavity imaging. These units include an x-ray generator, an x-ray tube (usually with stationary anode), a collimator, an exposure timer, patient positioning features and a control panel. The configuration of these components depends on the type of radiography performed and the type of x-ray generator used. Most dental radiographic unit x-ray tubes have a voltage range from 50 to 100 kV, and a current range from 1 to 20 mA. Dental radiographic units are used for imaging dentition, individual tooth anatomy and dental problems, as well as for orthodontic planning and assessment.

Abbreviation denxra

07909 หัวขัดฟันความเร็วต่ำ **UMDNS** 16699

Prophy

หัวขัดฟันความเร็วต่ำ

Abbreviation prophy

07910 เครื่องตรวจความมีชีวิตของฟัน **UMDNS** 13187

Electric Pulp Tester

Physiologic analyzers designed to evaluate the pulpal vitality of teeth by electrically stimulating the nerve tissue of the pulp. The electric current needed to obtain a patient response to the stimulus is a measure of the condition of the dental pulp. These analyzers usually consist of a high-frequency electronic oscillator, cables, and electrodes to apply the electrical signal; some units include a display. Dental pulp physiologic analyzers are used to determine pulp necrosis, pulpitis, and involvement of teeth that are near lesions.

Abbreviation pulpte

07911 แผ่นยางกันน้ำลาย **UMDNS** 11155

Rubber Dams

A sheet of latex rubber that is punched with holes and placed over the teeth during dental procedures to isolate the field of operation from the rest of the rest of the oral cavity [**GMDN = Rubber dam,dental = 11155**]

Abbreviation rubdam

07912 กระบอกโหละฉีดยาน้ำยาล้างแผล UMDNS 17112

Irrigation Syringe

Plunger syringes used in dentistry to inject and/or aspirate a volume of solution into the working area. These devices typically consist of small syringes (3 ml is typical) and are capable of aspirating the fluid and debris, preventing their extrusion beyond the apical confines of the tooth; some may also include thumb rings and/or swivel finger bars to improve control of the syringe. Most dental irrigation syringes may be attached to blunted needles for use in endodontic procedures or to very fine needles to perform special procedures (e.g., root canal).

Abbreviation syrirr

07913 เครื่องชุดหินปูนไฟฟ้า UMDNS 17497

Ultrasonic Scaler Unit

A dental instrument used to remove calculus and other deposits from tooth surfaces during dental cleaning and periodontal therapy. [GMDN = Scaler, periodontic, (specify) = 40534]

Abbreviation ultsca

07914 เครื่องอัด Vacuum ทำ spint UMDNS 16696

Vacuum Splint

Prepackaged collections (either custom or standard) of the necessary equipment and supplies for preparing and utilizing rigid or flexible appliances that overlay the occlusal surfaces of the teeth (i.e., dental splints). Dental splints are typically used to maintain the position of displaced or movable teeth, to treat clenching and bruxism and their sequelae, and to provide temporary relief from muscle or temporomandibular joint pain.

Abbreviation vacspl

07915 หม้อต้มไล่ขี้ผึ้ง UMDNS 16189

Wax Removing Boiler

ไม่มี Definition

Abbreviation waxboi

07916 เครื่องปั่นวัสดุอุดฟันอมัลกัม UMDNS 10082

Amalgamators

Devices, usually electrically powered, intended to mix, by shaking, amalgam capsules containing mercury and dental alloy particles. The capsule may be an integral part of the amalgamator or a separate component placed into the amalgamator.

Abbreviation amamat

07917 เครื่องฉายแสงวัสดุอุดฟัน UMDNS 16736

Light Curing Unit

A dedicated light designed for dental use, e.g. delivering intense focused lighting to the dental operating, examination or procedure site, or used as a part of the treatment. [GMDN = **Light, dental, (specify) = 38624**]

Abbreviation curlig

07918 โคมไฟส่องปากทางทันตกรรมสนาม UMDNS 12351

Mobile Dental Light Unit

Lights designed to deliver intense focused lighting, either to contribute to the performance of a dental procedure (e.g., resin polymerization) or to illuminate the oral cavity and/or surrounding anatomic sites where the procedure (e.g., operating, examination, prophylactic) is performed. A variety of lights with different wavelengths and power are used in dental procedures, including lights for general dental examination, intraoral lights, and lights used for polymerization of dental resins. **Related Terms:** Lights, Dental, Intraoral [12-352]

Abbreviation denlig

กลุ่มที่ 8 Emergency Medicine

08000 รถเข็นที่บรรจุแก๊สทางการแพทย์ UMDNS 11835

Carts, Gas, Cylinder, backpack medical device

Storage devices equipped with wheels for transporting supplies from one area of a medical facility to another. They are typically constructed of metal or plastic and contain shelves or drawers.

Abbreviation cargas

08001 เครื่องช่วยชีวิตเด็กแรกเกิด UMDNS 13360

Resuscitator, Cardiopulmonary

Resuscitators that combine in units the capabilities to restore the cardiac function and provide ventilation to a patient who is apneic or exhibits inadequate respiration and is simultaneously under cardiac arrest. These resuscitators apply mechanical compression cyclically to the cavity between the sternum and the vertebral column, producing a compression of the sternum up to five centimeters (two inches), forcing the heart to eject blood; pulmonary resuscitation is performed by using an integral pneumatic pulmonary resuscitator, typically applying time-cycled ventilation. Cardiopulmonary resuscitators are used as a substitute of manual external cardiac compression to prevent fatigue of emergency personnel and to provide a better consistency in the applied force and rate of compression to ventilation ratio of 5:1. These

resuscitators may be used during emergencies involving cardiopulmonary arrest if an oxygen cylinder or an oxygen-piped wall outlet is present; they can also be used during patient transportation in ambulances.

Abbreviation fetres

กลุ่มที่ 9 Gastroenterology

Entero-Endoscope

09000 เครื่องส่องตรวจลำไส้เล็กขนาดยาว **UMDNS** 18125

Enteroscope

Flexible endoscopes designed for direct insertion through the mouth in the upper gastrointestinal tract for visual examination, biopsy, and treatment of lesions of the interior of the small intestine. Enteroscopes usually consist of a flexible outer sheath, a lighting system, and a working channel for catheters and operative devices. **Related Terms:** Duodenoscopes [11-359] Endoscopes, Gastrointestinal Tract, Upper Tract [20-478] Enteroscopes, Video [18-126] Gastroduodenoscopes [11-853]

Abbreviation scoent

09100 กล้องส่องตรวจลำไส้ใหญ่ส่วนปลายชนิดตรง **UMDNS** 15058

Rigid Sigmoidoscope

Sigmoidoscopes with a nonflexible (i.e., rigid) structure that can only follow a straight path through the lower (i.e., sigmoid) colon; they include illumination and imaging systems enabling the examination and treatment of the sigmoid colon. The sheath is usually made of stainless steel.

Abbreviation scosig-r

Other

09200 กล้องส่องตรวจทางเดินน้ำดี **UMDNS** 10831

Fiberoptic Cholecystoscope

Endoscopes designed for insertion into the biliary tract for visual examination, biopsy, removal or crushing of stones, and treatment of lesions of the interior of the pancreaticobiliary tree, especially of the common bile duct. Choledochoscopes usually include a lighting system and a working channel for catheters and operative devices. These endoscopes are typically flexible, and they may be inserted percutaneously, during laparoscopic procedures, or through the duodenum (transduodenal). Therapeutic choledochoscopes (with operating channels) may be used to perform biopsies, electrosurgery, and other procedures, such as fragmenting and removing stones.

Abbreviation scocho

- 09201 กล้องส่องตรวจลำไส้ใหญ่ส่วนโคลลอน UMDNS 10950
 Fiberoptic Colonoscope
 Flexible endoscopes designed for direct insertion through the rectum in the lower gastrointestinal tract for visual examination, biopsy, and treatment of lesions of the interior of the colon; some of these devices can be used for the entire large intestine. Colonoscopes usually consist of a flexible outer sheath, a lighting system, and a working channel for catheters and operative devices.
Abbreviation scocol
- 09202 กล้องส่องตรวจลำไส้เล็กส่วนต้นและท่อน้ำดี UMDNS 11359
 Fiberoptic Duodenoscope
 Flexible endoscopes designed for direct insertion through the mouth in the upper gastrointestinal tract for visual examination, biopsy, and treating lesions of the interior of the proximal portion of the small intestine from pylorus to the jejunum (i.e., duodenum). Duodenoscopes usually consist of a flexible outer sheath, a lighting system, and a working channel for catheters and operative devices. **Related Terms:** Duodenoscopes, Video[17-654] Endoscopes, Gastrointestinal Tract, Upper Tract [20-478] Enteroscopes [18-125] Gastroduodenoscopes[11-853]
Abbreviation scoduo
- 09203 กล้องส่องตรวจกระเพาะอาหารและลำไส้เล็ก UMDNS 11853
 Fiberoptic Gastroduodenoscope
 Flexible endoscopes designed for insertion, either directly through the mouth or by an incision in the gastric wall, in the upper gastrointestinal tract for visual examination, biopsy, and treatment of lesions of the interior of the stomach and the proximal portion of the small intestine from the pylorus to the jejunum (i.e., duodenum). Gastroduodenoscopes usually include a flexible outer sheath, a lighting system, and a working channel for catheters and operative devices. **Related Terms:** Duodenoscopes [11-359] Endoscopes, Gastrointestinal Tract, Upper Tract [20-478] Gastrosopes [11-856]
Abbreviation scogas
- 09204 กล้องส่องตรวจภายในช่องท้อง UMDNS 13003
 Fiberoptic Peritoneoscope
 ไม่มี Definition
Abbreviation scoper
- 09205 กล้องส่องตรวจทวารหนักชนิดนำแสง UMDNS 13126
 Fiberoptic Proctoscope
 ไม่มี Definition
Abbreviation scopro

- 09206 กล้องส่องตรวจพยาธิสภาพปากมดลูก UMDNS 10951
Colposcope
A special microscope for the examination of the female genitalia, e.g. vagina or uterine cervix.
[GMDN = Colposcope = 10940]
Abbreviation colpos
- 09207 ชุดเครื่องมือขยายหลอดอาหาร UMDNS 11257
Esophageal Dilator Set
Bougies designed for passing through the esophagus, usually to dilate and/or calibrate strictures. These handheld, manual instruments consist of a strong-walled rubber tube that is filled with mercury (or tungsten) or a set of perforated, olive-shaped tips, devices that are inserted via a previously swallowed string. Esophageal bougies are intended to treat strictures, stenosis, esophagitis, and/or cardiospasm; some esophageal bougies permit the introduction of an extremely slender solid tube (a filiform) via their lumen for use as a guide or for dilation of very thin strictures. **Related Terms:** Bougies, Esophagus, Filiform [21-005] Bougies, Esophagus, Mercury-Filled [21-002] Bougies, Esophagus, Olive-Tip [21-004] Bougies, Esophagus, Tungsten-Filled [21-003]
Abbreviation dileso
- 09208 เครื่องมือชุดตรวจวินิจฉัยโรคหู UMDNS 12849
Otosopes
Instruments designed to inspect the ear, especially the outer ear canal and the tympanic membrane. These instruments include a light source (e.g., halogen lamp), batteries, magnifying glasses, a specula, (may be disposable), and a handle. Some of these instruments also include other accessories, according to their intended use (e.g., diagnostic, operative).
Abbreviation otosco
- 09209 กล้องส่องตรวจหลอดอาหาร UMDNS 11603
Esophagosopes
Endoscopes designed for direct insertion through the mouth into the upper gastrointestinal tract for visual examination, biopsy, retrieval of foreign bodies, and treatment of lesions of the interior of the esophagus. Esophagosopes usually consist of an outer sheath, a lighting system, and a working channel for catheters and operative devices; these endoscopes may be rigid or flexible. **Related Terms:** Endoscopes, Gastrointestinal Tract, Upper Tract [20-478]
Abbreviation scoeso

09210 กล้องส่องตรวจลำไส้ใหญ่ส่วนปลายชนิดตรง UMDNS 13594

Flexible Sigmoidoscope

Endoscopes designed for direct insertion through the rectum into the lower gastrointestinal tract for visual examination, biopsy, and treatment of lesions of the lower (i.e., sigmoid) part of the colon. Sigmoidoscopes usually consist of a flexible outer sheath, a lighting system, and a working channel for catheters and operative devices.

Abbreviation scosig

09211 กล้องส่องตรวจทวารหนักและลำไส้ใหญ่ส่วนปลาย UMDNS 13127

Sigmoidoscope Anoscope

Endoscopes designed for direct insertion through the rectum into the lower gastrointestinal tract for visual examination, biopsy, and treatment of lesions of the rectum and the lower (i.e., sigmoid) part of the colon. Sigmoidoscopes usually consist of a flexible outer sheath, a lighting system, and a working channel for catheters and operative devices.

Abbreviation scosig-a

09900 ชุดเครื่องมือขยายทวารหนัก UMDNS 11262

Dilator For Anal

A surgical instrument designed designed to dilate the anal sphincter and canal when the size of the anal opening may interfere with its function or the passage of an examining instrument. [GMDN = Dilator, rectal = 11262]

Abbreviation dilpro

09901 ชุดล้างกระเพาะอาหาร UMDNS 17189

Gastric Lavage And Irrigation Set

Mattress systems that include a mattress made of multiple air cells, which are cyclically inflated and deflated in such a way that the inflated sacks cells support the patient and the deflated ones give pressure relief to prevent maceration of the patient's skin. Control units connected to the mattress regulate the cycles of inflation and deflation. These systems are typically used in the care and management of patients at risk for, or who already have compromised skin surfaces, such as burn patients, patients at risk for developing decubitus ulcers, patients with decubitus ulcers, etc.

Abbreviation gaslav

- 09902 เครื่องดูดของเหลวจากช่องท้อง UMDNS 10215
 Gastric Suction
 Aspirators used to evacuate small amounts of gas, fluid, tissue, or other foreign materials from a body cavity by means of suction. They are compact and used for a single patient.
Abbreviation gassuc
- 09903 เครื่องวิเคราะห์การเคลื่อนไหวของระบบทางเดินอาหาร UMDNS 15036
 Analyzers, Physiologic Peristaltic Motility, Gastrointestinal
 Peristaltic motility analyzers that determine gastric and/or small intestine (usually the duodenum) motility by measuring the pressure on an intragastric probe at several points. These analyzers usually also include a pH electrode to measure the acidity of the stomach contents. Gastrointestinal motility analyzers are used to evaluate several diseases in the stomach and small intestine, including the prediction of duodenal and/or gastric ulcers. **Related Terms:** Gastrographs [11-854]
Abbreviation g-imot
- 09904 เครื่องรัดริดสีดวงทวาร UMDNS 12335
 Barron Hemorrhoid Alligator
 Devices designed to cut off blood flow to hemorrhoidal tissue. **Related Terms:** Occluders, Vascular [17-731]
Abbreviation hemlig
- 09905 เขี่ยอก UMDNS 11799
 Jars, Forceps
 A cylindrical vessel with a wide mouth designed for holding medical materials or instruments which are frequently used, e.g. in examination room or a doctor's surgery.
Abbreviation jarfor
- 09906 เครื่องมือตรวจวินิจฉัยระบบทางเดินอาหารด้วยอัลตราซาวด์จากกล้องส่องตรวจ UMDNS 14278
 Gastro Endoscopic Ultrasound System
 Scanning systems that use sound waves at frequencies (typically in the range of 2 to 15 MHz) well above the level of human hearing to generate an image of tissue in a transverse plane of the body. These systems convert an electrical signal into ultrasonic energy that is transmitted into tissues. The intensity, time, and direction of the echoes are measured and processed to generate an amplitude display (A-mode), a two-dimensional "brightness modulated" image display (B-mode), or a one-dimensional graphic display of a moving structure (M-mode). Ultrasonic scanners are composed of transducers (to convert electrical signals to sound

waves and sound waves to electrical signals); scanners that measure the intensity, time, and direction of the reflected (echoed) sound waves; and scan converters that display the image on a TV monitor (usually a high-resolution monitor). Ultrasonic scanning systems are used in many diagnostic procedures, including gynecologic, obstetric, cardiac, vascular, endoscopic, thyroid, and breast procedures. Some ultrasonic devices using the Doppler principle are used to display blood flow information.

Abbreviation scout

09907 เครื่องตัดก้อนเนื้อสำหรับกล้องส่องตรวจ **UMDNS** 15990

Snare for Flexible Colonoscope

An instrument typically consisting of a channel, or canula, and two stationary and one sliding finger ring. A snare positions and tightens a loop of flexible wire around a region of tissue. By moving the sliding finger ring relative to the others, the finger ring controls how much wire extends out of the channel. [GMDN = Snare, (specify) = 34822]

Abbreviation snare

09908 ชุดดูดของเหลวและเลือดจากช่องท้องติดผนัง **UMDNS** 10215

Gastric Suction Unit, Wall

Aspirators used to evacuate small amounts of gas, fluid, tissue, or other foreign materials from a body cavity by means of suction. They are compact and used for a single patient.

Abbreviation suqip-g

09909 โต๊ะตรวจทวารหนัก **UMDNS** 17759

Anal Examination Table

Adjustable examination/treatment tables that usually include knee and elbow rests and heel stirrups. These tables are designed to support the patient's body in adequate position during perineal examination and procedures.

Abbreviation tabana

กลุ่มที่ 10 Gynecology

10000 ชุดเจาะดูดของเหลวผ่านผนังช่องคลอด **UMDNS** 15313

Culdocentesis Set

Prepackaged collections (either custom or standard) of the equipment and supplies intended for use to perform a culdocentesis procedure, a procedure wherein the clinician makes a needle puncture or incision through the vagina in order to remove intraperitoneal fluid, including purulent material.

Abbreviation culcen

10001 เติงตรวจภายใน UMDNS 17549

Vaginal Examination Table

Adjustable examination/treatment tables that usually include knee crutches, traction handles and heel stirrups. These tables are designed to support the woman's body in appropriate positions during gynecologic examination and procedures.

Abbreviation pv-bed

10002 เครื่องมือชุดส่องตรวจและผ่าตัดโพรงมดลูก UMDNS 12081

Operating Hysteroscopes

Endoscopes, either rigid or flexible, designed for direct insertion through the canal of the uterine cervix into the cavity of the uterus for visual examination, biopsy, and treatment of lesions of the interior of the cervix and the cavity of the uterus. Hysteroscopes usually consist of an outer sheath, a lighting system, and a working channel for catheters and operative devices; they may be flexible or rigid.

Abbreviation scohys

10003 เครื่องจักรระบบอัลตราโซนิค ใช้ในการผ่าตัดตับและเนื้องอกในสมอง UMDNS 15756

Ultrasonic Aspirator

Aspirators that use high-frequency mechanical ultrasonic vibration and an irrigation/suction system to cut, coagulate, and remove soft tissue or growths with a high water content from the body by means of suction. They are used during neurosurgery, gynecologic and orthopedic procedures for brain and spinal cord tumors, hepatic cysts, vulvar lesions and during partial nephrectomies, laparoscopic cholecystectomies, and spleen and liver resections. They are also used in surgery when blades or blunt dissection could damage the surrounding tissue or when lasers would completely eradicate a lesion. They consist of an ultrasonic generator, a lightweight slender handpiece with an irrigation/aspiration hollow tip, a fluidics system, and a footswitch.

Abbreviation ultasp

10004 เครื่องมือขูดมดลูกด้วยวิธีสูญญากาศ UMDNS 10222

Uterine Aspirator Set

Aspirators used to evacuate gas, fluid, tissue, or other foreign materials from the uterus by means of suction, typically used for dilation and evacuation therapy, terminating early pregnancies up to 12 weeks, treating incomplete spontaneous abortions, and removing retained afterbirth. They can also be used for diagnostic dilation and curettage to remove the outermost layer of uterine lining (endometrium) so that further microscopic exams can be performed. They are linepowered, have high-vacuum suction and a fine curet, and may be equipped with a microbial filter.

Abbreviation uteasp

10005 เครื่องมือถ่างตรวจภายในสตรี

UMDNS 13666

Vaginal Speculum

Specula designed to expand the vagina. These specula typically consist of a mechanical instrument that includes two pivoted arms. The portions closer to the pivot point are usually the handle, while the distal portions are inserted into the vagina. Vaginal specula permit direct performance of examination and manual procedures in the interior of the vagina and/or uterine cervix. **Related Terms:** Colposcopes [10-960] Hysteroscopes[12-081]

Abbreviation vagspe

กลุ่มที่ 11 Health Facility

Bed

11000 ตู้ข้างเตียงผู้ป่วย

UMDNS 10531

Bed Cabinet

Cabinets designed to store patient daily-use utensils and/or other products or devices (e.g., telephone, radio sets, nurse-call units) needed for short- or long-term patient care that are usually placed close to the patient bed. This furniture typically consists of metallic or wooden closed cabinet with drawers, shelves, and doors or, less frequently, of open cabinets including shelves and one or more drawers. Bedside cabinets are used in homes, hospitals, and other healthcare facilities; they are available either as separate units or combined with other furniture (e.g., bed, chairs, bookcases) that use the same materials and/or style conforming to a patient room furniture set. **Related Terms:** Furniture, Patient Room [15-915]

Abbreviation bedcab

11001 เตียงผู้ป่วยปรับระดับด้วยไฟฟ้า

UMDNS 10347

Electrical Patient Bed

Beds with one or more built-in electric motors and remote electric or pneumatic controls that can be operated by the patient or staff to adjust the bed surface, contour, or both. In most adjustable electric beds, the mattress support is typically divided into three or more pivoted sections that can adjust the height and assume Gatch positions or Fowler positions (head and knees elevated) or tilt to Trendelenburg and reverse Trendelenburg positions (body straight; feet elevated or lowered, respectively). These beds are designed for use in recuperation or treatment. Most electric beds include movable and latchable siderails. Some beds may incorporate fixed endrails or a fabric framed canopy. **Related Terms:** Beds, Electric, Alternating Pressure [18-383] Beds, Electric, Birthing [15-732] Beds, Electric, Circular Revolving [10-345] Beds, Electric, Flotation Therapy [10-348] Beds, Electric, Low-Air-Loss [17-593] Beds, Electric, Obese [15-760] Beds, Electric, Radiography/Fluoroscopy [10-351] Beds, Electric, Rocking [10-363] Beds, Electric, Rotation [18-384] Beds, Electric, Rotation/Rocking [18-385] Beds, Electric, Vertical Tilting [16-991] Electrical Conversion Kits, Mechanical Bed [16-917]

Abbreviation bedele

- 11002 เตียงชนิดและขนาดต่างๆ UMDNS x
 Beds
 ไม่มี Definition
Abbreviation beds
- 11003 เตียงสำหรับผู้ป่วยเฉพาะทาง UMDNS x
 Bed Special
 A bed specifically designed for special purposes, e.g. AIDS treatment, disable person, flotation therapy, obese person etc. (ข้อมูลที่เพิ่มเติมคำนิยามให้เอง)
Abbreviation bedspe
- 11004 เตียงผู้ป่วยชนิดปรับระดับได้ UMDNS 10357
 Fowler Bed
 Beds with one or more mechanical manual crank handles or other controls that can be operated by the staff to adjust the bed surface, contour, or both. In most adjustable mechanical beds, the mattress support is divided in three or more pivoted sections that are height adjustable and can assume the Gatch position or the Fowler position (head and knees elevated) or tilt to Trendelenburg and reverse Trendelenburg positions (body straight; feet elevated or lowered, respectively). These beds are designed for use in recuperation or treatment. Most electric beds include movable and latchable siderails. Some beds may incorporate fixed endrails or a fabric framed canopy. **Related Terms:** Beds, Mechanical, Birthing [18-388]
 Beds, Mechanical, Flotation Therapy [18-389] Beds, Mechanical, Neonatal [18-393] Beds, Mechanical, Pediatric [18-392] Beds, Mechanical, Radiography/Fluoroscopy [18-391] Beds, Mechanical, Rotation [18-390]
Abbreviation fowbed
- 11005 เตียงปรับระดับได้(สำหรับผู้ป่วยทางเวชศาสตร์ฟื้นฟู) UMDNS x
 Adjustable Height Bed with Split-Side Rail
 A bed designed to be used and, when applicable, operated by a disable person and / or an attendant. It may be fixed or adjustable by either manual or power assisted means. It may have one or more sections or features of the bed which can be adjusted, e.g. in height or angle, for the occupant's comfort. [GMDN = **Bed, disabled person, (specify) = 41647**]
Abbreviation rehbed

Cameras

11100 กล้องถ่ายภาพ UMDNS 10549

Camera

Devices used to capture images. Cameras can be designed for many purposes, including to make permanent images of objects on films, electronic images to be displayed and/or transmitted, radiographic/fluoroscopic images, and images produced by the radiation generated by radiopharmaceuticals.

Related Terms: Cameras, Cine [16-657] Cameras, Endoscope [15-748] Cameras, Fundus [10-551] Cameras, Gamma [15-944] Cameras, Identification [10-552] Cameras, Microscope [15-815] Cameras, Multi-Image [15-823] Cameras, Ophthalmic [16-419] Cameras, Oscilloscope [10-558] Cameras, Radiographic Photospot [16-418] Cameras, Surgical [10-559] Cameras, Video [17-001] Cameras, Video, Endoscope [17-002] Cameras, Video, Ingestible [20-392]

Abbreviation digcam

11101 เครื่องพิมพ์ชื่อบนแผ่นฟิล์ม UMDNS 10552

Identification Camera

A device used to produce an image of an object. [GMDN = Camera, (specify) = 10549]

Abbreviation idecam

Light Sources and lamp

11200 เครื่องกำเนิดแสง UMDNS 12340

Light Sources

Devices that provide light for use in a distant area using a delivery system (e.g., fiberoptics). Light sources may include one of a variety of lamps (e.g., xenon, halogen, mercury). Most light sources are operated from line power, but some may be powered from batteries. They are mostly used in endoscopic, microscopic, and other examination and/or in surgical procedures. **Related Terms :** Light Sources, Fiberoptic [12-345] Light Sources, Fiberoptic, Flexible Endoscopic [12-343] Light Sources, Fiberoptic, Rigid Endoscopic/Multipurpose[16-831] Light Sources, Flash [12-346] Light Sources, Microscope [16-438] Lights [12-347] Power Supplies [18-557]

Abbreviation ligsou

11201 เครื่องฉายแสงอุลตราไวโอเลตพร้อมอุปกรณ์ UMDNS 15762

Ultraviolet Therapy

A device intended for medical purposes that is used to destroy bacteria in the air by exposure to ultraviolet radiation from a light source, consisting of, e.g. a low pressure mercury vapour tube that emits ultraviolet radiation as well as visible light. It may also destroy bacteria by other means, thereby reducing

concentration of airborne droplet nuclei that carry live micro-organisms. It could typically be used to prevent the spreading of tuberculosis. [GMDN = Light germicidal, ultraviolet = 35150]

Abbreviation ultthe

11202 โคมไฟส่องตรวจและผ่าตัดเล็ก **UMDNS** 12276

Minor Operating Lamp

Lights designed to deliver intense focused lightning directly on the area where the examination is performed. These lights emit radiation in the visible spectrum; they are mostly used in dental and physician offices for patient examination and to perform other procedures (e.g., minor surgery). Examination lights are available in stand-alone (free standing), wall-mounted, ceiling-mounted, and table-top configurations

Related Terms: Lights, Examination, Ceiling-Mounted [15-866]

Abbreviation ligope-m

11203 โคมไฟส่องตรวจและผ่าตัดเล็กชนิดเคลื่อนที่ได้ **UMDNS** 12276

Minor Operating Lamp, Mobile

Lights designed to deliver intense focused lightning directly on the area where the examination is performed. These lights emit radiation in the visible spectrum; they are mostly used in dental and physician offices for patient examination and to perform other procedures (e.g., minor surgery). Examination lights are available in stand-alone (free standing), wall-mounted, ceiling-mounted, and table-top configurations. **Related**

Terms : Lights, Examination, Ceiling-Mounted [15-866]

Abbreviation ligmob

11204 โคมไฟส่องตรวจภายใน **UMDNS** 12276

PV.Lamp

Lights designed to deliver intense focused lightning directly on the area where the examination is performed. These lights emit radiation in the visible spectrum; they are mostly used in dental and physician offices for patient examination and to perform other procedures (e.g., minor surgery). Examination lights are available in stand-alone (free standing), wall-mounted, ceiling-mounted, and table-top configurations

Abbreviation pvlamp

Tables

11300 โต๊ะชนิดและขนาดต่างๆ **UMDNS** 13949

Tables

Furniture used within the field of medicine that consists of a smooth, flat slab fixed on legs.

Abbreviation tables

- 11301 โต๊ะเคลื่อนเตียง UMDNS 13963
 Over Bed
 Tables designed to be moved directly over the bed to provide the capability for patients to eat, read, or write while they are located in a hospital bed.
Abbreviation ovebed
- Other**
- 19900 ชุดกำเนิดพลังลม UMDNS 10972
 Compress Medical-Air Unit
 Compressed air system components that are used to mechanically compress atmospheric air.
Abbreviation aircom
- 19901 ตู้ชนิดและขนาดต่างๆ UMDNS 10526
 Cabinets
 ไม่มี Definition
Abbreviation cabinet
- 19902 รถชนิดและขนาดต่างๆ UMDNS 10635
 Carts
 Storage devices equipped with wheels for transporting supplies from one area of a medical facility to another. They are typically constructed of metal or plastic and contain shelves or drawers. **Related Terms:** Carts, Anesthetist's [10-636] Carts, Central Supply [15-886] Carts, Computer/Video Monitor [22-805] Carts, Food Service [15-887] Carts, Housekeeping [15-890] Carts, Instrument [10-641] Carts, Isolation [10-642] Carts, Linen/Laundry [15-888] Carts, Malignant Hyperthermia [16-988] Carts, Medication [10-644] Carts, Mortuary [17-901] Carts, Orthopedic Supply [10-646] Carts, Other [15-208] Carts, Resuscitation [10-647] Carts, Service/Utility [15-889] Carts, Surgical Case [15-891] Carts, Tissue [16-493] Carts, Traction [10-650]
Abbreviation carts
- 19903 ตู้อบและเป่าท่อสายยาง UMDNS 15812
 Drying Cabinets
Dryers [17-133] : Equipment designed to remove moisture, either in liquid or vapor state, from devices, films, fabrics, objects, and/or gases using a physical procedure (e.g., heat, centrifugal force, refrigeration, forced air, filtration), and/or natural convection or with the exclusive use of chemical desiccating products. Dedicated dryers are used in healthcare facilities

to dry labware, laboratory slides and gels, laundry, small devices and/or utensils, forensic evidence, and x-ray films; they are also used to dry the air in medical air systems.

Abbreviation drycab

19904 เครื่องกรองอากาศ

UMDNS 12268

Laminar Air Flow Units

Equipment designed to displace all the entire air mass within an enclosure with uniform velocity and parallel direction, distorted only by objects in the flow pathway. Typically air is drawn from the environment into the system by the negative pressure created by a blower; air particles and liquid droplets are removed using high-efficiency particulate-air (HEPA) filters that usually can prevent the passage of particulate matter of 0.3 micron in size or larger with more than 99.99 efficiency, keeping a contamination level of less than 100 particles per cubic foot of particles of 0.5 micron or larger. The filtered air is then circulated into the enclosure (e.g., a cabinet, a room) and exhausted into the environment or recirculated into the enclosure using a system of blowers and air pathways. Laminar air flow is used in clinical laboratories (e.g., for handling cell cultures and human pathogens) and to isolate patients to avoid contamination, either to the patient or from the patient to health care providers. These units may be installed in existing rooms or supplied as an integral part of a cabinet.

Related Terms : Laminar Air Flow Units, Fixed [15-279] Laminar Air Flow Units, Fixed, Pharmaceutical [17-710] Laminar Air Flow Units, Fixed, Surgical [17-709] Laminar Air Flow Units, Mobile [15-280]

Abbreviation lamair

19905 แผ่นรองนอนสำหรับเคลื่อนย้ายผู้ป่วย

UMDNS 19014

Pad Slide

Boards designed to facilitate patient transfer between two close surfaces, providing a bridge on which the person can slide. These boards are available in a variety of shapes and sizes. The most common are rectangular with dimensions of 50 to 76 cm x 20 to 25 cm (20 to 30 inches x 8 to 10 inches); most of them are made of wood or plastic, have tapered ends, and include cutouts or notches to facilitate placing and removal. Patient transfer boards are used to transfer disabled patients to and from wheelchairs, beds, stretchers, commodes, and bathtubs. **Related Terms:** Patient Transfer Aids [15-693] Patient Transfer Aids, Lateral Transfer[19-016]

Abbreviation padsli

19906 กระบอกถ่ายปัสสาวะ

UMDNS 14291

Urinals

A vessel with a wide mouth into which patient's urine may be discharged.

Abbreviation urenal

- 19907 เครื่องล้างหม้อนอนถ่ายและกระบอกปัสสาวะ UMDNS 10334
 Automatic Flusher and Sanitizer
 A washing machine for decontamination and disinfect (chemically and / or thermally) reusable medical devices. Some do have built-in drying features as well. [GMDN = Washer, decontamination = 17671]
Abbreviation waspan
- 19908 เครื่องกำจัดจุลชีพและสารเคมีในอากาศให้บริสุทธิ์ UMDNS 16629
 Air Cleaners
 Equipment designed to cleanse room air by drawing the air through a filter or set of filters and then recirculating the cleansed air. These cleaners, depending upon the characteristics and efficiency of the filter(s), can remove airborne particulates (aerosols) and/or gases and vapors. They are available as ceiling, wall, or stand alone units; air cleaners mounted on wheeled platforms are also available. Some air cleaners are capable of exhausting air to create a negative pressure (i.e., isolation) room. Air cleaners are used in healthcare facilities, isolation and clean rooms, and in emergency shelters. Related Terms: Filters, Air [11-711]
Abbreviation aircle
- 19909 เครื่องผลิตโอโซนเพื่อปรับปรุงอากาศในห้องปฏิบัติการ UMDNS 12899
 Ozone Gennerators
 Devices designed to deliver ozone gas. These generators are typically a device that provides high-voltage current between two sets of electrodes, converting gaseous oxygen into ozone when oxygen passes through the high-energy field. Ozone generators usually include devices to measure the output ozone concentration and a mechanism to internally destroy the unused ozone; the generators should be used at the site of application because it is not possible to store ozone. Ozone has been used clinically for treatment of several different diseases and is delivered by rectal administration, blood treatment and reinfusion, or direct infusion in the vasculature, with controversial results. Ozone is also used as a disinfectant
Abbreviation ozogen
- 19910 เครื่องดูดและเป่าฝุ่น UMDNS 18184
 Vacuum Cleaner
 Electrical devices that clean by trapping small particles using a suction vacuum pump and appropriate filters and collection bags. **Related Terms:** Vacuum Cleaners, Laboratory Fluid [23-554] Vacuum Cleaners, Mercury [17-651] Vacuum Cleaners, Micrometric Filtration [18-185]
Abbreviation vaccle

19911 เครื่องมือเขียนรูปทรงผู้ป่วย **UMDNS 11003**

Patient Contour Device

Graphic recorders in which continuous, time-varying signals are segmented and stacked sequentially atop each other, either manually or using a computer. These recorders may be used in measurements of blood pressure, ECG or any other quasi-periodic wave. Contourographs can be used for assessing the time variation of physiological parameters over periods. much longer than the inherent cycle length of the variable being recorded.

Abbreviation patcon

กลุ่มที่ 12 Home Care

Manifolds

12000 เครื่องควบคุมการจ่ายแก๊สออกซิเจน **UMDNS 15042**

Oxygen Manifold manitold,O2

ส่วนของ O2

Abbreviation oxyman

12001 เครื่องควบคุมการจ่ายแก๊สไนตรัสออกไซด์ **UMDNS 15042**

Manifold , gas

ส่วนของชุดจ่ายแก๊ส ของ piping system มาตามผนัง

Abbreviation nitman

Water Purification Systems

12100 ระบบกรองน้ำสำหรับเครื่องไตเทียม **UMDNS 14437**

Reverse Osmosis Water Treatment System

A system made up of several units for the purpose of purification water. Different methods may be used, e.g. filtration, deionization, reverse osmosis or ultraviolet light. The unit can be separately connected or combined as a single system. It will typically have a water conditioning feature built-in as the first step.

[GMDN = Water purification system = 15612]

Abbreviation revosm

12101 เครื่องกรองน้ำและทำน้ำให้น้ำบริสุทธิ์ด้วยไอโซน **UMDNS 14435**

Deionizer water

Demineralizers [11-145] : Water purification systems consisting of activated carbon-resin columns for removal of inorganic and/or organic chemical contaminants from the water supply.

Abbreviation deioni

12102 เครื่องทำน้ำบริสุทธิ์ด้วยแสงอุลตราไวโอเลต UMDNS 14438
Ultraviolet Water Purifier
Abbreviation watpur-u

Other (ไม่มีข้อมูล)

กลุ่มที่ 13 Implants (ไม่มีข้อมูล)

กลุ่มที่ 14 Intensive Care Unit (ICU)

Monitor, invasive care

14000 เครื่องตรวจคลื่นไฟฟ้าหัวใจแบบไร้สาย UMDNS 20180/ 13988
ECG Telemetry

Bedside monitors designed to be used (either as a component of a physiologic monitoring system or as a standalone unit) along with related devices to acquire, measure, and process information for the purpose of continuously monitoring the electrical activity of the heart and the associated electrocardiogram (ECG). Typical functions of an electrocardiography bedside monitor include continuous 3-, 5-, and/or 6-lead ECG monitoring; heart rate numeric and ECG waveform(s) display; arrhythmia detection; ST-segment analysis; and appropriate initiation of visual/audible alarms. Some bedside monitors provide additional functions, such as 12-lead ECG monitoring and diagnostic interpretation.

Abbreviation ekgtel

14001 เครื่องเฝ้าติดตามคลื่นไฟฟ้าหัวใจแบบพกพา UMDNS 20180
Holter Monitor
ไม่มี Definition

Abbreviation holmon

14002 โมดูลวัด Vital Sign อยู่ที่ศูนย์กลาง UMDNS 20179
Central Vital Sign Modules

Monitors designed to be positioned in a central location, usually at a nurses' station; they typically consolidate information (e.g., audible and visual alarms) from individual bedsides and/or telemetry monitors. These monitors usually display an electrocardiogram for each patient being monitored; they include computing capabilities and additional displays to observe trend information; some also include full-disclosure capabilities.

Central station monitors are used for full remote monitoring of patients in one or more areas of a healthcare facility; however, they do not replace bedside monitors.

Abbreviation modcen

14003 เครื่องเฝ้าระวังสัญญาณไฟฟ้าหัวใจ สัญญาณความดันโลหิต **UMDNS** 16764
แบบภายนอก สัญญาณความดันโลหิตแบบภายใน และ
เปอร์เซ็นต์ ความอิ่มตัวของออกซิเจนในเลือด

EKG , NIBP,IBP, and SPO2 Monitor

Bedside monitors designed to be used (either as a component of a physiologic monitoring system or as a standalone unit) along with related devices to acquire, measure, and process information for the purpose of continuously monitoring the electrical activity of the heart and the associated electrocardiogram (ECG). Typical functions of an electrocardiography bedside monitor include continuous 3-, 5-, and/or 6-lead ECG monitoring; heart rate numeric and ECG waveform(s) display; arrhythmia detection; ST-segment analysis; and appropriate initiation of visual/audible alarms. Some bedside monitors provide additional functions, such as 12-lead ECG monitoring and diagnostic interpretation

Abbreviation monito-i

14004 เครื่องเฝ้าระวังสัญญาณไฟฟ้าหัวใจ สัญญาณความดันโลหิตแบบภายนอก **UMDNS** 16764
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Abbreviation monito-n

14005 เครื่องวัดและติดตามเปอร์เซ็นต์ความอิ่มตัวของออกซิเจน **UMDNS** 17148
ในเลือดและชีพจร

Pulse Oxymeter

Oximeters designed primarily for determining the relative amount of oxygenated and deoxygenated hemoglobin (O₂Hb and HHb, respectively) by measuring light absorbance changes resulting from arterial blood flow pulsations and displaying the results as percent saturation of hemoglobin in arterial blood (SpO₂). These oximeters include red and infrared light sources (typically LEDs of 660 and 940 nm), photodetectors, and

probes that transmit light through a pulsating arterial bed, such as the finger tip, earlobe, or toe. Pulse oximeters are used in operating rooms, intensive care units, recovery rooms, and sometimes in emergency vehicles or for patient respiratory care at home. **Related Terms:** Monitors, Personal, Pulse Oximetry [22-855]

Oximeters, Cerebral [17-942] Probes, Pulse Oximeter [17-594]

Abbreviation puloxy

14100 โมดูลวัดความดันโลหิตในหลอดเลือด **UMDNS x**

Invasive Blood Pressure Module

A plug-in unit, typically used in a multiparameter patient monitors, that measure the blood pressure (from one or more sites) using a pressure transducer introduced directly into the blood vessel via a catheter.

[GMDN = Patient monitor module, blood pressure, invasive = 36550]

Abbreviation modibp

14101 โมดูลเครื่องเฝ้าติดตามการทำงานของหัวใจ **UMDNS x**

ชนิด Multi- Measurement Server

Multi - Measurement Server Module

A unit that, utilizing built-in functions, modules or other equipment, collects several monitor parameters and displays these by the bed / patient. A bedside unit can be coupled up to central unit, but can operate independently. The monitoring parameters can be, e.g. electrocardiogram (ECG), blood pressure, temperature, cardiac output or respiratory gases. **[GMDN = Patient monitor, multiparameter = 33586]**

A unit that, utilizing built-in functions, modules or other equipment, collects several monitor parameters and displays these by the bed / patient. A bedside unit can be coupled up to central unit, but can operate independently. The monitoring parameters can be, e.g. electrocardiogram (ECG), respiratory rate, temperature, blood pressure, pulse or oximetry. **[Patient monitor module, multifunction = 36553]**

Abbreviation modmul

14102 โมดูลวัดความดันโลหิตภายนอกหลอดเลือด **UMDNS x**

Noninvasive Blood Pressure Module

A plug-in unit, typically used in a multiparameter patient monitors, that measure the blood pressure (from one or more sites) using an arm or leg cuff (indirect method) **[GMDN = Patient monitor module,**

blood pressure, noninvasive = 36551]

Abbreviation modnbp

14103 โมดูลวัดความอิ่มตัวของออกซิเจนในเลือด UMDNS x

Pulse Oxymeter Module

เครื่องวัด % O₂ ในเลือด/ส่วนหนึ่งของเครื่อง bedside monitor

Abbreviation modpul

14104 โมดูลวัดอุณหภูมิภายนอกหลอดเลือด UMDNS x

Temperature Module

เครื่องวัด อุณหภูมิร่างกาย ส่วนหนึ่งของเครื่อง bedside monitor

Abbreviation modtem

14900 Racks สำหรับใส่ Module UMDNS x

Racks Module

ชั้น ช่องเสียบ module G

Abbreviation modrac

กลุ่มที่ 15 Internal Medicine (ไม่มีข้อมูล)

กลุ่มที่ 16 Materials Management

Refrigerator

16000 เครื่องล้างเครื่องมือแพทย์ด้วยคลื่นเสียงความถี่สูง

UMDNS 14263

Ultrasonic Cleaner

Surgical instrument washers designed for automatic removal of dirt, stains, and/or biological debris (i.e., washing) from labware (e.g., glass and plastic beakers, test tubes), surgical instruments, and/or other critical devices using ultrasonic energy. The process is performed by delivering ultrasonic waves to a tank filled with a warm cleaning solution (e.g., detergents formulated for ultrasonic cleansing). These systems typically include a radiofrequency generator (frequencies from 25 to 40 kHz are typical), ultrasonic transducers, a heating unit, and a stainless steel tank with baskets and/or trays. Cleaning is performed by the scrubbing action of the ultrasonic vibration and also by the implosion of bubbles (i.e., cavitation effect). Surgical instrument ultrasonic washers may include two or three tanks to perform automatic cycles for washing, rinsing, and drying; they may also include heating capabilities. This equipment may provide some level of disinfection by killing and/or inactivating several microorganism species; it is commonly used after general cleaning and before thermal or chemical disinfection. Both stand-alone and tabletop units are available for use in central supplies departments of healthcare facilities. **Related Terms:** Decontamination Units, Physical Removal/Chemical Neutralization, Ultrasonic [20-584] Power Meters, Ultrasound, Cleaning System [16-841]

Abbreviation ultcle

16001 เครื่องล้างถุงมือ UMDNS 11878

Washing for Glove

A washing machine for decontamination and disinfect (chemically and / or thermally) reusable medical devices. Some do have built-in drying features as well. [GMDN = Washer, decontamination = 17671]

Abbreviation wasglo

16002 เครื่องซักผ้า UMDNS 15931

Washing Machine

Washers designed for automatic or semiautomatic removal of dirt and/or stains (i.e., washing) from soiled cloth and linen (i.e., laundry) using physical and/or chemical procedures. These washers typically perform one or more preprogrammed cycles of operations that may include prewash, enzyme treatment, detergent washing, and rinsing. Laundry washers typically include a rotary drum for cleaning, filters, temperature and speed controls, and hoses for water intake and evacuation. Standard and heavy-duty top-load and front-load laundry washers are available for use in healthcare facilities.

Abbreviation wasmac

16003 เครื่องล้างเครื่องมือทางการแพทย์แบบอัตโนมัติ UMDNS 15198

Automatic Instrument Washer

Decontamination Systems [20-585] : Systems designed for decontamination of chemical agents, including mustard (H agent), nerve agents such as VX and the G series (e.g., tabun [GA], sarin [GB]), and toxic industrial materials; biological agents; and/or nuclear material contaminants. These systems usually consist of several separate but interacting units (e.g., pumps, applicators, heaters, sprayers) that can deliver appropriate products (e.g., water, gases, decontaminants, steam). They perform decontamination by physical removal and/or chemical neutralization of contaminants from the surface of equipment. Decontamination systems are mainly used for decontamination of large outdoor equipment and vehicles; specialized systems that decontaminate multiple garments and personal gear or the effects of dispersive (blast) contaminant artifacts are also available. **Related Terms** : Decontamination Units [20-576] Sanitizers [13-444] Sterilizing Units [13-737] Washers, Bedpan/Ancillary Utensil [14-310] Washers, Cart [10-634] Washers, Cuvette [21-162] Washers, Labware [15-196]

Abbreviation inswas

16004 ตู้ควบคุมอุณหภูมิ UMDNS 13315

Refrigerator

Equipment designed to keep a thermally insulated compartment at cool temperatures above the freezing point of water (i.e., 0 degrees Celsius [32 degrees Fahrenheit]), typically between 2 and 10 degrees

Celsius (35 and 50 degrees Fahrenheit). This equipment is used mainly for storage of perishable products. Refrigerators used in healthcare facilities are usually dedicated equipment manufactured with appropriate technical characteristics, such as range of temperature, size, shelving, accuracy, reliability, and configuration according to uses (e.g., clinical laboratories, blood banks, pharmacies); standard refrigerators for general use (e.g., food preservation) are also available. Some refrigerators include a separate, usually small, chamber to keep products at a temperature below the freezing point of water. **Related Terms:** Freezers [15-583]

Abbreviation refrig

16005 เครื่องล้างเครื่องมือส่องตรวจระบบทางเดินอาหาร **UMDNS** 15999

Endoscope Washers

A washing machine for the decontamination and disinfection of flexible endoscope. It includes a processor to circulate a liquid disinfectant through the lumen of the endoscope. Some may also have built-in drying feature. [GMDN = Washer, decontamination, endoscope, flexible = 35628]

Abbreviation scowas

Sterilizer

16300 เครื่องทำให้ปราศจากเชื้อ **UMDNS** 13746

Sterilizer

Sterilization units that use pressurized steam to generate moist heat for the elimination of microbial contamination from non-heat-sensitive medical devices and products for surgical and general patient care use.

Related Terms: Sterilizing Units, Steam, Bulk [16-141] Sterilizing Units, Steam, Tabletop [16-142]

Abbreviation steril

16301 เครื่องทำให้ปราศจากเชื้อด้วยแก๊สเอทิลีนออกไซด์ **UMDNS** 13740

Ethylene Oxide Sterilizer

Sterilizing units that use ethylene oxide as a sterilant under defined conditions of gas concentration, temperature, and relative humidity.

Abbreviation steril-e

16302 เครื่องทำให้ปราศจากเชื้อด้วยแก๊สไฮโดรเจนเปอร์ออกไซด์พลาสมา **UMDNS** 18146

Hydrogen Peroxide Plasma Sterilizer

Sterilizing units that use plasma to sterilize medical devices. The plasma is generated by exposing vapor or gas substrate to a strong electric, radio-frequency, or electromagnetic field, resulting in a reactive cloud of ions, electrons, and neutral particles. Gases that can be used with these units include argon; vapors that can be used include hydrogen peroxide and peracetic acid.

Abbreviation steril-h

16303 เครื่องทำให้ปราศจากเชื้อด้วยไอน้ำขนาดเล็ก UMDNS 16142
Autoclave, Table Top

Compact sterilizing units that use pressurized steam to generate moist heat to eliminate viable microbes from non-heat-sensitive medical devices and products used for surgical and general patient care. Most tabletop sterilizers have chamber sizes less than 0.5 cubic meters and are typically used within the hospital in operating suites, labor and delivery areas, physician offices, outpatient medical surgical facilities, and dental offices.

Abbreviation autocl

Dryer

16600 เครื่องอบแห้งถุงมือ UMDNS 11878
Glove Drying Unit

An automatic dry - heat oven used for drying examination gloves or surgical gloves.

Abbreviation glodry

16601 เครื่องคลุกแป้งถุงมือ UMDNS 11878
Glove Powderer

A device acting as a protective barrier between the user's hand or hands and the external environment. This will typically be, e.g. an infection barrier between patient and healthcare provide or as an overall protection of the skin of the hand and fingers. The device may also provide therapeutic protection. [GMDN = **Glove, (specify) = 11879**]

Abbreviation glopow

16602 ตู้อบร้อนทำลายเชื้อ UMDNS 14410
Hot Air Oven

Ovens designed for clinical laboratory procedures (e.g., baking, drying, desiccating, sterilizing of glassware, instruments, cultures, or samples); they operate at temperatures typically from ambient to a maximum of between 200 and 325 degrees Celsius (392 to 620 degrees Fahrenheit) with the chamber temperature accuracy, resolution, and uniformity required in clinical laboratory work. These ovens usually consist of a thermal isolated chamber made of corrosion-proof materials and, frequently, a large glass window; they also include time-and-temperature sensors and controls (either manual or automated), temperature protection, and alarms. Laboratory ovens are available in many different capacities (typically from 27 to 135 cubic dm [1 to 5 cubic feet]) and configurations (e.g., tabletop, upright, undercounter). Dedicated laboratory ovens provide gravity and/or forced-air capabilities; some can provide a vacuum environment in the working chamber.

Abbreviation hotove

16603 เครื่องผนึกของพลาสติกสำหรับใส่เครื่องมือแพทย์เพื่ออบฆ่าเชื้อ **UMDNS 15786**
Plastic Sealing Machine for Sterile Pack

A device used for sealing packaged products and utensils, e.g. blood products, test tubes, or sterilized instruments / equipment. It is typically used in operation theatre units, sterile packaging centres, and laboratories. The device will typically use the application of heat to the packaging materials to create an airtight seal. [GMDN = Sealing unit, packing = 36674]

Abbreviation plasea

Other

16900 หุ่นฝึกและสอนการช่วยชีวิตฉุกเฉิน **UMDNS 15309**
Ambuman CPR Training

Training Manikins is like a man used for training medical staffs to get experience in resuscitation, e.g., stimulating closed chest compression, opening chest cardiac massage, stimulating artificial respiration to restore cardiac output and pulmonary ventilation following cardiac arrest or apnoea.

1. A unit consisting of manikin and software for training in the cardiovascular management of critical care patients. Histories and progress notes may be reviewed; it is possible to perform a catheterization on some models. [GMDN = Training model, physiological, haemodynamic monitoring = 36132] 2. A specially constructed doll with respiratory and circulatory (heart) functions used for educational / instructive teaching in technique, e.g. "mouth to mouth" resuscitation, heart compression or manual pulse registration.

[GMDN = Training model anatomical, mannequin = 35540] (Definition มี 2 Definition)

Abbreviation ambman

16901 โคร่งถังทิ้งฝ้ายก๊อสนและขยะพร้อมถังสแตนเลส **UMDNS 14427**
Kicking Bucket

ไม่มี Defination

Abbreviation buckic

16902 รถเข็นทำการพยาบาลทั่วไป **UMDNS 15889**
Nursing Carts

Carts used to transport all types of equipment and supplies throughout the medical facility. These carts generally have at least two shelves, which are either surrounded by guard rails or are traylike to keep equipment from sliding off the carts.

Abbreviation carnur

16903 เครื่องพิมพ์ภาพวีดิทัศน์

UMDNS 17508

Color Video Printer

Printers designed to produce a permanent, monochromatic and/or color text or graphic copy (i.e., hard copy) on paper or other appropriate media (e.g., transparent film) from video data stored in a recorder or displayed by a monitor. These printers typically use thermal technology (e.g., thermal dye transfer also known as dye sublimation) to produce a hard copy on a dedicated film or on heat-sensitive paper with grayscale gradations; the printers may include a digitizer (also known as a frame grabber) to convert signals from analog video sources. Video printers are used in healthcare facilities for documentation of imaging procedures (e.g., endoscopic, ultrasound, radiographic), as well as to produce images for patient files; video printers are not normally intended to produce images for diagnostic purposes. **Related Terms:** Video Systems [15-966]

Abbreviation printer

กลุ่มที่ 17 Nephrology

Dialysis

17000 เครื่องเปลี่ยนถุงน้ำยา ซี.เอ.พี.ดี.

UMDNS 17434

Peritoneal Dialysis Sterile Connection Units

Peritoneal Dialysis Units[11-226] : Devices designed to remove metabolic wastes through selective diffusion across the peritoneum by controlling the flow of a specially designed solution (i.e., a dialysate) into and out of the abdominal cavity (i.e., peritoneal dialysis). These devices consist of a machine that performs automated dialysis cycles, typically while the patient sleeps, by controlling the flow of dialysate. Peritoneal dialysis units infuse and remove dialysate by means of a catheter and a sterile disposable tubing system. A temporary catheter, or more frequently a permanently implanted abdominal catheter, provides access to the peritoneal cavity. Peritoneal dialysis is used less frequently than hemodialysis, it is especially indicated for patients who are unable to tolerate hemodialysis (e.g., the elderly, and patients with diabetes and/or other vascular cardiovascular conditions).

Abbreviation capdex

17001 เครื่องล้างตัวกรองเลือดไตเทียมอัตโนมัติ

UMDNS 16018

Automatic Dialyzer Reprocessing System

Automated equipment designed for rinsing, cleaning, and resterilizing (i.e., reprocessing) hemodialysis dialyzers before reuse. Following dialysis, this equipment performs a cycle that includes water rinsing; removing blood, fibrin, and/or other blood components deposited on the dialyzer membrane with a cleaning agent (e.g., hydrogen peroxide); and finally resterilizing, typically with a solution of formaldehyde.

Abbreviation diarep

17002 เครื่องไตเทียม

UMDNS 11218

Hemodialysis Machine

Devices used to perform hemodialysis, a treatment whereby blood is passed through an extracorporeal hemodialyzer that allows the transfer of substances by diffusion and convection for the purpose of decreasing biochemical abnormalities as well as fluid, electrolyte, and acid-base imbalances. Detectors, Air Related Terms: Bubble/Foam, Hemodialysis Unit [11-219]

Detectors, Blood Leakage, Hemodialysis Unit [20-752]

Detectors, Fluid Level, Hemodialysis Unit [20-750]

Dialysate Delivery Systems [15-575]

Hemodialysis Units, Continuous Replacement Therapy [23-428]

Hemodialysis Units, Continuous Replacement Therapy, Renal [23-426] Hemofiltration Units [15-039]

Abbreviation hemdia

17003 เครื่องล้างไตทางช่องท้องแบบอัตโนมัติ

UMDNS 11226

Automated Peritoneal Dialysis Machine

Devices designed to remove metabolic wastes through selective diffusion across the peritoneum by controlling the flow of a specially designed solution (i.e., a dialysate) into and out of the abdominal cavity (i.e., peritoneal dialysis). These devices consist of a machine that performs automated dialysis cycles, typically while the patient sleeps, by controlling the flow of dialysate. Peritoneal dialysis units infuse and remove dialysate by means of a catheter and a sterile disposable tubing system. A temporary catheter, or more frequently a permanently implanted abdominal catheter, provides access to the peritoneal cavity. Peritoneal dialysis is used less frequently than hemodialysis, it is especially indicated for patients who are unable to tolerate hemodialysis (e.g., the elderly, and patients with diabetes and/or other vascular cardiovascular conditions). **Related Terms:** Transfer Sets, Continuous Ambulatory Peritoneal Dialysis (CAPD) [17-163]

Abbreviation perdia

17004 เก้าอี้ปรับเอนนอนสำหรับทำล้างไต

UMDNS 16436

Reclining Sofa (Therapy Chair)

Chairs made of easily washable materials, with appropriate arm rests for dialysis procedures and usually with back and foot rests that can be adjusted by the patient. These chairs provide interface with dialysis units, facilitating the patient connection to the extracorporeal blood circuit.

Abbreviation recsof

Lithotripters

17400 เครื่องสลายนิ่วในระบบทางเดินปัสสาวะ **UMDNS 16758**

Extracorporeal Shock Wave Lithotripters

Lithotripters that noninvasively disintegrate stones using focused shock waves. These devices typically consist of a shock-wave generator, an examination/treatment table, an imaging system, and a control console. Shock waves are delivered through a treatment head consisting of an enclosed, water-filled cylinder that protrudes through the treatment table and has a cushion that touches the patient's skin. An ellipsoid or acoustic reflector focuses the shock waves at the stone as the waves travel through the water and the patient's body. Some older units utilize a water bath instead of an examination/treatment table. **Related Terms:**

Lithotripters, Extracorporeal, Electromechanical [18-415] Lithotripters, Extracorporeal, Piezoelectric [18-416] Lithotripters, Extracorporeal, Spark-Gap [18-417] Power Meters, Ultrasound, Therapeutic Unit, Shock Wave [20-166]

Abbreviation littri

17401 เครื่องสลายนิ่วในท่อน้ำดี **UMDNS 16229**

Electro Hydrolic Lithotriptors

Intracorporeal lithotripters that use plasma-induced shock waves to fracture stones. A generator-powered probe fires energy pulses at the stone, while the probe is irrigated with a saline solution. The collapse of the resulting plasma bubble causes a hydraulic shock that fragments the stone into several pieces that can then be removed using a grasper or stone basket.

Abbreviation littri-e

กลุ่มที่ 18 Neurology

Monitor,neurological

18000 เครื่องเฝ้าระวังคลื่นไฟฟ้าสมอง **UMDNS 20160**

Electroencephalography Monitor

Bedside monitors designed to be used (either as a component of a physiologic monitoring system or as a standalone device) along with related devices to acquire, measure, and process information for the purpose of continuously monitoring electrical signals generated by the brain and the associated electroencephalogram (EEG). Typically, EEG measurements/trends are monitored via electrodes placed on a patient's scalp and/or forehead; intracranial (e.g., subdural, epidural) and nasopharyngeal sites are sometimes used. Electroencephalography bedside monitor functions include display of numeric values/trends for EEG measurements and associated waveforms and appropriate initiation of visual/audible alarms. Electroencephalography bedside

monitors may support a variety of signal-processing and display techniques (e.g., compressed spectral array, density spectral array, bispectral analysis), depending on the application (e.g., monitoring of intensive care patients, level-of-consciousness monitoring of anesthetized patients). An example of a specialized technique for level-of-consciousness monitoring is bispectral analysis, a signal-processing technique that quantifies the degree of phase coupling between

Abbreviation eegmon

18001 เครื่องวัดความดันของเหลวในสมอง **UMDNS** 16763

Intra Cranial Pressure Monitor

Bedside monitors designed for continuous measuring of cerebrospinal fluid (CSF) pressure on the brain and meningeal membranes. The pressure may be measured directly within one of the brain ventricles (intraventricular), beneath the duramater (subarachnoid), or outside the dura (epidural). These systems include a pressure transducer (e.g., strain gauge, pneumatic, fiberoptic), an interface cable, and an electronic unit for data processing and display. **Related Terms:** Monitors, Telemetric, Intracranial Pressure [20-182] Pressure Measuring Units, Intracranial [13-110]

Abbreviation icpmon

18002 เครื่องวัดกำลังกล้ามเนื้อหลังและขา **UMDNS** 15577

Back-Leg-Chest Dynamometer

Instruments designed to measure mechanical force, including the force produced by muscular contraction. Dynamometers intended for clinical use are available in a variety of designs and using different mechanisms (e.g., squeeze, hydraulic, spring-type) to measure muscle strength, according to the anatomic part (e.g., hand, back, leg), the force being measured, the intended evaluation, and the level of precision needed. Clinical dynamometers are intended mainly to test muscle strength after illness or trauma and as a tool to evaluate an individual's progress during treatment (e.g., during rehabilitation therapy). Dedicated clinical dynamometers are available to measure hand grip, pinch, and leg and/or back strength; some dynamometers are used for inspection, repair, and/or calibration of medical devices and instruments. **Related Terms:** Analyzers, Physiologic, Neuromuscular Function, Dynamometric [18-781]Dynamometer Exercise Systems, Computerized [17-681] Dynamometers, Hand Grip [23-808] Dynamometers, Hand Grip, Bulb Squeeze [23-809] Dynamometers, Hand Grip, Hydraulic [23-814] Dynamometers, Hand Grip, Spring [23-812] Dynamometers, Hand Grip/Pinch Force, Bulb Squeeze [23-818] Dynamometers, Multipurpose, Push-Pull [23-820] Dynamometers, Pinch Force [23-743] Dynamometers, Pinch Force, Hydraulic [23-816]

Abbreviation musdyn

18003 เครื่องบันทึกการนอนหลับ

UMDNS 20197

Polysomnogram

Electronic storage data recorders designed to measure and record the amount, type, and timing of sleep typically during overnight or in 24-hour periods. These recorders usually consist of a small portable unit worn on the belt and physical parameter (e.g., electrooculograph, electromyograph) sensor electrodes attached to the patient's body. Recorders can store information analogous to that obtained in polysomnography studies, but for a limited set of parameters. Sleep/awake electronic storage recorders are used for ambulatory and/or home assessment of sleep disorders, such as hypersomnia and somnambulism. **Related Terms:** Monitors, Telemetric, Physical Activity [17-999]

Abbreviation polysom

18004 เครื่องตรวจความผิดปกติเกี่ยวกับการนอนหลับ

UMDNS 17456

Polysomnography, Sleep Laborater / Poly somnography, Sleep Laborater

Physiologic analyzers that simultaneously measure, record, and interpret a variety of physiologic functions during sleep. These analyzers typically perform evaluations of electroencephalography, electrocardiography, electro-oculography, electromyography, respiration, temperature, and pulse oximetry readings; usually, they also provide audiovisual information about the sleeping patient for behavioral analysis. Some analyzers also perform additional evaluations according to the study needs, such as gastroesophageal reflux, bedwetting (enuresis), or penile tumescence. Somnography analyzers consist of electrodes and instruments that measure physiologic activities; a headbox that includes samplers, filters, and amplifiers; and appropriate software for processing and patient reporting. These analyzers are used in the diagnostic evaluation of sleep and sleep-related disorders, such as difficulty falling asleep (insomnia), difficulty staying awake (hypersomnia), apnea, and other sleep disorders associated with medical or psychiatric conditions. **Related Terms:** Polysomnographs [17-458]

Abbreviation slelab

Stimulator

18100 เครื่องกระตุ้นสมอง

UMDNS 18467

Intraoperative Cortical Stimulator

Electrical stimulators that apply the stimulus to all or any part of the brain, such as the cerebellum or the cerebrum (sometimes including the deep cerebral centers). **Related Terms:**Electrical stimulators that apply the stimulus to all or any part of the brain, such as the cerebellum or the cerebrum (sometimes including the deep cerebral centers)

Abbreviation corsti

18101 เครื่องรักษาอาการทางจิตด้วยไฟฟ้าและบันทึกคลื่นสมอง **UMDNS 11484**

Electro Convulsive Therapy

Electrical brain stimulators that apply stimuli (electric shock) to a patient's brain to induce convulsions and loss of consciousness. The stimuli are applied through electrodes placed on an unshaved scalp or on bare skin over the temples; stimuli are not usually targeted toward specific areas of the brain. These stimulators typically consist of a console with controls, displays and printers, and electrodes; some also include monitors (e.g., electrocardiograph, electroencephalograph) to display vital signs during treatment. The shape, duration, and repetition rate of the electrical stimuli applied by these stimulators determine the amount of energy reaching the brain. Convulsive therapy electrical stimulators are used to treat patients with major depression, schizophrenia, and mania.

Abbreviation elesho

Other

18900 เครื่องตรวจคลื่นไฟฟ้าสมอง **UMDNS 11467**

Electroencephalograph EEG

Graphic recorders of the variations of the electrical potential caused by the electrical activity of the brain, usually detected at the patient's scalp. Leads affixed to the scalp and ear lobes transmit the electric signals to the recorder, which in turn reproduces their characteristics in an electroencephalogram. They are used to study a variety of neurological conditions, to evaluate psychiatric disorders, and to assist in localizing tumors or lesions on or near the surface of the brain.

Abbreviation eeg

18901 เครื่องตรวจคลื่นไฟฟ้ากล้ามเนื้อและเส้นประสาท **UMDNS 11474**

Electromyograph / EMG

Graphic recorders of the intrinsic electrical potential of skeletal muscle. These recorders include an electrode that is usually inserted directly into the muscle, an amplifier that boosts and transmits the bioelectrical potentials to the recorder which in turn reproduces their characteristics in an electromyogram. Some recorders are compatible with personal computers for waveform storage and analysis. A loudspeaker is typically attached so the potentials can be monitored acoustically. Electromyographs are used in the evaluation of abnormalities either when the electrode is at rest within the muscle (spontaneous activity) or during voluntary muscle contraction of graded activity. Related Terms: Analyzers, Physiologic, Neuromuscular Function, Gait [16-334]Myographs [12-692] Stimulators, Electrical, Neuromuscular, Diagnostic [16-263]

Abbreviation emg

- 18902 สเตอียีรีโอแทคติกแบบใช้เฟรม UMDNS 18177
 Stereotactic System
 ไม่มี Definition
Abbreviation stereo
- 18903 สเตอียีรีโอแทคติกแบบใช้เฟรม UMDNS 18178
 Stereotactic System,Frame
 Neurosurgical stereotactic systems that use a headframe for accurate planning and performance of neurosurgical procedures. The headframe may be invasively or noninvasively attached to the skull.
Abbreviation stereo-f
- 18904 ชุดเจาะน้ำไขสันหลัง UMDNS 12404
 Lumbar Puncture Set
 A packaged collection of equipment and supplies used to perform a puncture of the lumbar spinal area to obtain spinal fluid. Typical components include a spinal needle and collection tubes for spinal fluid.
[GMDN = Lumbar Puncture Kit = 12404]
Abbreviation lumset
- 18905 เครื่องมือผ่าตัดลดน้ำในโพรงสมอง UMDNS 16244
 Ventriculo-Peritoneal Shunt
 A device used to divert excess cerebrospinal fluid in the hydrocephalus to where it can be absorbed back into the body (atrial to peritoneal derivation). **[GMDN = Shunts, hydrocephalic = 16244]**
Abbreviation setvps
- 18906 เครื่องมือกำหนดตำแหน่งในการผ่าตัดสมอง UMDNS 18179
 Frame Stereotactic &Frameless Stereotactic Set
 Neurosurgical stereotactic systems which use another technique (e.g. mechanical articulated arm, floating probe) instead of a headframe to digitize and also to perform the procedures. **Related Terms:** Telesurgery Systems, Surgical [18-599]
Abbreviation stetac-n
- 18907 ชุดซ้อมเสียง UMDNS 14255
 Tuning Forks
 A "U" shaped instrument, usually made of stainless steel, with a handle at the base of the "U". The vertical prongs of the "U" are cut to a particular length to produce sound of a specific wave length when the

"U" is struck against a hard object, usually rubber. These instrument are used to test hearing acuity. [GMDN = Fork, tuning = 32526]

Abbreviation tunfor

กลุ่มที่ 19 Neurosurgery

Retractor

19000 เครื่องมือถ่างสมอง UMDNS 13377

Brain Retractor

A surgical instrument for separating and / or drawing aside the margins of sulcus, fissure or margin of an incision of the brain. [GMDN = Retractor, neurosurgical, brain = 35312]

Abbreviation braret

19001 ชุดเครื่องมือถ่างผ่าตัดแบบบัคคีเฮโล UMDNS 13377

Budde - Halo Retractor

ไม่มี Definition

Abbreviation budret

19002 เครื่องมือถ่างสมองซีริเบลลัม UMDNS 13377

Cerebellum Self-Retaining Set

A surgical instrument for separating and / or drawing aside the margins of sulcus, fissure or margin of an incision of the brain. [GMDN = Retractor, neurosurgical, brain = 35312]

Abbreviation celret

Other

19900 เครื่องมือผ่าตัดเปิดกะโหลกด้วยระบบแก๊สในโตรเจน UMDNS 11334

Craniotome Set

Perforators designed for automatic or semiautomatic cutting of circular sections of the skull (i.e., cranium). These instruments consist of two coaxial drills, a drive shank that connects to a powered (electric or pneumatic) handpiece, and a built-in clutch mechanism. The inner drill extends slightly beyond the outer drill in such a way that when the inner drill penetrates the inner table of the skull, the clutch mechanism disengages the cutters from the drive shank, preventing penetration or nicking of the membrane that contains the cerebrospinal fluid and protecting the cortex (dura mater). Automatic cranial perforators are used to make holes to alleviate intracranial pressure or to obtain cerebrospinal fluid samples. They are also used to drill perforations that define the border of a cranial bone flap; a side-cut craniotome is used to complete a beveled cut between adjacent drills completing the bone flap in procedures such as excision of tumors and treatment of cerebral aneurysms. Cranial

perforators are available as reusable or disposable units; some are designed for use with specific handpic.

Related Terms: Drills, Perforator [11-342] Trephines, Surgical, Skull [14-152]: Drills, Perforator [11-342] Trephines, Surgical, Skull [14-152]

Abbreviation cranio

19901 เครื่องมือดึงศีรษะ คอ แบบการ์ดเนอร์เวลล์ UMDNS 14064

Gardner Well Tong

Tongs designed to perform traction on the cervical spine by applying an upward force to the skull that causes a hyperextension of the head and neck. These devices are typically a two-arm pivoted instrument that is attached to the skull using pins (either partially implanted or not); the proximal end includes a mechanism (e.g., an adjustable threaded bolt and nut) for the application of the traction force. Some devices include straps that allow the connection of the tong to an external traction unit that usually includes a cable, a pulley, and a set of weights. Skull traction tongs are used in orthopedic surgery procedures for fractured spines; tongs attached to external traction units are used in the management and/or treatment of cervical spinal column damages (e.g., to avoid further spinal cord injury) caused by trauma (e.g., fractures) or diseases.

Abbreviation garton

19902 เครื่องมือประกอบการยึดศีรษะคนไข้ระหว่างผ่าตัด UMDNS 15025

Head Clamps

A surgical instrument used to grasp the skull to hold the head and neck in a particular, fixed position during surgical procedure. Typical applications include neurosurgical procedure. [GMDN = **Clamp, surgical, skull = 35446**]

Abbreviation heacla

19903 ชุดฉีดสีเข้ากระดูกสันหลัง UMDNS 12689

Myelogram Set

A prepackaged kit , tray or set containing the necessary equipment and supplies used for used for injecting contrast medium into the subarachnoid space (usually of the lumbar spine) for the purposes of visualizing the spinal canal by radiographic study. [GMDN = **Myelograph kit = 35199**]

Abbreviation myeset

19904 กล้องจุลทรรศน์สำหรับผ่าตัดทางศัลยกรรมประสาท UMDNS 18289

Neurosurgical Operating Microscope

Operating microscopes with high mobility and flexibility, designed using combinations of couplers, objectives, lenses, and body tubes for specific use in neurosurgery.

Abbreviation opemic-n

กลุ่มที่ 20 Nursing Services

Carts

20000 รถเข็นจ่ายยา UMDNS 10644

Drug Carts

Carts including drawers, shelves, and compartments appropriate for organizing the storage and transportation of medication, instruments (e.g., syringes), and other supplies to the patient bed. Most of these carts include a removable section of drawers (a "cassette") that is used as a unit-dose system to dispense individual daily medications from the pharmacy to each patient.

Abbreviation cardru

20001 รถเข็นใส่อุปกรณ์ทางการแพทย์ UMDNS 10641

Instrument Carts

Carts used for storage and transport of surgical instruments, medical devices, and electronic instruments. They often serve as a rack on which the devices remain. Some instrument carts are completely closed units to prevent contamination during transport.

Abbreviation carins

20002 รถเข็นแฟ้มประวัติผู้ป่วย UMDNS 15208

Medical Record Carts

Storage devices equipped with wheels for transporting supplies from one area of a medical facility to another. They are typically constructed of metal or plastic and contain shelves or drawers.

Abbreviation carrec

20003 รถเข็นผู้ป่วยนั่งถ่าย UMDNS 15208

WC Cart

A chair designed with a toilet-like seat that allows an immobilized person / patient to utilize a toilet without leaving the chair. [GMDN = Chair, toilet = 40539]

Abbreviation car-wc

Stretchers

20100 รถเข็นผู้ป่วยแบบนอน UMDNS 13816

Stretchers

Stretchers that include a wheeled frame to facilitate the transportation of recumbent patients expediently and safely along a flat surface. **Related Terms:** Stretchers, Mobile, Ambulance [16-630] Stretchers, Mobile, Hospital [16-786] Stretchers, Mobile, Hospital, Adjustable-Height [19-021]

Stretchers, Mobile, Hospital, Fixed-Height [19-020] Stretchers, Mobile, Hospital, Patient Transfer [13-820]
Stretchers, Mobile, Hospital, Radiographic [15-726]

Abbreviation stretc

20101 เตียงเคลื่อนย้ายผู้ป่วยชนิดปรับระดับได้ ด้วยระบบไฮดรอลิก **UMDNS** 13816

Stretechers, hydraulic

Stretchers that include a wheeled frame to facilitate the transportation of recumbent patients expediently and safely along a flat surface. **Related Terms:** Stretchers, Mobile, Ambulance [16-630]

Stretchers, Mobile, Hospital [16-786] Stretchers, Mobile, Hospital, Adjustable-Height [19-021]

Stretchers, Mobile, Hospital, Fixed-Height [19-020] Stretchers, Mobile, Hospital, Patient Transfer [13-820] Stretchers, Mobile, Hospital, Radiographic [15-726]

Abbreviation stretch-h

Warming Unit

20200 ชุดผ้าห่มไฟฟ้า **UMDNS** 10414

Electric Blanket Set

Warming units designed to heat blankets. These units usually include a high capacity (e.g., 0.2 to 0.5 m3) cabinet with appropriate perforated shelves for blanket positioning, avoiding contact with very hot surfaces to prevent scorching; either steam or dry hot air is typically circulated to heat the blanket in a temperature range from 30 degrees to 90 degrees C (90 degrees to 200 degrees F)

Abbreviation elebla

20201 เครื่องควบคุมอุณหภูมิร่างกายผู้ป่วย **UMDNS** 12068

Hyper - Hypothermia Unit

Units designed to regulate a patient's temperature by heating or cooling. These units usually include a central system with heating and refrigerating capabilities, controls, alarms, and some means (e.g., blankets) to deliver thermal changes to the patient. Patient warming/cooling units are used to warm patients who are hypothermic, to maintain normal body temperature during and after surgery, to cool feverish patients, or to induce hypothermia to lower metabolism (e.g., during cardiac surgery, neurosurgery). **Related Terms:** Blankets, Circulating-Fluid [12-067] Blankets, Forced-Air [18-852] Heating Pads [11-985] Warming Units, Patient [17-570] Warming/Cooling Units, Patient, Circulating-Fluid [12-074] Warming/Cooling Units, Patient, Circulating-Fluid, Intravascular [21-566] Warming/Cooling Units, Patient, Forced-Air [18-851] Warming/Cooling Units, Patient, Heart-Lung Bypass [17-206]

Abbreviation hypoth

20202 เครื่องทำให้ร่างกายอบอุ่นด้วยลมร้อน

UMDNS 17570

Patient Warmer Unit

Units that help regulate a patient's temperature by adding heat. These units usually include a central device with heating elements, controls, alarms, and some means (e.g., blankets) to deliver heat to the patient. Patient warming units treat patients for or protect patients from hypothermia; they are frequently used to help maintain normal body temperature during and after surgery. **Related Terms:**

Blankets, Circulating-Fluid [12-067] Blankets, Forced-Air [18-852] Heating Pads [11-985] Warming Units, Patient, Circulating-Fluid [17-648] Warming Units, Patient, Forced-Air [17-950] Warming Units, Patient, Radiant [13-248] Warming Units, Patient, Radiant, Adult [13-249] Warming Units, Patient, Radiant, Infant [17-956] Warming Units, Patient, Radiant, Infant, Mobile [17-433] Warming/Cooling Units, Patient [12-068]

Abbreviation patwar

Infusion Unit

20300 เครื่องควบคุมการให้อาหารเหลวทางสายยางอัตโนมัติ

UMDNS 13209

Enteral Feeding Pump

Pumps designed to accurately control the flow of liquid feeding solutions (e.g., commercially prepared formulas, blenderized foods) that are administered enterally (i.e., via the digestive tract). These pumps may include rotary peristaltic pumps, in which a section of flexible tubing is held against a set of revolving rollers by tension on the anchored section of tubing; linear peristaltic pumps that push fluids along a linear section of tubing with a series of fingerlike projections and an opposing surface; or volumetric pumps, which repeatedly compress a specific amount of fluid into a cassette, providing a more controlled, accurate infusion. Many pumps include memory for the dose rate, dose settings, and volume infused, as well as visible and/or audible alarms to alert the user to flow changes or malfunctions. Enteral feeding pumps are used in patients who are unable or unwilling to consume adequate nutrients and are without gastrointestinal complications; they deliver the feeding solutions through temporary feeding tubes (e.g., nasogastric tubes) or surgically implanted tubes (e.g., gastrostomy tubes, jejunostomy tubes).

Abbreviation feepum

20301 เครื่องควบคุมการให้ยาและสารละลายอัตโนมัติ

UMDNS 16495

Infusion Pump

Pumps designed for controlled and accurate infusion of liquids to a patient through intravenous, epidural, or subcutaneous routes for therapeutic and/or diagnostic purposes. These pumps may use peristaltic mechanisms, cassettes, or a syringe driven mechanism for propelling the infusate. Infusion pumps usually include electronic controls, alarms, and memory. **Related Terms:** Infusion Controllers [11-010]

Infusion Pump Administration Sets [16-579] Infusion Pumps, Ambulatory [16-491]

Infusion Pumps, Ambulatory, Insulin [17-159] Infusion Pumps, General-Purpose [13-215]
Infusion Pumps, High-Flow, Warming [17-907] Infusion Pumps, Implantable [16-143]
Infusion Pumps, Micro [16-722] Infusion Pumps, Multichannel [17-634]
Infusion Pumps, Patient-Controlled Analgesic [16-924] Infusion Pumps, Syringe [13-217]
Infusion Pumps, Syringe, Oxytocin [16-167] Testers, Infusion Pump [16-720]

Abbreviation infpum

20302 เครื่องระงับความเจ็บปวดด้วยตัวผู้ป่วยเอง

UMDNS 16924

Patient Controlled Anesthesia

Infusion pumps that are designed to deliver a predetermined amount of analgesic drug on demand, i.e., when requested by the patient. These pumps are typically connected to infusion pump tubing designed specifically for use with patient-controlled analgesic (PCA) infusion pumps; this tubing is connected to a infusion catheter or other infusion device (e.g., epidural catheter, subcutaneous injection/infusion port). Typically, PCA pumps are programmed to deliver in any one of the following modes: demand dose, demand dose plus continuous infusion, or continuous infusion; these pumps can also be programmed to deliver one-time doses (i.e., bolus doses). PCA pumps are designed with specific safeguards that restrict the amount of drug that can be requested and delivered over a specific period of time, e.g., 1 mg of drug every 6 minutes for a total of 10 mg per hour. The software inherent in the PCA pump is typically capable of storing cumulative data regarding number of doses delivered, date/time of each dose delivered, number of requests received, and total volume of drug delivered.

Abbreviation pca

20303 เครื่องให้สารละลายด้วยกระบอกไซริงค์

UMDNS 13217

Syringe Pump

Infusion pumps designed for intravenous administration of solutions at very low and precisely controlled flows by expelling fluid from a syringe. These pumps usually consist of a motor that drives a screw or gear mechanism that advances either the plunger or barrel of the syringe at a predetermined rate, they also include electronic controls and alarms; in most pumps the syringe containing the infusate must be manually replaced once it has emptied to continue the infusion. Because of their lower flow settings and flow resolution to 0.1mL/hr, they are especially appropriate for neonatal, infant, and critical care applications in which small volumes of concentrated drugs are to be delivered over an extended period. Some of these pumps may be calibrated in units specific for delivery of oxytocin, insulin, or other drugs.

Abbreviation syrpum

Dressing

20600 หม้อหนึ่งสำลีสําหรับใส่ก๊อซและสำลี

UMDNS 11313

Jars Surgical Dressing

Jars used as clean containers to store dressings and bandages free from contamination. These devices are either disposable (e.g., single-use) or reusable cylindrical containers with no handles made of stainless steel or, less frequently, plastic or glass with a tight lid that is usually made of the same material; they are supplied in a variety of sizes according to the dressing and/or bandage dimensions. Dressing jars are used to store dressings and/or bandages that are intended to be placed over a wound or diseased tissue during examination, treatment, and/or surgical procedures performed in hospitals, doctors' offices, and at home.

Abbreviation surjar

Other

20900 เครื่องวัดความดันโลหิต (แบบเข็ม)

UMDNS 13106

Blood Pressure Analog

Instruments used for the indirect (noninvasive) measurement of arterial blood pressure. Related Terms : Sphygmomanometers, Aneroid [16-156] Sphygmomanometers, Electronic [16-157] Sphygmomanometers, Electronic, Automatic [16-173] Sphygmomanometers, Electronic, Automatic, Auscultatory [18-325] Sphygmomanometers, Electronic, Automatic, Differential Sensor [18-327] Sphygmomanometers, Electronic, Automatic, Oscillometric [18-326] Sphygmomanometers, Electronic, Automatic, Plethysmographic [16-986] Sphygmomanometers, Electronic, Automatic, Wrist [23-551] Sphygmomanometers, Electronic, Manual [16-174] Sphygmomanometers, Mercury [16-158]

Abbreviation bp-ana

20901 เครื่องวัดความดันโลหิต (แบบตัวเลข)

UMDNS 16173

Blood Pressure Digital

Electronic sphygmomanometers designed with a self-contained program for proper function and automatic cuff inflation and measurement cycles. These instruments usually display current heart rate and mean arterial pressures in addition to systolic and diastolic blood pressure. Most automatic electronic sphygmomanometers will sound an alarm if blood pressure exceeds preset limits, and some can be set to take readings continuously. Although these instruments are not intended for monitoring for recording purposes, they may include a printer and keep a record of several measurements.

Abbreviation bp-dig

20902 เก้าอี้ชนิดและขนาดต่างๆ

UMDNS 10787

Chairs

Furniture consisting of a single seat with a back and with or without arms, specially designed for patient use (e.g., during examination, treatment, rehabilitation). Chairs are usually movable. Note: In definitions

commonly found in dictionaries, a chair is a seat with a back that may include arms or not, and a stool is a seat without a back or arms; but it is a common practice in medical furniture literature to use "chair" when the furniture is designed for patient use and "stool" for the furniture typically used by the health personnel (physicians, nurses, dentists, etc.), regardless of whether it has a back rest or arms. This convention is used in the stool and chair terms. **Related Terms:** Chairs, Bath [10-788] Chairs, Birthing [15-024]Chairs, Blood Drawing [10-789] Chairs, Commode [18-403]Chairs, Dialysis [16-436] Chairs, Disabled Patient [18-406] Chairs, Disabled Patient, Geriatric [10-796] Chairs, Disabled Patient, Pediatric [10-797] Chairs, Disabled Patient, Seat-Lifting [17-975] Chairs, Examination/Treatment [16-437] Chairs, Examination/Treatment, Dentistry [10-792]Chairs, Examination/Treatment, Ophthalmology [15-723]

Abbreviation chairs

20903 Collectors

UMDNS 10941

Collectors

A small container for medical treatment purposes used to collect fluids, gas or other materials from the human body . This may also be for specimen or sample purposes. **[GMDN = Collector, (specify) = 10941]**

Abbreviation collec

20904 เครื่องดูดชนิดควบคุมความดัน

UMDNS x

Controllable Suction

Aspirators [10208] Devices that are used to evacuate gas, fluid, tissue, or other foreign materials from a body cavity by means of suction. They generally consist of a motorized suction pump (some hospitals have a central vacuum system), rubber tubing, a plastic/glass specimen container, a pressure gauge, a vacuum control adjustment knob, and sometimes, a microbial filter. The pump creates a vacuum in the suction tubing, which is inserted into the cavity for the removal of gases, fluids, or other particles, which are removed and routed to the specimen container. Aspirators may also consist only of a simple rubber bulb and pipette that is inserted into the cavity and manually squeezed to remove the fluid, gas, or other material. Typically, these devices are used by surgeons, assisting surgeons, or nurses during surgery, but they may also be used at the bedside, in the home, in long-term nursing home facilities, and during emergency medical response.

Abbreviation consuc

20905 เครื่องนับเม็ดยาอัตโนมัติ

UMDNS 18172

Counter Machine

An automatic device used to measure the number of pills / tablets for dispensing to patients.

Abbreviation coumac

20906 เครื่องละลายพลาสมาแช่แข็ง

UMDNS 15555

Cryoprecipitate Baths

Devices used to influence other objects, media, a human's body or body part in order to transfer the treatment basis for which the bath is intended to the object. Purposes can be, e.g., cleansing, therapeutic, temperature change, chemical reaction, etc. Objects can also be exposed to mechanical influence, e.g., ultrasonic waves, water jets from nozzles for massage, or other forms of reaction. Related Terms : Baths, Arm [10-182] Baths, Dialysate Warming [15-825] Baths, Freezing [15-106] Baths, Leg [12-313] Baths, Paraffin, Physical Therapy [12-956] Baths, Portable [13-088] Baths, Sitz [13-609] Baths, Steam [13-725] Baths, Tissue Flotation [15-107] Baths, Water [15-108] Baths, Water, Laboratory [16-861] Baths, Water, Molded Plastic Splint [17-526] Baths, Water, Plasma-Thawing [16-796] Baths, Water, Shaker [16-772] Baths, Whirlpool [14-450]

Abbreviation crybat

20907 Cuffs (ความหมายกว้างมาก ควรเอาออก)

UMDNS 11072

Cuffs

Bandlike devices encircling a body part or another device. Cuffs used in medical procedures or monitoring are typically filled with air or fluid. **Related Terms:** Cuffs, Blood Pressure [11-073] Cuffs, Tourniquet [17-231] Cuffs, Tourniquet, Disposable [16-907] Cuffs, Tourniquet, Reusable [17-230] Cuffs, Tracheal Tube [14-082] Cuffs, Tracheostomy Tube [14-094] Cuffs, Vascular Catheter [17-470]

Abbreviation cuffs

20908 เครื่องชั่งน้ำหนักแบบเข็ม

UMDNS 18455

Weight Meter Analog

Scales designed to weigh adult patients. These scales are made with different configurations according to patient capabilities (e.g., ambulatory, bed-ridden, disabled) and/or the procedure or treatment (e.g., intensive care, dialysis) needed. Related Terms: Scales, Patient, Bedside [18-459] Scales, Patient, Bedside, Slab [18-460] Scales, Patient, Bedside, Sling [17-195] Scales, Patient, Chair [13-460] Scales, Patient, Chair, Dialysis [18-461] Scales, Patient, Floor [13-461] Scales, Patient, Modular Transducers [18-462] Scales, Patient, Platform [18-456] Scales, Patient, Platform, Electronic [18-458] Scales, Patient, Platform, Mechanical [18-457] Scales, Patient, Underbed [13-458] Scales, Patient, Wheelchair [15-053]

Abbreviation weiana

20909 เครื่องชั่งน้ำหนักและวัดส่วนสูงผู้ใหญ่แบบตัวเลข UMDNS 18455

Digital Adult Weight and Height Measurement

Scales designed to weigh adult patients. These scales are made with different configurations according to patient capabilities (e.g., ambulatory, bed-ridden, disabled) and/or the procedure or treatment (e.g., intensive care, dialysis) needed. Related Terms: Scales, Patient, Bedside [18-459] Scales, Patient, Bedside, Slab [18-460] Scales, Patient, Bedside, Sling [17-195] Scales, Patient, Chair [13-460] Scales, Patient, Chair, Dialysis [18-461] Scales, Patient, Floor [13-461] Scales, Patient, Modular Transducers [18-462] Scales, Patient, Platform [18-456] Scales, Patient, Platform, Electronic [18-458] Scales, Patient, Platform, Mechanical [18-457] Scales, Patient, Underbed [13-458] Scales, Patient, Wheelchair [15-053]

Abbreviation weidig

20910 เครื่องชั่งน้ำหนักพร้อมรถเข็น UMDNS 15053

Wheel Chair Weight Scale

Patient scales typically including a weighing platform that is large enough and low enough for wheelchair access; they may also include ramps to facilitate rolling the scales on and off the platform. Wheelchair scales usually have a weighing capacity of up to 275 to 450 kg (600 to 1,000 lb) and an accuracy of 100 g (0.25 lb). These scales may use mechanical, electromechanical, or electronic weighing technologies. Wheelchair scales are used for routine periodic weighing of patients who cannot stand on a conventional scale.

Abbreviation weiwhe

20911 ที่นอนลมป้องกันแผลกดทับ UMDNS 18147

Alpha Bed

Mattress systems that include a mattress made of multiple air cells, which are cyclically inflated and deflated in such a way that the inflated sacks cells support the patient and the deflated ones give pressure relief to prevent maceration of the patient's skin. Control units connected to the mattress regulate the cycles of inflation and deflation. These systems are typically used in the care and management of patients at risk for, or who already have compromised skin surfaces, such as burn patients, patients at risk for developing decubitus ulcers, patients with decubitus ulcers, etc.

Abbreviation airbed

20912 เครื่องเตือนสำหรับเด็กปัสสาวะรดที่นอน UMDNS 15550

Alarms

A device that give a signal (visual / audible / tactile) when pre-set limits are exceeded. [GMDN = Alarm, (specify) = 15550]

Abbreviation alarm

20913 Aspirators

UMDNS 10208

Aspirators

Devices that are used to evacuate gas, fluid, tissue, or other foreign materials from a body cavity by means of suction. They generally consist of a motorized suction pump (some hospitals have a central vacuum system), rubber tubing, a plastic/glass specimen container, a pressure gauge, a vacuum control adjustment knob, and sometimes, a microbial filter. The pump creates a vacuum in the suction tubing, which is inserted into the cavity for the removal of gases, fluids, or other particles, which are removed and routed to the specimen container. Aspirators may also consist only of a simple rubber bulb and pipette that is inserted into the cavity and manually squeezed to remove the fluid, gas, or other material. Typically, these devices are used by surgeons, assisting surgeons, or nurses during surgery, but they may also be used at the bedside, in the home, in long-term nursing home facilities, and during emergency medical response. Related Terms: Aspirators, Autopsy [17-435] Aspirators, Dental [10-212] Aspirators, Emergency [15-016] Aspirators, Endocervical [16-227] Aspirators, Endoscopic Irrigation [17-424]

Aspirators, Infant [10-214] Aspirators, Liposuction [17-103] Aspirators, Low-Volume [10-215]

Aspirators, Nasal [10-216] Aspirators, Surgical [10-217] Aspirators, Thoracic [10-218]

Aspirators, Tracheal [10-219] Aspirators, Ultrasonic [15-756] Aspirators, Uterine [10-222]

Abbreviation aspira

20914 ที่ชำระล้างบาดแผลไฟไหม้หรือน้ำร้อนลวก

UMDNS 10316

Bathtubes (Mobile)

A bath specifically designed for a portable use. It can be readily dismantled and packed into a manageable size. This device will typically be used when there is no access to ordinary bathing facilities, e.g. in a military hospital or homes where persons needing attention do not have a bath. It is typically be used for hygienic purposes (body wash). [GMDN=Bath, portable=13088]

Abbreviation battub

20915 ที่นอน

UMDNS 12475

Mattress, Bed

Mattresses with appropriate dimensions for use on beds in hospitals and nursing homes and/or for home care. These mattresses are usually filled with foam, include inner springs (e.g., wire coils), or are a combination of both; they are typically made of fire-retardant materials and are enclosed in waterproof antimicrobial covers. Some bed mattresses are designed to gatch in the typical positions of a hospital bed (e.g., Fowler). Bed mattresses made in an appropriate size for pediatric use or to support the weight of obese and morbidly obese patients (e.g., bariatric mattresses) are also available. Mattresses, Bed, Flame-Resistant/Safety [17-553] Mattresses, Bed, Gel [19-017] Mattresses, Bed, Static Air [19-018] Mattresses, Bed, Water [12-480]

Abbreviation bedmat

- 20916 หม้อนอนถ่ายอุจจาระ UMDNS 10339
 Bedpans
 Devices used by a bedridden patient as receptacles for urine and feces.
Abbreviation bedpan
- 20917 หม้อต้มน้ำ UMDNS 17849
 Boiler
 A device used to regulate a patient's body temperature, and which may assist in or warming of the patient **[GMDN = Heating unit (specify) = 36856]**
Abbreviation boiler
- 20918 แขนเทียมสำหรับฝึกหัดการแทงเข็มเข้าเส้นโลหิต UMDNS 15816
 Intravenous Training Arm
 A synthetic replica of a human arm with veins for instructing intravenous line placement injections and infusion. It is typically used by nursing, medical and paramedical students to simulate the anatomy of an arm with blood vessels, tissue and skin produced in soft, rubber - like materials. **[GMDN = Training model, anatomical arm, infusion = 35577]**
Abbreviation intra
- 20919 เครื่องยกผู้ป่วย UMDNS 12330
 Lift Patient
 Lifts designed for hoisting and transferring a patient safely and with minimal physical effort. These lifts consist of a C-shaped or U-shaped support base usually including casters, a vertical mast, a pivoting boom, a swivel bar, a seat (sling or rigid), and the lifting mechanism; they are manually, electrically, or battery operated using hydraulic or screw jack lifting mechanisms. Patient lifts are frequently used to transfer patients (e.g., to and from a wheelchair, toilet, or bathtub), reducing the risk of injury to those assisting with the transfer (typically only one person) and of patient drop. Some patient transfer lifts are mounted on tracks to permit patient transfers between rooms or different vertical levels. **Related Terms :** Lifts, Patient Transfer, Overhead Track [19-015] Lifts, Patient Transfer, Stairway [17-818] Patient Transfer Aids [15-693] Slings, Patient Transfer, Mechanical Lift [17-661]
Abbreviation lifpat
- 20920 ตู้เก็บยาและเวชภัณฑ์ UMDNS 10535
 Medical Cabinet
 Cabinets designed to store medicines and other disposable products of frequent use in healthcare (e.g., adhesive tape, dressing). These cabinets are usually constructed of metals (e.g., stainless steel), plastics, wood,

or combinations of these materials. They frequently consist of stand-alone or wall-mounted units (either recessed or surface mounted) including shelves; many medicine cabinets include a swing door externally covered with a mirror. Some cabinets include a working surface appropriate for medicine preparation. Medicine cabinets are used in many different locations, including nurse stations in healthcare facilities, nursing centers, and homes.

Abbreviation medcab

20921 ไมโครมานิปูเลเตอร์พร้อมอุปกรณ์ **UMDNS 12534**

Micromanipulators

A device that is designed to convert large movements (normal hand movements) into small (micro) movements for the purpose of providing extreme precision. It is typically used in, e.g. micro and laser surgery, work under a microscope, microinjection, gene manipulation, manipulation of fine instruments or dissection of minute objects. [GMDN = **Micromanipulator = 12534**]

Abbreviation micman

20922 Strippers (ไม่มีภาษาไทย) **UMDNS 13823**

Strippers

strip ตรวจเลือด

Abbreviation strip

20923 Stylets(ไม่มีภาษาไทย) **UMDNS 13833**

Stylets

A wire or a thin flexible rod contained in the lumen of a needle, vessel, or tube. It is used to stiffen maintain shape, or patency or clear the needle, vessel or tube. [GMDN = **Stylet, (specify) = 13833**]

Abbreviation stylet

20924 เครื่องเฝ้าระวังอุณหภูมิร่างกาย **UMDNS 12672**

Temperature Monitor

A plug - in unit, typically used in a Patient monitor, multiparameter, that measures and monitors the patient' s body temperature at one or more sites. This is typically done by using probes, e.g. skin or rectal. [GMDN = **Patient monitor module, temperature = 36562**]

Abbreviation temmon

- 20925 ปรอทวัดไข้แบบอิเล็กทรอนิกส์ UMDNS 14032
 Thermometer Electronic
 Thermometers that include an electronic device and attached sensors that detect and transduce changes in temperature into variations of some electric characteristic (e.g., resistance, voltage). These variations of the electric characteristics are processed in electronic circuits and, in turn, displayed as temperature readings. Related Terms: Thermometers, Electronic, Cryogenic [11-066] Thermometers, Electronic, Fiberoptic [16-960] Thermometers, Electronic, Infrared [14-036] Thermometers, Electronic, Infrared, Ear [17-887] Thermometers, Electronic, Infrared, Skin [17-888] Thermometers, Electronic, Thermistor/Thermocouple [18-299] Thermometers, Electronic, Thermistor/Thermocouple, Laboratory [17-436] Thermometers, Electronic, Thermistor/Thermocouple, Patient [14-035]
Abbreviation ther-e
- 20926 ถาดชนิดต่างๆ UMDNS 15609
 Trays
 A flat shallow vessel usually with a raised rim providing a suitable platform for carrying many items at once, e.g. food, medicine, instruments or papers. It is typically designed to fit into other devices, e.g. supply trolleys, conveyor systems or walkers. [GMDN = Tray, (specft) = 15609]
Abbreviation trays
- 20927 Trocars (ไม่มีภาษาไทย) UMDNS 14154
 Trocars
 Surgical instruments with a sharp pyramidal or conical point used to puncture a surface. These devices can be assembled and used together with a compatible sleeve that fills the trocar lumen, thereby allowing the introduction of the trocar assembly. After the puncturing, the trocar is withdrawn providing a working channel to the cavity. **Related Terms:** Trocars, Abdominal [14-155] Trocars, Amniotic Membrane [14-156] Trocars, Antrum [14-157] Trocars, Cardiovascular [14-158] Trocars, Gallbladder [14-159] Trocars, Laryngeal [14-160] Trocars, Other [15-260] Trocars, Suprapubic [16-421] Trocars, Thoracic [14-161] Trocars, Tracheal [14-162]
Abbreviation trocar
- 20928 เครื่องวัดอุณหภูมิทางช่องหู UMDNS 17887
 Infrared Tympanic Thermometer
 Infrared electronic thermometers used to measure a patient's ear canal temperature. Most of these thermometers are designed to estimate the internal ("core") temperature of the body by measurement of infrared radiation from within the auditory canal, while others claim to measure directly the infrared emissions from the tympanic membrane. Infrared ear thermometers also usually display "corrected" offset values of oral and/or rectal temperature.
Abbreviation tytem

20929 ชุดเครื่องมือช่วยฝึกบาดแผลสมมุติ UMDNS 15865

Wound Management Training Set

A anatomical device designed to imitate, a part or parts of the human anatomy and is used to simulate injuries, trauma, for the purpose of training exercises for, e.g. healthcare workers or military personnel. This device will also include imitation blood. Such devices are typically used on large scale exercises, and individual training. [GMDN = Training model, anatomical wound make - up = 37800]

Abbreviation woutra

กลุ่มที่ 21 Obstetrics

21000 เตียงรอกคลอด UMDNS 13960

Delivery Table

Adjustable examination/treatment tables that include knee crutches, traction handles, and heel stirrups. These tables are designed to support the woman's body in appropriate positions during labor and delivery and in other procedures related to pregnancy.

Abbreviation delbed

21001 เตียงคลอดบุตร UMDNS 18386

Labour Bed

Bar- or rail-like apparatus used to assist women with positioning and support during labor. [GMDN = Bed, birthing = 15732]

Abbreviation labbed

21002 เครื่องมือชุดทำคลอดปกติ UMDNS 11141

Labour Set

Prepackaged collections (either custom or standard) of the necessary equipment and supplies used to deliver the fetus and placenta (i.e., obstetric delivery). Typical components in these kits may include sterile gowns, gloves, needles, syringes, lidocaine bottles, basins, scissors, scalpels, cord clamps, obstetric pads, and drapes. **Related Terms:** Maternity Kits [12-463]

Abbreviation labor

21100 ชุดเจาะถุงน้ำคร่ำเพื่อเร่งคลอด UMDNS 12990

Perforators, Amniotic Membrane

Perforators designed to puncture the membrane containing the fetus (i.e., amniotic membrane or amnion). These perforators typically consist of a small device that includes a ring for use around the finger and a pointed distal end to perforate the membrane. Amniotic membrane perforators are available for the right and

the left hand; the instruments permit manual examination of the membrane and rupture of the membrane if needed in only one operation. Amniotic membrane rupture may be performed also using long devices with a protected sharp point (i.e., amniotomes), and dedicated forceps or trocars. **Related Terms :** Amniotomes [10-089] Trocars, Amniotic Membrane [14-156]

Abbreviation amnper

21101 Aspirators, Infant(ไม่มีภาษาไทย) **UMDNS 10214**

Aspirators, Infant

Aspirators used to evacuate mucus or other foreign materials from the throat of a newborn by means of suction. They are used in obstetrics, pediatrics, and surgery and they can be either motorized or manual in design

Abbreviation aspinf

21102 เครื่องมือผ่าตัดอวัยวะสืบพันธุ์ชาย **UMDNS 10869**

Circumcision Clamps

Surgical clamps designed to to crush the inner and outer skin of the foreskin together to cause hemostasis during circumcision. These clamps are typically manual instruments that provide protection for the glans; usually, the foreskin is excised with a knife or scissors. Circumcision clamps are available in a variety of shapes and sizes, including reusable and single-use devices and adult and infant sizes. **Related Terms:** Clamps, Surgical, Penis, Circumcision, Disposable [21-219] Clamps, Surgical, Penis, Circumcision, Reusable [21-220]

Abbreviation circum

21103 เครื่องฟังเสียงหัวใจทารกในครรภ์ด้วยคลื่นเสียงความถี่สูง **UMDNS 11696**

Doppler Fetus Detectors

Fetal heart detectors that use ultrasonic waves to provide audible and/or visual information. They consist of an ultrasound-frequency electrical generator and appropriate ultrasound transducers housed in a probe that is placed on the maternal abdomen. Ultrasonic heartbeat detectors amplify the audible frequency shift (i.e., Doppler effect) signal of the returned ultrasonic waves and deliver it to speakers or headphones; the heart rate is determined either by measuring the timing of the peaks in the Doppler signal or, more accurately, by using automated autocorrelation procedures. These devices can detect fetal heart activity as soon as 10 weeks after conception.

Abbreviation dopfet

21104 เครื่องติดตามสภาวะทารกในครรภ์และการบีบตัวของมดลูก **UMDNS 12610**

Fetal Heart Rate and Uterine Contraction Monitors

Monitors designed to measure, record, and/or display fetal heart rate (FHR) and uterine contractions. These monitors may sense both FHR and uterine contractions from the surface of the maternal abdomen (indirect, noninvasive method), or directly through electrodes in the fetus and pressure transducers in the uterus (direct, invasive method).

Abbreviation fetmon

21105 เครื่องมือชุดทำคลอดด้วยกีม **UMDNS 11788**

Forceps, Obstetrical Set

Forceps used to gently grasp, extract, and apply traction to or rotation of the head of a newborn in order to facilitate delivery and removal of the newborn from the birth canal (the channel formed by the cervix, vagina, and vulva). They consist of two separate sides or handles and are manually squeezed together using both hands.

Abbreviation forobs

21106 เครื่องมือชุดทำคลอดด้วยระบบสุญญากาศ **UMDNS 14317**

Vacuum Extractors

An instrument for producing traction upon the head of a foetus by means of a soft cup held by a vacuum. [GMDN = Extractor, vacuum foetal = 32596]

Abbreviation obsvac

21107 เครื่องวัดความยาวของมดลูก (ควรใช้ชื่ออื่น) **UMDNS 13644**

Uterine Sound

A surgical instrument intended to be used to probe and explore the uterus. It consists of a slender hollow or solid instrument made of metal, plastic or other suitable material in a cylindrical form and in a range of sizes and flexibilities. [GMDN = Probe, surgical, uterine = 13644]

Abbreviation utesou

กลุ่มที่ 22 Ophthalmology

Eye test, chart

22000 ชุดตรวจตาบอดสี **UMDNS 16801**

Colour Blindness Test (Ishihara Chart)

An ophthalmic chart with coloured figures printed on coloured backgrounds, used in testing colour vision. [GMDN = Charts, Eye, Color Discrimination = 35898]

Abbreviation eyecol

22001 เครื่องตรวจการเคลื่อนไหวลูกตา UMDNS 16476

Optokinetic Drums

A drum-like ophthalmic device covered with alternating white and dark stripes or pictures. The device is intended to elicit and evaluate nystagmus (involuntary rapid movement of the eyeball). [GMDN = **Optokinetic drum = 16476**]

Abbreviation optdru

22002 ชุดวัดมุมตาเข UMDNS 15875

Prism Set

An ophthalmic device comprising prisms of ascending power used during sight testing to assess the eye muscles. [GMDN = **Prism bar = 32719**]

Abbreviation priset

22003 เครื่องวัดสายตาแบบเครื่องฉาย UMDNS 16890

Vision Test Chart Projector

An ophthalmic chart imprinted with block letters or other symbols in gradually decreasing sizes, identified according to distances at which they are ordinarily visible: used in testing visual acuity. Such charts are often combined in a box where the individual letters or symbols are selected and high-lighted by the optician/doctor with background electrical lighting. [GMDN = **Chart, eye, visual acuity = 16800**]

Abbreviation vistes

Ophthalmic tool set

22200 เครื่องมือชุดเนื้อเยื่อ UMDNS 11084

Curret, ophthalmic

Instruments designed with a spoon-like working end intended for mechanical scraping and/or removal of tissue from the wall of an anatomic cavity or surface. These devices are typically manual, handheld, or endoscopic instruments with a solid or fenestrated (e.g., a ring, loop) working end that resembles a spoon with blunt or sharp edges, a shaft, and a handle at the other end; some curettes are used through the working channel of an endoscope. Curettes are typically used to remove tissue, either for use as a laboratory sample (biopsy) or during dental and/or surgical procedures. Related Terms: Curettes, Biopsy [21-307] Curettes, Biopsy, Bronchus, Endoscopic [21-308] Curettes, Biopsy, Bronchus, Endoscopic [21-308] Curettes, Biopsy, Bronchus, Endoscopic, Flexible [21-310] Curettes, Biopsy, Bronchus, Endoscopic, Rigid [21-311] Curettes, Biopsy, Nasal [21-312] Curettes, Biopsy, Uterine, Endometrium [21-314] Curettes, Biopsy, Uterine, Endometrium, Cervical Canal [21-317] Curettes, Biopsy/Surgical, Uterine, Suction [21-318] Curettes, Dental [21-321] Curettes, Dental, Periodontal [21-322] Curettes, Dental, Periodontal, Operative [21-323] Curettes, Dental, Periodontal, Scaling [21-324] Curettes, Dental, Periodontal, Scaling, Parallel Cutting Edges [21-325] Curettes, Dental, Periodontal,

Scaling, Single Cutting Edge [21-326]Curettes, Dental/Oral Surgery [21-327]Curettes, Surgical [21-319]Curettes, Surgical, Bone [21-330]Curettes, Surgical, Bone, Microsurgery [21-331]Curettes, Surgical, Bone, Spinal [21-332]Curettes, Surgical, Bone, Spinal, Disc [21-333]Curettes, Surgical, Ear [21-335]Curettes, Surgical, Eye [21-338]Curettes, Surgical, Eye, Chalazion [21-339]Curettes, Surgical, Eye, Corneal [21-340]Curettes, Surgical, Joint [21-341]Curettes, Surgical, Joint, Endoscopic [21-342]Curettes, Surgical, Middle Ear [21-343]Curettes, Surgical, Middle Ear, Microsurgery [21-348]Curettes, Surgical, Nasal [21-352]Curettes, Surgical, Nasal, Adenoid [21-353]Curettes, Surgical, Nasal, Ethmoid [21-354]Curettes, Surgical, Nasal, Sinus [21-355]Curettes, Surgical, Pituitary Gland [21-360]Curettes, Surgical, Skin [21-334]Curettes, Surgical, Uterine [21-361]Curettes, Surgical, Uterine, Placenta/Ovum [21-363]

Abbreviation curret

22201 ปากคีบจับเนื้อเยื่อทางตา UMDNS 16209

Foreeps, ophthalmic

Small forceps used to grasp, firmly hold, and exert traction or compression on structures of the eye, particularly the iris and cornea, during ophthalmic surgery such as lens implantation or iris suturing.

Abbreviation foreye

22202 เครื่องมือผ่าตัดเปลี่ยนกระจกตา UMDNS 12222

Keratoplasty Set

Surgical instruments designed for incision of the cornea, often for shaving the outer layer of the cornea. These instruments typically consist of devices that are either manually operated or electrically powered and include appropriate blades and mechanisms; some instruments use a high-pressure waterjet to shave sections of the cornea. Keratomes are used mainly during corneal grafting procedures (e.g., keratoplasty), especially for partial-thickness implants. Dedicated knives are also used for incision of the cornea.

Abbreviation kerato

22203 เครื่องมือแม่เหล็กสำหรับดูดสิ่งแปลกปลอมในตาด้วยแม่เหล็กไฟฟ้า UMDNS 15269

Intraocular Magnet Set

Detectors, Metallic Foreign Body, Magnetic [12-516] : Detectors designed to identify/locate ferromagnetic foreign objects in a patient's body and/or discriminate ferromagnetic foreign objects from nonferromagnetic foreign objects. These detectors typically consist of a handheld unit with controls (e.g., dials and knobs), a display and/or a speaker, and one or more attached probes. Some detectors include a dedicated probe that can be placed on/near the patient's body surface (e.g., in wounds). Typically, a drive coil generates an alternating magnetic field and two search coils in the sides of this field are positioned in such a way that the signal generated by one coil cancels the signal from the other in the absence of a magnetic body. When a ferromagnetic object is present on one side of the two coils, the balance is upset, generating voltage that

produces an audible signal and/or deflects a meter. Magnetic foreign-body detectors are used mainly to locate foreign bodies in the eyes, but they are also used in other applications such as to locate metallic implants in the body (e.g., before a magnetic resonance imaging scan) and objects that may have been left in the patient during a surgical procedure.

Abbreviation ocumag

22204 ชุดเลนส์สำหรับลองสายตา UMDNS 17555

Trial Lens Set

A set of ophthalmic lenses of various dioptric powers intended to be handled or inserted in a trial frame for vision testing to determine the required refraction. [GMDN = Lens, trial set = 36068]

Abbreviation trilen

22205 แผ่นวัดสายตา UMDNS 16800

Visual Acuity Chart

An ophthalmic chart imprinted with block letters or other symbols in gradually decreasing sizes, identified according to distances at which they are ordinarily visible: used in testing visual acuity. Such charts are often combined in a box where the individual letters or symbols are selected and high-lighted by the optician/doctor with back ground electrical lighting. [GMDN = Chart, eye, visual acuity = 16800]

Abbreviation vischa

Ophthalmoscope, lamp, meter

22400 เครื่องตรวจและรักษาตาเหล่ UMDNS 17536

Amblyoscopes

Reflecting stereoscopes that present to the two eyes two separate target images through two angled tubes. The angle between the two tubes can be adjusted horizontally and vertically. Therefore, convergence and divergence can be measured, binocular vision can be measured or trained, and vision can be stimulated in the amblyopic eye.

Abbreviation amblyo

22401 เครื่องมือวัดตาโปน UMDNS 16345

Exophthalmometer

Instruments for measuring the amount of abnormal protrusion of the eyeball.

Abbreviation exomet

- 22402 เครื่องวัดสายตาแบบอัตโนมัติ UMDNS 12811
 Auto Kerato-Refractometer
 An ophthalmic instrument used for measuring the size of the reflected image on the convex surface of the cornea and lens of the eye, by which their curvature can be ascertained. [GMDN = **Ophthalmometer** = 12811]
Abbreviation eyemet
- 22403 เครื่องตรวจชนิดส่องด้วยไฟของจอรับภาพและประสาทตาพร้อมเลนส์ UMDNS 12818
 Indirect Ophthalmoscope with Aspheric Lens
 Ophthalmoscopes including a light, a mirror with a single hole through which the examiner may look, and a dial holding several lenses of varying strengths. They produce an inverted, or reversed, image of 2 to 5 times magnification. **Related Terms:** Ophthalmoscopes, Direct [12-817] Ophthalmoscopes, Scanning Laser [18-190]
Abbreviation indopt
- 22404 เครื่องวัดกำลังเลนส์ระบบอัตโนมัติ UMDNS 12326
 Automatic Lensmeters
 Instruments intended to be used to measure the optical characteristics of lenses. These devices are typically designed as either an automated computer or a microscope-type device which allows for the close examination of lenses. The computer type models are able to shine light on the lenses to determine the refraction angles, and can thus give characteristics of the lens. In addition, some models are able to tell exactly how much ultraviolet (UV) protection a lens has using a spectrometer. The non-computerized models operate on the same principles However, instead of using a computer to make all the measurements, the measurements are done by lining up the angles.
Abbreviation lenmet
- 22405 เครื่องวัดความดันลูกตาชนิดไม่สัมผัส UMDNS 16809
 Non-Contact Tonometer
 Instruments for determining ocular tension (resistance of the tunica of the eye to deformation) and the extent of corneal indentation. **Related Terms :** Calibrators, Ophthalmic Tonometer [16-414] Ophthalmic Tonographs [14-067]
Abbreviation nonten

22406 เครื่องมือตรวจโรค หู ตา คอ จมูก UMDNS 12815
Ophthalmoscopes

Ophthalmoscope/Otosopes [18-595] : Instrument sets that combine a direct ophthalmoscope and an otoscope. These sets typically include ophthalmoscope and otoscope heads and a handle with an internal battery that can be used either with the ophthalmoscope or the otoscope head; they are usually available in cases. The handle frequently includes a battery charger. Most ophthalmoscope/otoscope sets are used for primary care or emergency diagnosis, but some devices can also be used in surgery.

Abbreviation opthal

22407 เครื่องตรวจจอประสาทตาพร้อมชุดเลนส์วัดสายตา UMDNS 13372
Retinoscope

Instruments for investigating, diagnosing, and evaluating refractive errors of the eye, by projection of a beam of light into the eye and observation of the movement of the illuminated area on the retina surface and of the refraction by the eye of the emergent rays.

Abbreviation scoret

22408 กล้องขยายตรวจตาส่วนหน้าแบบสองตาพร้อมเครื่องวัดความดันลูกตา UMDNS 12281
Slit Lamp Biomicroscope with Tonometer

An ophthalmic device used to observe and examine the eye. It is also used for measurement of pressure within the eye, i.e. tonometry, and measurement of corneal thickness and anterior chamber depth. The device provides a narrow slit of light which is projected into the eye, and reflections from this are detected obliquely with a travelling microscope to observe and/or measure the position of the reflecting surfaces.

[GMDN = Slit, ophthalmic = 35148]

Abbreviation slilam

Special

22600 เครื่องมือผ่าตัดตัดต่อกระจกใสเลนส์แก้วตาเทียม UMDNS 10673
Cataract Extraction with Intraocular Lens Implantation

Equipment designed to break up and remove the natural lenses from the eye when they become fogged (i.e., affected by cataracts). Several devices are used for cataract extraction, but most specialized units perform the cataract extraction using phacoemulsification or cryogenic methods. **Related Terms:** Cataract Extraction Units, Phacoemulsification [17-596] Cryosurgical Units, Ophthalmic [11-068] Vitrectomy Units [14-386] Vitrectomy Units [14-386]

Abbreviation catext

22601 เครื่องวิเคราะห์พื้นผิวและความโค้งของกระจกตาด้วยระบบคอมพิวเตอร์ UMDNS 18038
Corneal Topography

Ophthalmic systems used to measure the curvature of the anterior corneal surface (i.e., its topography). These systems typically consist of a videokeratoscope and a computer workstation with image-processing capabilities; they may also incorporate patient data-management software.

Abbreviation cortop

22602 เครื่องวัดความโค้งกระจกตา UMDNS 12811
Keratometer

An ophthalmic instrument used for measuring the size of the reflected image on the convex surface of the cornea and lens of the eye, by which their curvature can be ascertained. [GMDN = **Ophthalmometer = 12811**]

Abbreviation kermet

22603 เครื่องรักษาจอประสาทตาด้วยแสงอาร์กอนเลเซอร์ชนิดยิงภายในลูกตา UMDNS 16945
Argon Endolaser Photocoagulator

A gas laser used in surgical procedure using argon gas as the substrate. It can be used in several clinical specialities, e.g. neurology, otology or ophthalmology. [GMDN = **Laser, argon = 35938**]

Abbreviation 22603

22604 เครื่องรักษาโรคตาด้วยแสงเลเซอร์ชนิดนีโอดีเนียมเย็ค UMDNS 18217
ND : YAG Ophthalmic Laser

Nd:YAG frequency-doubled lasers, usually operated in pulsed modes, used to coagulate abnormal vascular tissue in the retina and other photocoagulation procedures in the eye. They are typically coupled to a biomicroscope slit lamp or an indirect ophthalmoscope.

Abbreviation lasyag

22605 เครื่องตรวจขั้วประสาทตาและจอประสาทตาด้วยระบบคอมพิวเตอร์ UMDNS 18191
โดยใช้เลเซอร์สแกน

Optical Coherence Tomography

Laser scanning systems that use coherent light and interferometer techniques to obtain cross-sectional images of the retina and cornea, revealing the underlying structure not directly observable (tomographic images) in an analogous way, but with higher image resolution than conventional B-mode ultrasound and magnetic resonance imaging. These systems are used for a variety of clinical applications involving retinal and intraretinal thickness

measurements. **Related Terms:** Ophthalmoscopes, Scanning Laser [18-190] Scanning Systems, Laser, Optical Tomography, Biometry [23-549] Scanning Systems, Ultrasonic, Ophthalmic [11-389]

Abbreviation octeye

22606 เครื่องย่อยสลายต้อกระจกด้วยน้ำและคลื่นเสียงความถี่สูง **UMDNS** 17596

Phacoemulsification

Cataract extraction units that remove the cataractous lenses by the insertion of a probe, typically in the anterior chamber of the eye, that cuts and emulsifies the lens using ultrasonic waves. These units consist of a hollow probe that includes an irrigation sleeve, an oscillating tip that converts electric energy into ultrasonic waves, and a channel for aspiration of lens fragments. They also consist of a unit that includes a vacuum pump and controls for the output levels, irrigation rate, and mode of operation. **Related Terms:** Probes, Ultrasonic, Phacoemulsification Unit [23-436]

Abbreviation phaemu

22607 เครื่องมือตรวจความผิดปกติของอวัยวะการทรงตัวของหูชั้นใน **UMDNS** 11479

Electronystagmography

Graphic recorders of the electrical potential caused by eye movements. These recorders include either an electrode for each eye and one on the forehead (multichannel recording) for measuring the potential from both eyes simultaneously or electrodes that must be repositioned before each test for single-channel recording. The use of two channels for each eye allows measurement of eye movement in magnitude and direction as a vector. Some recorders are compatible with personal computers for waveform storage and analysis. Electronystagmographs are used for detecting multiple sclerosis, vestibular dysfunctions, the presence of drugs, and other specific disorders characterized by involuntary eye movement (nystagmus). **Related Terms:** Electrooculographs [11-480] Stimulators, Caloric, Vestibular Function [10-548] Videonystagmographs [21-989]

Abbreviation elenys

22608 เครื่องทดสอบการทำงานของประสาทตา **UMDNS** 11482

Electro Retinogram

Graphic recorders of the changes in electrical potential on or near the surface of the cornea to a reference distal point on the body, following stimulation of the retina by light (i.e., flashes of white light). These recorders include a primary electrode (typically gold, platinum, or silver), a reference electrode located almost anywhere in the body (e.g., cheek, earlobe), and an amplifier that boosts the bioelectrical potential. Some recorders are compatible with personal computers for waveform storage and analysis. Electoretinographs are used in the diagnosis of retinal degeneration, night blindness, and circulatory disturbances of the retina. **Related Terms:** Electrocochleographs [17-495] Electrooculographs [11-480] Recorders, Graphic, Evoked Potential [11-614] Stimulators, Photic, Visual [13-783]

Abbreviation eleret

- 22609 เลนส์สำหรับใส่ตาเพื่อช่วยเครื่อง Slit Lamp UMDNS 11894
 Gonioscope Lens
 Optical instruments for examining the angle of the anterior chamber and for demonstrating ocular motility and rotation.
Abbreviation eyelen
- 22610 กล้องถ่ายภาพจอประสาทตาชนิดปรับภาพอัตโนมัติ UMDNS 10551
 Auto Focus Fundus Camera
 Devices used to capture images. Cameras can be designed for many purposes, including to make permanent images of objects on films, electronic images to be displayed and/or transmitted, radiographic / fluoroscopic images, and images produced by the radiation generated by radiopharmaceuticals.
Abbreviation funcam
- 22611 เครื่องตรวจลานสายตาแบบอัตโนมัติ UMDNS 16918
 Computerized Visual Field Analyzer
 Ophthalmic perimeters that perform the visual field assessment with little involvement of the operator. Currently, automated perimeters perform static perimetry, as well as simultaneous monitoring of the fixation of the eye. These instruments project targets at predetermined locations in the visual field for patient detection, using one or more procedures for field evaluation (i.e., threshold, suprathreshold, or threshold related). Automated perimeters include a stimuli source (projection devices, light-emitting diodes) with automated background illumination and computing capabilities for test programming and data processing, recording, and displaying.
Abbreviation visfei
- Other**
- 29000 Enucleators UMDNS 11587
 Enucleators
 Optical instruments for examining the angle of the anterior chamber and for demonstrating ocular motility and rotation.
Abbreviation enucle

กลุ่มที่ 23 Orthopedics

Saw

23000 เลื่อยตัดกระดูกทำงานด้วยลม UMDNS 13452

Air Power Saws (A-O saw)

Bone surgery saws driven by pneumatic power designed to cut bone and other hard tissue. These saws are typically small, handheld, powered instruments with a pneumatic motor; a mechanism to drive an oscillating, reciprocating, or sagittal blade; and a hose connected to the pressurized gas source. Pneumatic power bone surgery saws are smaller and quieter than electric saws, but they produce a larger amount of debris in the environment. They are used in orthopedic, cardiothoracic, and other surgical procedures.

Abbreviation airsaw

23001 เลื่อยไฟฟ้า UMDNS 13450

Saw Bone,Electric

Bone surgery saws driven by electric (either line or battery) power designed to cut bone and other hard tissue. These saws are typically, small, handheld, power instruments with an electric motor and a mechanism to drive an oscillating, reciprocating, or sagittal blade. Bone surgery electrical saws are used in orthopedic, cardiothoracic, and other surgical procedures.

Abbreviation saw-e

23002 เลื่อยพลังลม UMDNS 13451

Saw Bone,Air

A device that is manual or powered by, e.g. air, nitrogen, battery or mains electricity, used as a single piece or with a number of attachment. e.g. oscillating or reciprocating blades. The device may be of the micro or macro design. The attachments may allow use of the device in a number of surgical specialities, e.g. orthopaedic, otolaryngologic, podiatric or plastic surgery. [GMDN = Saw, surgical, (specify) = 13448]

Abbreviation saw-g

23003 เลื่อยด้วยมือ UMDNS 13449/ 22768

Saw Bone,Manual

Surgical saws designed to cut hard tissue during surgical (e.g., orthopedic, microsurgery) procedures. These saws are typically handheld, manual instruments with a metal structure including a hinged back, a handle, and a solid, sturdy serrated blade. Manual bone surgical saws are used mainly in orthopedic procedures.

Abbreviation saw-m

Other

23900 เครื่องตัดเฟือง UMDNS 10655

Cast Cutters

A device used to cut through cast material to facilitate the removal of the cast, create a bivalve (hinged) cast, or open a window in the cast to view underlying tissue. [GMDN = **Cast cutter, (specify) = 10655**]

Abbreviation castcut

23901 เตียงเข้าเฟือง UMDNS 13962

Cast Fracture Table

Adjustable examination/treatment tables that include a base, pedestal, and upper-body support (e.g., tabletop or sacral rest padding), a perineal post, an apparatus for lower-body support (e.g., abductor bars), and any number of orthopedic accessories. These tables and their individual segments are raised and lowered by mechanical or hydraulic systems using manual or electric controls. Orthopedic tables provide an elevated surface for supporting the patient's body and a specific apparatus for supporting and/or providing traction for the patient's limbs during upper- and lower-extremity orthopedic procedures. Orthopedic tables may include traction devices and accommodate C-arm radiographic/fluoroscopic studies. **Related Terms :** Tables, Examination/Treatment, Adjustable, Orthopedic, Traction [13-967] Tables, Operating, Spinal [18-376]

Abbreviation castab

23902 เครื่องมือยึดกระดูกภายนอก UMDNS 16044

External Fixator

Systems of devices/components that are designed for external application for the purpose of stabilizing, holding and/or fastening (i.e., fixation) bones. External orthopedic fixation systems are used mainly for temporary stabilization of fractured and/or otherwise weakened bones during the healing process. **Related Terms:** Orthopedic External Fixation Systems, Fracture [15-767] Orthopedic External Fixation Systems, Other [16-059] Orthopedic External Fixation Systems, Spinal [16-046]

Abbreviation extfix

23903 เครื่องมือยึดกระดูกภายใน UMDNS 16027

Internal Fixator

Groups of orthopedic devices, including a case, trays, a number of implants, and the appropriate instrumentation, that are used to correct or reconstruct serious bone fractures and spinal injuries or defects that cannot be stabilized by casting or splinting. They can also be used for bone lengthening. The systems, consisting of any combination of metal plates, screws, pins, wires, rods, and nails, are used to support and compress the fractured bone and prevent it from bending or rotating. **Related Terms:** Orthopedic Internal

Fixation Systems, Fracture [12-833] Orthopedic Internal Fixation Systems, Other [16-031] Orthopedic Internal Fixation Systems, Spinal [15-766]

Abbreviation intfix

23904 Bone Clamp UMDNS 10866

Bone Clamps

Surgical clamps designed to hold, grasp, and/or manipulate bones. These clamps typically are handheld, manual instruments with two strong blunt curved distal jaws that may be either fixed or adjustable in size; some devices resemble heavy forceps. Bone clamps are mainly used in orthopedic procedures.

Abbreviation boncla

23905 ช้อนขูดกระดูก UMDNS 11084

Curett, bone

Instruments designed with a spoon-like working end intended for mechanical scraping and/or removal of tissue from the wall of an anatomic cavity or surface. These devices are typically manual, handheld, or endoscopic instruments with a solid or fenestrated (e.g., a ring, loop) working end that resembles a spoon with blunt or sharp edges, a shaft, and a handle at the other end; some curettes are used through the working channel of an endoscope. Curettes are typically used to remove tissue, either for use as a laboratory sample (biopsy) or during dental and/or surgical procedures. **Related Terms:** Curettes, Biopsy [21-307] Curettes, Biopsy, Bronchus, Endoscopic [21-308] Curettes, Biopsy, Bronchus, Endoscopic, Flexible [21-310] Curettes, Biopsy, Bronchus, Endoscopic, Rigid [21-311] Curettes, Biopsy, Nasal [21-312] Curettes, Biopsy, Uterine, Endometrium [21-314] Curettes, Biopsy, Uterine, Endometrium, Cervical Canal [21-317] Curettes, Biopsy/Surgical, Uterine, Suction [21-318] Curettes, Dental [21-321] Curettes, Dental, Periodontal [21-322] Curettes, Dental, Periodontal, Operative [21-323] Curettes, Dental, Periodontal, Scaling [21-324] Curettes, Dental, Periodontal, Scaling, Parallel Cutting Edges [21-325] Curettes, Dental, Periodontal, Scaling, Curettes, Dental/Oral Surgery [21-327] Curettes, Surgical [21-319] Curettes, Surgical, Bone [21-330] Curettes, Surgical, Bone, Microsurgery [21-331] Curettes, Surgical, Bone, Spinal [21-332] Curettes, Surgical, Bone, Spinal, Disc [21-333] Curettes, Surgical, Ear [21-335] Curettes, Surgical, Eye [21-338]

Abbreviation boncur

23906 โลหะเส้นลวดค้ำกระดูก UMDNS 16104

Circlage Wires

Wire Crimpers, Surgical, Orthopedic [21-892] : Surgical wire crimpers designed for bending or tightening metallic wires to bones during orthopedic procedures. These crimpers are typically a forceps-like handheld instrument with appropriate size and conformed jaws to manipulate wires; they frequently include attached pins protruding from the jaws to roll the wire. Orthopedic surgery wire crimpers are used mainly in

procedures intended to fix bones in open fractures of long bones; they are also used as an aid in orthopedic cerclage procedures.

Abbreviation cirwir

23907 Corset(ไม่มีภาษาไทย) UMDNS 11024

Corsets

Orthopedic devices that encircle and support a part, as worn in certain spinal injuries or deformities.

Abbreviation corset

23908 Cutters, Bone UMDNS 10455

Cutters, Bone

Cutters designed to penetrate with a sharp edge or to separate in two parts bones. These devices typically consist of a manual, non-powered, metallic instrument with one or more sharp edges; some bone cutters include two-cutting blades and two short handles working on a pivot resembling forceps or cutting pliers. Bone cutters are mainly used in orthopedic surgical procedures and in oral surgery. **Related Terms:** Blades, Bone Cutting [10-456] Forceps, Bone [15-670] G135Routers, Bone Cutting [13-425] Saws, Postmortem [15-174] Saws, Surgical [22-758] Trephines, Surgical, Bone Harvesting [22-671]

Abbreviation cutter

23909 เครื่องมือยึดกระดูกเพื่อจัดกระดูกให้เข้าที่ UMDNS 11291

Distractors Set

Devices designed to separate the surfaces of a joint without displacement and/or rupture of the ligaments (i.e., distraction) during surgical procedures. These devices are typically a mechanism that may include clamps, screws, levers, and a platform; the mechanism is frequently attached to the operating table. Distractors are intended mainly to permit manipulation and locking of an articulation in several positions while maintaining distraction, improving visualization of articulated spaces, and providing greater distance between distracted surfaces, thus facilitating operative procedures in the joints; they may also provide stable traction for reduction and fixation of joint and other small fractures. Dedicated distractors intended for use in the hand, wrist, shoulder, knee, spine, and hip articulations are available.

Abbreviation distra

23910 ชุดเครื่องมือเข้าเฟือกขากรรไกร UMDNS 15801

Intra Maxillary Fixation Close Reduction Set

A device used in fracture fixation of bones and also to attach soft tissue to bone tissue. It may also be used to augment and support bone tissue including instances when a fracture is likely to take place, i.e. where a pathological condition exists. The device may also be used to attach another device to bone, e.g. during

ligament repair or in spinal surgery. Such devices may be : bone plates, nails, rods, bands, screws, nuts, bolts or staples.[GMDN = **Fixation device, internal, screw = 16101**]

Abbreviation maxfix

23911 ชุดส่วตอกกระดูก **UMDNS 12845**

Osteotomy Set

Osteotomes designed to cut and/or shape bone during orthopedic procedures. These osteotomes are typically heavy, strong, handheld chisel-like instruments with a sharp distal end (either straight or curved) that is often beveled on both sides. Dedicated osteotomes with appropriate shapes are available for specific orthopedic procedures, including prosthetic procedures involving femoral and tibial cutting.

Abbreviation ostset

23912 เพลทตามกระดูก ดีซีพี **UMDNS 13050**

DCP Plate

Implantable metal bars with perforations for the insertion of screws, which are attached to bone fragments to bridge the fracture gap and shield the fracture site from stress as the bone heals.

Abbreviation pladcp

23913 กล้องส่องตรวจภายในข้อ **UMDNS 10198**

Fiberoptic Arthroscope

Endoscopes designed for percutaneous insertion into a joint (e.g., wrist, elbow, knee) for visual examination, biopsy, and treatment of lesions of the articulation, especially during surgical procedures. Arthroscopes usually consist of a rigid outer sheath, a lighting system, and a working channel for catheters and operative devices. Most arthroscopes include a television camera on the distal tip, typically in the form of a microchip (a charge-coupled device [CCD]). The image is electronically transmitted through wires in the endoscope for external processing, display, and recording of video images.

Abbreviation scoart

23914 เปลหามแบบตักซ้อนสำหรับเคลื่อนย้ายผู้ป่วย **UMDNS 15793**

Scoop Stretcher

A device designed for transporting the patient from an emergency site which is not readily accessible for standard ambulance stretchers. This can be, e.g. mountain or marine rescue, or difficult indoor situation, e.g. narrow corridors or extremely steep stairways. It is designed to be lightweight, simple in operation and easily transported, e.g. ideally by one or two persons. The patient is often strapped to the stretcher to keep them secure during vertical or helicopter lifts. [GMDN = **Stretcher, portable = 13818**]

Abbreviation scostr

- 23915 สกรูตามกระดูก UMDNS 11346
 Screw Set,Driver/Extractors,Bone
 Surgical driver/extractors designed to insert and extract nails and/or pins into or from bones by applying linear force or torque during orthopedic procedures. Instruments applying linear force are typically manual, handheld instruments with a working end that accommodates nails and pins (e.g., a hollow adjustable cylinder), a handle for manipulation, and possibly a sliding sleeve between the tip and the handle for hitting (hammering) the working end; instruments intended to apply torque usually include a threaded working end (either male or female), a rotating shaft, and a concentric, T-shaped, or otherwise configured handle appropriate to apply manual torque. Bone nail and pin driver/extractors are used mainly in orthopedic procedures (e.g., femur, hip prostheses implantation); dedicated instruments are available for specific nails and pins used in specialized prostheses (e.g., medullary nails).
Abbreviation scrset
- 23916 ชุดคามหลังและเคลื่อนย้ายผู้ป่วย UMDNS 13673
 Spinal Board
 ไม่มี Definition
Abbreviation spiboa
- 23917 ชุดเฝือกหลังและคอ UMDNS 12093
 Spinal Immobilizer
Restraints [13-346] : Devices designed to restrict and/or control a person's movement to the extent that is necessary for treatment, examination, or protection of the person or others. Examples of such devices include, but are not limited to a wristlet, anklet, vest, mitt, straight jacket, body/limb holder, etc.
Abbreviation spiimm
- 23918 ชุดเฝือกเทียมใช้ลมดูดออก UMDNS 13689
 Splint Set-Vacuum Type
 ไม่มี Definition
Abbreviation splvac
- 23919 หัวขูดหินปูนไฟฟ้า UMDNS 13454
 Scaler Tip
 A dental instrument used to remove calculus and other deposits from tooth surfaces during dental cleaning and periodontal therapy. [GMDN = Scaler, periodontic, (specify) = 40534]
Abbreviation tipsca

- 23920 เตียงสำหรับการรักษาด้วยการดึง UMDNS 13967
 Auto Traction Bed
 Orthopedic tables designed to perform traction procedures (e.g., lumbar, cervical). These tables usually include interchangeable accessories, typically head halters, pelvis belts, and traction boots.
Abbreviation traped
- 23921 โครงเหล็กใช้สำหรับการรักษาพยาบาล UMDNS 15582
 Ward Frame
 Adjustable frames that are usually attached to the patient's bed for management of various orthopedic conditions. These frames typically consist of a steel tubing frame that includes brackets and/or pulleys; they include a post for each the headboard and footboard and an adjustable length top bar or rail with a hanging trapeze. Traction frames are designed for use in combination with weights and/or other attachments to produce the desired traction in patients while permitting some freedom of motion; they are used for treatment of patients with fractures and in some other orthopedic diseases (e.g. spine, hip, cervical). Some traction frames designed for particular treatment (e.g. e.g. cervical or pelvic traction) are only attached to the footboard or headboard.
Abbreviation warfra
- 23922 เครื่องมือตัดลวดทางศัลยกรรมกระดูก UMDNS 13041
 Wire Cutter
 A scissors-like surgical instrument with jaws which are specifically designed to cut wires, pins or cerclages. [GMDN = Wire cutter = 32885]
Abbreviation wircut
- 23923 เครื่องมือสำหรับใส่ซีเมนต์ และเอาซีเมนต์ออก UMDNS 12830
 Cement Set
 Acrylic cement made from methylmethacrylate, polymethylmethacrylate (PMMA), esters of methacrylic acid, or copolymers containing PMMA and polystyrene (PMMA). It is used in arthroplastic procedures of the joints for the fixation of polymer or metallic prosthetic implants to the living bone, as well as for fracture fixation. **Related Terms:** Restrictors, Orthopedic Cement [16-126]
Abbreviation cemset
- 23924 โครงเหล็กที่วางขาสำหรับคนไข้กระดูกหัก UMDNS 13684
 Bohler Braun Splint
 Splints made of aluminum that are pre-shaped.
Abbreviation bohbra

กลุ่มที่ 24 Otolaryngology

24000 ชุดกล้องตรวจไซนัส UMDNS 12710

Sinuscope Set

Respiratory tract endoscopes designed for direct insertion and visual examination of the nasal cavity. Nasoscopes usually include a lighting system (e.g., fiberoptic) and are capable of seeing pictures from the tip of the device. **Related Terms:** Endoscopes, Respiratory Tract [20-476] Nasopharyngoscopes [12-709] Specula, Nasal [13-664]

Abbreviation scosin

24001 เครื่องมือผ่าตัดต่อมทอนซิล UMDNS 14070

Tonsillectomy Set

A manual surgical instrument used to cut off tonsils. Tonsillectomes are designed as either a flexible loop for grasping and holding the tonsil or metal frame which holds and guides a sliding knife blade. The loop form holds the tonsil so it may be cut off with manual knife. The frame form has any of several designs of manual cranks that operate the sliding knife blade which cut off the tonsil. **[GMDN = Tonsillectomes = 14070]**

Abbreviation setton

24002 ชุดเจาะคอ UMDNS 14099

Tracheostomy Set

A packaged collection of surgical instruments and other items used to create an opening in the trachea and the insertion of a tube to relieve upper airway obstruction and to facilitate ventilation. This is the surgical creation of an artificial airway in the trachea (windpipe) on the anterior surface of the neck. **[GMDN = Tracheotomy kit = 14099]**

Abbreviation settra

24003 เครื่องมือตรวจและรักษาโรคทาง หู คอ จมูกชนิด ตู้SMR UMDNS 11585

ENT Treatment Cabinet,SMR

Devices intended to support the patient during an ear/nose/throat examination or treatment. These units provide specialized features for examination and/or treatment. They typically incorporate the table and/or chair as part of the system.

Abbreviation smr

24004 เครื่องมือตรวจและรักษาโรค หู คอ จมูก พร้อมกล้องไฟเบอร์ออปติก UMDNS 11585
ENT Examination Set with Fiberoptic

Devices intended to support the patient during an ear/nose/throat examination or treatment. These units provide specialized features for examination and/or treatment. They typically incorporate the table and/or chair as part of the system.

Abbreviation entexa

24005 กล้องส่องตรวจกล่องเสียงแบบไฟเบอร์ออปติก UMDNS 15075
Fiberoptic Laryngoscope

Laryngoscopes with a nonrigid (i.e., flexible) structure, capable of bending to follow the curved passage of the airway when the patient cannot be manipulated for direct visualization. Flexible laryngoscopes usually include a fiberoptic illumination and imaging system that facilitates the examination and performance of therapeutic procedures. **Related Terms:** Laryngoscopes, Flexible, Lower Larynx/Glottis [23-533] Laryngoscopes, Flexible, Video [23-531] Laryngoscopes, Flexible, Lower Larynx/Glottis [23-533] Laryngoscopes, Flexible, Video [23-531]

Abbreviation scolar

24100 ชุดตรวจการทำงานของเส้นเสียง UMDNS 12294
Stroboscope Set

Laryngoscopes designed to observe the glottic action during phonations by focusing a stroboscopic light through a lens. Laryngostroboscopes usually include a constant and/or flashing light source, a camera, and a microphone; they are typically attached to a recording system and printer. These devices provide a slow-motion view of the vocal folds (i.e., true vocal cords) as they vibrate, permitting the assessment of phonatory function; detect lesions; and follow the course of treatment for the patient. Laryngostroboscopes are mostly used for larynx and vocal cord examination during phonation studies in voice-diagnosing laboratories. **Related Terms:** Endoscopes, Respiratory Tract [20-476] Laryngoscopes [12-293]

Abbreviation strscsco

24101 ชุดดูดเสมหะใช้กับระบบไปป์ไลน์ UMDNS 10219
Secretion Suction Unit,Wall

Aspirators used to evacuate mucus or other foreign materials from the throat (trachea and bronchial tubes) by means of suction during surgery and bedside treatment.

Abbreviation sucqip-s

24102 เครื่องวิเคราะห์เสียงด้วยภาพ และแก้ไขการพูดผิดปกติ **UMDNS 17229**

Speech and Voice Analyzer

เครื่องวิเคราะห์การพูด

Abbreviation voiana

24200 Aspirators, Nasal **UMDNS 10216**

Aspirators, Nasal

Aspirators [10-208] : Devices that are used to evacuate gas, fluid, tissue, or other foreign materials from a body cavity by means of suction. They generally consist of a motorized suction pump (some hospitals have a central vacuum system), rubber tubing, a plastic/glass specimen container, a pressure gauge, a vacuum control adjustment knob, and sometimes, a microbial filter. The pump creates a vacuum in the suction tubing, which is inserted into the cavity for the removal of gases, fluids, or other particles, which are removed and routed to the specimen container. Aspirators may also consist only of a simple rubber bulb and pipette that is inserted into the cavity and manually squeezed to remove the fluid, gas, or other material. Typically, these devices are used by surgeons, assisting surgeons, or nurses during surgery, but they may also be used at the bedside, in the home, in long-term nursing home facilities, and during emergency medical response.

Abbreviation aspnas

24201 เครื่องตรวจการได้ยิน **UMDNS 10228**

Audiometer

Instruments designed to measure and characterize hearing loss by determining the lowest audible level (i.e., hearing threshold) of a patient for pure test tones, signals (e.g., speech), or both. These devices include tone generators, amplifiers, and sound-level monitors. Audiometers are intended for conducting diagnostic tests for hearing disorders and assisting in other otologic disorders diagnosis.

Abbreviation audmet

24202 เครื่องวัด evoke potential **UMDNS 16303**

Evoke Potential Units

Evoked potential graphic recorders that record a potential that originates in the auditory pathway of the brain in response to acoustic stimuli (e.g., clicks delivered through an earphone). These potentials are usually recorded from an electrode placed on the scalp at the vertex, with a reference electrode on the earlobe.

The resultant waveform may be used to assess the function of the auditory pathways and to differentiate coma due to metabolic factors from structural damage.

Abbreviation 16303

24203 เครื่องวิเคราะห์และใส่เครื่องช่วยฟัง UMDNS 15633
Hearing Aid Analyzer

Testers designed to assess the characteristics of hearing aids; they can usually measure, evaluate, display, and/or record hearing-aid characteristics, such as insertion gain, sound pressure level, frequency response, and harmonic distortion either as graphs or as numbers. Many testers use composite signals instead of pure frequency tones for testing, thus improving testing of nonlinear hearing aids and making detection of intermodulation distortion easier. These testers typically include signal generators, audio transducers (e.g., microphones, loudspeakers), a display, and computing and recording capabilities. Hearing-aid testers are used to fit and periodically test analog, digital, and/or programmable hearing aids; most testers include capabilities for both test chamber and real ear measurements. **Related Terms:** Hearing Aids [11-967]

Abbreviation heaana

24204 เครื่องมือใช้ในการใส่ท่อหายใจ UMDNS 12293
Laryngoscopes

Respiratory tract endoscopes designed for direct insertion through the mouth into the air tract for visual examination, biopsy, and treatment of lesions of the larynx; they are also used for intubation of the trachea. Laryngoscopes are available either as rigid or flexible devices. **Related Terms :** Endoscopes, Respiratory Tract [20-476] Laryngoscope Handles [24-022] Laryngostroboscopes [12-294]

Abbreviation larsco

24205 เครื่องตรวจการทำงานของหูชั้นกลาง UMDNS 15634
Middle Ear Diagnosis Set

Physiologic analyzers that measure and evaluate some physical aspects of the ear's conductive apparatus, especially the detection of middle-ear fluid. These analyzers are used as adjuncts to visual (or pneumatic) otoscopy in diagnosing and managing middle ear disease, particularly in children, including obstructions and otitis media effusions; they are also used to evaluate stiffness or flaccidity of the tympanic membrane. **Related Terms:** Analyzers, Physiologic, Middle Ear, Acoustic Reflectometry [18-784]

Abbreviation middia

24206 เครื่องถ่างปาก UMDNS 11822

Mouth Gag

Devices used for holding the jaws open during oral or dental surgical intervention.

Abbreviation mougag

24207 เครื่องถ่างจมูก UMDNS 13664

Nasal Speculum

Specula designed for expanding the nasal cavity. These instruments typically consist of a mechanical instrument that includes two pivoted arms. The portions closer to the pivot point are usually the handle, while the distal portions are inserted in the nasal cavity. Nasal specula are used for examination and treatment of the inner surface of the nasal cavity. They are usually stainless steel instruments available in many different sizes and shapes (e.g., bi-valve nasal specula); some include a lighting system.

Abbreviation nasspe

24208 เครื่องวัดความดันทานและการไหลเวียนอากาศผ่านทางเดินหายใจส่วนบน UMDNS 15737

Rhinomanometers

Manometer Sets, Venous, Central/Peripheral [10-776] : Devices designed for measuring and recording the central or peripheral venous pressure, or the difference between central and peripheral venous pressure, by means of an indwelling catheter and a pressure manometer.

Abbreviation rhimet

24209 เครื่องดูดเสมหะ UMDNS 10219

Secretion Suction

Aspirators used to evacuate mucus or other foreign materials from the throat (trachea and bronchial tubes) by means of suction during surgery and bedside treatment.

Abbreviation sectio

กลุ่มที่ 25 Pathology

25000 เข็มตัดชิ้นเนื้อต่อมลูกหมากระบบอัตโนมัติ UMDNS 17848

Prostate Biopsy Gun

Biopsy instruments designed for the automatic extraction of core tissue samples (typically in the form of a cylinder) from an anatomic structure with minimal damage to the sample and surrounding tissue. Biopsy guns are typically handheld, manual instruments with a spring-loaded mechanism for transcutaneous insertion of a biopsy needle to obtain tissue samples intended for laboratory examination and/or test (i.e. biopsy). Biopsy guns are used mainly to obtain large samples of soft tissue from internal organs, including the kidneys, prostate,

pancreas, and liver, and the breast. The procedures are frequently performed under image guidance (e.g., radiographic, ultrasonic, magnetic resonance). **Related Terms:** Needles, Biopsy [12-734]

Abbreviation biogun

25001 เครื่องละลายแคลเซียมในกระดูก UMDNS 17118

Bone Decalcifiers

An agent used on hard tissue/cell specimens, e.g. bone, cartilage to protect cellular structure for microscopic examination. [GMDN = Decalcifying reagent = 35963]

Abbreviation bondec

25002 เครื่องมือผ่าชำแหละ UMDNS 11290

Dissectors

A hand-held surgical instrument, usually spoon shaped or rounded at the working end made of stainless steel, used to separate a soft tissue or body structure from another. It comes in various shapes and sizes but usually has a handle proximally which continues into a shaft as one moves distally. The shaft terminates in a tip which may be pointed or flat, sharp or blunt and angled or straight from the shaft. [GMDN = Dissector = 11290]

Abbreviation dissec

25003 ตู้เย็นเก็บศพ UMDNS 13316

Mortuary End Opening Refrigerator Unit

Refrigerators designed to slow decomposition of stored cadavers in the morgue either during autopsy procedures or until the cadaver is disposed of; the refrigerator usually operates at temperatures between 4 and 10 degrees Celsius (39 and 50 degrees Fahrenheit). These refrigerators typically consist of one or more chambers made with corrosion-resistant (typically stainless steel) interiors, minimizing the risk of adulteration, contamination, and/or corrosion of contents; an internal configuration appropriate for storage and easy manipulation of cadavers; a compressor, condenser, evaporator, tubing, controls, and alarms for dependable long-term storage according to morgue procedures. Morgue refrigerators are available in end-opening, side-opening, and walk-in configurations for a single cadaver or, more frequently, for two or more cadavers. **Related Terms:** Refrigerators, Morgue, End-Opening [22-022] Refrigerators, Morgue, Side-Opening [22-026] Refrigerators, Morgue, Walk-In [22-027]

Abbreviation refaut

25004 เดีงผ่าตัดชันสูตรศพ UMDNS 13953

Downdraft Ventilation Autopsy Tables

Tables with an appropriate (e.g., stainless steel) top surface that is smooth and polished, with no crevices, screws, or rivets, and that has raised rims, rounded corners, and a flat surface that slopes toward a

table or sink drain. These tables are designed to provide a working surface for postmortem examination/autopsy procedures, to collect and drain fluids discharged from the cadaver, to facilitate table cleaning and decontamination, and to prevent the accumulation of microorganisms.

Abbreviation tabaut

กลุ่มที่ 26 Pediatrics

26000 ตู้อบเด็กแบบเคลื่อนย้ายได้

UMDNS 12114

Transport Infant Incubator

Incubators used to transport infants outside or within the medical facility. These incubators provide a close and controlled environment by circulating heated air for the purpose of maintaining appropriate temperature and humidity levels for premature infants. These units are typically mounted on casters, which may be equipped with brakes. **Related Terms:** Warming Units, Patient, Radiant, Infant, Mobile [17-433]

Abbreviation inctra

26001 ตู้อบเด็กแรกเกิด

UMDNS 12113

Infant Incubator

Incubators designed to provide a closed controlled environment to maintain appropriate temperature and humidity levels for infants. These incubators typically consist of a clear removable plastic hood with a mattress; they also include some means to warm the infant, providing heated air (either by natural flow or forced) or through a warm water mattress. The incubators usually include temperature controls that work automatically either by measuring the air temperature or through a temperature sensor attached to the infant skin. Most incubators also include humidity controls. Infant incubators are used mainly for premature infants and in other newborns that cannot regulate the body temperature by themselves. **Related Terms :** Incubators, Infant, Mobile [17-432]
Incubators, Infant, Transport [12-114] Warming Units, Patient, Radiant, Infant [17-956]

Abbreviation infinc

26002 เครื่องให้ความอุ่นแก่ทารกแรกเกิด

UMDNS 18857

Radiant Warmer

Devices that combine the thermal capabilities of mobile infant incubators with the access advantages of infant radiant warming units. These devices provide a centralized control and monitoring system for both the incubator and the warming unit; typically, they can be automatically converted from a closed incubator to an open-bed radiant warming unit and vice versa with little effort in a few seconds. Incubator/radiant warming units are used to maintain a stable environment for infants, avoiding the need for transfer between incubators and radiant warming units. **Related Terms:** Incubators, Infant, Mobile [17-432] Warming Units, Patient, Radiant, Infant, Mobile [17-433]

Abbreviation radwar

กลุ่มที่ 27 Physical Medicine

Electrical Stimulator

27000 เครื่องกระตุ้นกล้ามเนื้อและประสาทด้วยไฟฟ้า UMDNS 18466

Electrical Stimulators

Stimulators that apply electrical stimuli (e.g., direct current, pulses of current) to a nerve, muscle, a discrete area of the central nervous system, or any other tissue. Electrical stimulators basically consist of an energy source (implantable or external) in electrical contact with target tissue via conductive lead wires, a controller or interrupter to prevent excessive energies from damaging the tissues, and an enclosure to prevent the biological environment from damaging the stimulator and vice versa. Related Terms: Stimulators, Electrical, Auditory [18-483] Stimulators, Electrical, Auditory, Cochlear [16-035] Stimulators, Electrical, Behavioral Therapy [10-369] Stimulators, Electrical, Bone Growth [15-087] Stimulators, Electrical, Bone Growth, External [18-481] Stimulators, Electrical, Bone Growth, Implantable [18-482] Stimulators, Electrical, Brain [18-467] Stimulators, Electrical, Brain, Analgesic [16-061] Stimulators, Electrical, Brain, Anesthesia [11-485] Stimulators, Electrical, Brain, Antiseizure [17-913] Stimulators, Electrical, Brain, Convulsive Therapy [11-484]

Abbreviation elesti

27001 เครื่องตรวจไฟฟ้ากล้ามเนื้อลาย UMDNS 18476

EMG Activated E.S

Neuromuscular electrical stimulators that include dedicated surface electrode garments for easy setup and connection. These stimulators are used to exercise and strengthen muscles weakened by inactivity. Muscle strengthening stimulators may help increase muscle mass, but will not improve voluntary control to paralyzed muscle.

Abbreviation EMG

27002 เครื่องตรวจไฟฟ้ากล้ามเนื้อลาย UMDNS 18476

Muscle Stimulators

Neuromuscular electrical stimulators that include dedicated surface electrode garments for easy setup and connection. These stimulators are used to exercise and strengthen muscles weakened by inactivity. Muscle strengthening stimulators may help increase muscle mass, but will not improve voluntary control to paralyzed muscle.

Abbreviation mussti

27003 เครื่องกระตุ้นเส้นประสาท

UMDNS 13775

Nerve Stimulator

Electrical stimulators designed to cause controlled muscular contractions. Neuromuscular stimulators usually apply stimuli near or directly to the nerves that control muscle activity. Related Terms: Electrodes, Neuromuscular Stimulator [11-454] Stimulators, Electrical, Neuromuscular, Bladder/Bowel Evacuation [16-029] Stimulators, Electrical, Neuromuscular, Diagnostic [16-263] Stimulators, Electrical, Neuromuscular, Dysphagia [23-916] Stimulators, Electrical, Neuromuscular, Ejaculation [17-912] Stimulators, Electrical, Neuromuscular, Gait [18-477] Stimulators, Electrical, Neuromuscular, Gait, External [18-479] Stimulators, Electrical, Neuromuscular, Gait, Implantable [18-478] Stimulators, Electrical, Neuromuscular, Grasp [18-475] Stimulators, Electrical, Neuromuscular, Incontinence [18-480] Stimulators, Electrical, Neuromuscular, Incontinence, Implantable [17-784] Stimulators, Electrical, Neuromuscular, Incontinence, Nonimplantable [17-505] Stimulators, Electrical, Neuromuscular, Muscle Strengthening [18-476] Stimulators, Electrical, Neuromuscular, Scoliosis [17-240]

Abbreviation nersti

27004 เครื่องระงับความเจ็บปวดด้วยกระแสไฟฟ้า

UMDNS 13782

Transcutaneous Nerve Stimulator Unit

Analgesic peripheral-nerve electrical stimulators that consist of external stimulators and electrodes that are placed on the skin in such a way that the body is not penetrated at any time, so the electrical stimulus is applied through the skin (transcutaneously) to the painful area. These stimulators typically include several predetermined stimulation modulation options (e.g., pulse frequency, pulse duration). Most of these stimulators are portable, battery-powered units commonly worn on a belt or carried in a pocket. These analgesic stimulators (also known as transcutaneous electric nerve stimulators [TENS]) are used to treat pain associated with surgery, trauma, musculoskeletal problems, bursitis, and dental problems and procedures; they are also used in physical therapy and during labor and delivery.

Abbreviation tens

27100 ถังน้ำอุ่นวนแช่แขน ขา

UMDNS 14450

Whirlpool Bath (Side Kick)

Baths equipped with a mechanism to produce water jets for the purpose of therapeutic massaging effect.

Abbreviation whipoo

- 27101 เก้าอี้สำหรับการรักษาทางกายภาพบำบัด UMDNS 10801
 Wooden Treatment
 Chairs designed to help patients assume a posture that assists in their rehabilitation and mobilization. These chairs typically have special characteristics (e.g., headrest, height adjustment, back and arm positioning, footrests, safety belts) that facilitate rapid patient positioning in the appropriate posture; the chairs may be mechanically or electrically adjustable. Some chairs also permit limited indoor transportation. Rehabilitation chairs are widely used in acute care settings as well as for short-term and long-term rehabilitation; they are intended for patients with a variety of chronic diseases. Dedicated chairs for cardiac and/or pulmonary rehabilitation are also available. **Related Terms:** Chairs, Disabled Patient [18-406] Chairs, Rehabilitation, Cardiac [10-790] Chairs, Rehabilitation, Pulmonary [18-405] Wheelchairs [14-449]
Abbreviation wootre
- 27102 อุปกรณ์บริหารมือและแขน แบบโรตารี UMDNS 15326
 Rotary Wrist-Hand Exercise Unit
 Exercisers that provide resistance to train, strengthen, or rehabilitate the muscles, joints, tendons, and ligaments of the wrist.
Abbreviation wriexe
- Traction**
- 27300 ชุดดึงกระดูกต้นคอ UMDNS 11958
 Head Halter Traction Set
 Devices designed to provide traction to the cervical vertebrae by pulling the head using force from an external traction unit. These devices typically combine several padded straps in a lightweight structure; usually one of the straps is placed under the chin, a second strap is placed on the back of the head, and a third strap is placed around the neck, attaching the two other straps. A head halter includes one or more rings at the top that permit its connection to the cable of an external traction unit that usually includes a pulley and a set of weights. Head halters intended for horizontal and/or vertical (frequently including spreading bars) traction are available; they are used in orthopedic and/or physical therapy procedures, including fracture treatment and widening of the intervertebral spaces in the spine. **Related Terms:** Slings [13-621]
Abbreviation haltra
- 27301 เครื่องดึงคอ UMDNS 14106
 Traction Unit, Neck
 Traction units designed to apply forces from a motor through harnesses that are typically attached to the cervical or lumbar vertebrae. These devices usually consist of an electrical motor and a control unit used to generate and regulate respectively, the mechanical forces and a cord (e.g., braided nylon) that is clamped to the

harness and transmits the force; adjustable spreader bars attached to the control unit are frequently used to vary the angle at which the cord applies the traction. Many powered units can be operated in several different modes, including short-term continuous (static) mode, intermittent mode in which intermittent action is automatically generated and relieved according to a preset maximum and minimum force and duration; and two more elaborate modes (used in conjunction with intermittent traction), one of which modes applies and relieves force in predetermined steps (i.e., progressive/regressive mode) while the other repeats the progressive/regressive mode in intermittent cycles (i.e., cycled mode). Powered traction units are used mainly to widen the intervertebral spaces, usually for treatment of prolapsed intervertebral disks,

Abbreviation tract-n

27302 เครื่องดึงเอว

UMDNS 14106

Traction Unit,Wrist

Traction units designed to apply forces from a motor through harnesses that are typically attached to the cervical or lumbar vertebrae. These devices usually consist of an electrical motor and a control unit used to generate and regulate respectively, the mechanical forces and a cord (e.g., braided nylon) that is clamped to the harness and transmits the force; adjustable spreader bars attached to the control unit are frequently used to vary the angle at which the cord applies the traction. Many powered units can be operated in several different modes, including short-term continuous (static) mode, intermittent mode in which intermittent action is automatically generated and relieved according to a preset maximum and minimum force and duration; and two more elaborate modes (used in conjunction with intermittent traction), one of which modes applies and relieves force in predetermined steps (i.e., progressive/regressive mode) while the other repeats the progressive/regressive mode in intermittent cycles (i.e., cycled mode). Powered traction units are used mainly to widen the intervertebral spaces, usually for treatment of prolapsed intervertebral disks,

Abbreviation tract-w

27303 เครื่องดึงเอวและและดึงคอ

UMDNS 14106

Traction Unit,Neck And Wrist

ไม่มี Definition

Abbreviation tract-w-n

Wheelchair

27500 รถเข็นผู้ป่วยแบบนั่ง

UMDNS 14449

Wheel Chair

Chairs mounted on large wheels, usually 55 to 66 cm (22 to 26 in), designed for indoor (e.g., hospital, institution, home) or outdoor transportation of patients or individuals with impaired walking ability. **Related**

Terms: Chairs, Disabled Patient [18-406] Chairs, Patient Transfer [16-639] Chairs, Rehabilitation [10-801]

Abbreviation whecha

27501 รถเข็นผู้ป่วยแบบนั่งชนิดควบคุมด้วยไฟฟ้า UMDNS 16214

Electric Wheelchairs

Powered wheelchairs with the capability of climbing curbs and stairs and/or allowing the occupant to operate the wheelchair while lifted in a balanced seated position to the eye level of a standing person. They may have additional capabilities such as displacement on uneven surfaces (e.g., gravel, sand, grass) and operation under remote control when the occupant is not sitting in the wheelchair. These wheelchairs typically consist of a seating structure, including a seat, a backrest, armrests, footrests, and other components and/or accessories; a power system, including a motor, a battery, and brakes; a computerized unit for easy and reliable device operation; and a control unit operated by the occupant. Climbing/lifting powered wheelchairs (as typical for powered wheelchairs) are customized for each patient's needs; they are usually appropriate for both indoor and outdoor use. Related Terms: Scooters, Powered [17-733] Wheelchairs, Powered, Climbing/Lifting [20-691] Wheelchairs, Powered, Disabled Patient [18-410]

Abbreviation whecha-e

27502 เก้าอี้สำหรับใช้ในการฝึกปรับสูงต่ำได้มีล้อ UMDNS 10801

Adjustable Height Chair

Chairs designed to assist permanently disabled persons in performing long-term activities that the person otherwise finds difficult or impossible to do. Chairs for disabled patients are adjustable in height and may be operated either manually or powered (e.g., electrically). Most of these chairs also include other accessories or restraints according to patient's particular disabilities.

Abbreviation rehcha

Other

27900 เครื่องรักษาด้วยคลื่นไมโครเวฟ UMDNS 11245

Microwave Diathermy

Microwave therapy systems designed to warm localized body tissues one to two centimeters below the skin due to tissue resistance to the pass of high-frequency electromagnetic radiation. These systems typically include a magnetron oscillator (frequency of 2.45 GHz is typical) and applicators that act as reflectors to focus the wave onto the desired area. Microwave diathermy systems radiate energy that can be more directly focused than radio-frequency (shortwave) energy; they are particularly useful in heating high-water-content tissues. Most of these systems are used to promote healing and pain relief (e.g., to treat muscle spasms and joint contractures) and in the treatment of neurological problems (e.g., sciatica).

Abbreviation micdia

- 27901 เครื่องรักษาด้วยความร้อนลึกโดยใช้คลื่นซ็อตเวฟพร้อมอุปกรณ์ **UMDNS 16362**
Shortwave Diathermy Unit
Radio-frequency (RF) therapy systems designed to warm localized body tissues using their resistance to the passage of high-frequency electromagnetic radiation. These systems include a RF generator in the range of 10 to 100 MHz (typically 27.12 MHz), a power amplifier, and applicators to deliver the energy to the patient. Diathermy RF systems are particularly useful in heating high-water-content tissues. They are used to promote healing and pain relief (e.g., to treat muscle spasms or joint contractures) and for treatment of neurological problems (e.g., sciatica). **Related Terms** : Power Meters, Radiofrequency, Shortwave Diathermy Unit [16-362]
Abbreviation shodia
- 27902 เติงฝึกยืน **UMDNS 13964**
Tilt Table
Adjustable examination/treatment tables that are height and position adjustable, including vertical tilting from supine to upright, and that incorporate foot supports and may attach exercisers (e.g., pulleys, rotators) and other accessories (e.g., cervical bars, arm slings). These tables are designed for treatment of diseases using therapeutic exercises and massage, to enhance blood circulation to the lower limbs in patients with neurological disorders (e.g., spinal cord injury), and to aid in muscle training and sense of balance.
Abbreviation tiltab
- 27903 เครื่องบริหารมือ ข้อมือ และ นิ้วมือชนิดทำงานต่อเนื่อง **UMDNS 17137**
Hand And Wrist CPM Machine
Exercisers that repeatedly flex and extend a hand or the hands of a patient, without muscular exertion, to lessen the adverse effects of joint immobilization or trauma.
Abbreviation hancpm
- 27904 เครื่องบริหารข้อเข่า ข้อเท้า และข้อ สะโพกชนิดทำงานต่อเนื่อง **UMDNS 11630**
Knee CPM Machine
Exercisers designed to provide variable resistance to movement of the lower extremities in order to maintain, develop, or restore leg and ankle muscle strength and endurance. Also used to increase venous circulation in the legs in order to prevent pulmonary thromboembolism formation in inactive patients. Exercisers designed to provide variable resistance to movement of the lower extremities in order to maintain, develop, or restore leg and ankle muscle strength and endurance. Also used to increase venous circulation in the legs in order to prevent pulmonary thromboembolism formation in inactive patients.
Abbreviation knecpm

- 27905 รอกคู่เหนือศีรษะสำหรับบริหารไหล่และแขน UMDNS 11636
 Overhead Pulley Weights
 Exercisers designed to provide variable resistance to the movement of the shoulders in order to maintain, develop, or restore shoulder muscle strength and endurance.
Abbreviation opepul
- 27906 บาร์สำหรับพยางค์วันนั่ง ดัดหัวเตียง UMDNS 11638
 Overhead Trapeze
 Devices designed to develop fitness. Areas benefiting from trapeze exercisers include the cardiovascular/cardiopulmonary systems, limbs, muscles, tendons, ligaments, and joints.
Abbreviation ovetra
- 27907 เครื่องวิเคราะห์ที่ส่วนประกอบของร่างกาย UMDNS 17417
 Body Composition Analyzer
 Physiologic analyzers that assess human body composition. These analyzers may determine body composition based in fat/fat-free two-compartment models (also called fat/lean components) using indirect methods (e.g., densitometry, absorptiometry, electrical conductivity, impedance), or a several-component method (typically four; i.e., water, protein, bone mineral, fat) using direct methods such as neutron-activation analysis. **Related Terms:** Analyzers, Physiologic, Body Composition, Hydrostatic Weighing [18-778]
Abbreviation anabod
- 27908 เครื่องลดอาการบวมแขนขา UMDNS 10969
 Intermittent Compression Equipment
 Peripheral circulatory assist units designed for intermittent compression. These units include pneumatic cuffs and/or single-chamber stockings that are inflated and deflated periodically, applying and releasing pressure in the lower limbs. Intermittent peripheral circulatory assist units are used to improve venous blood flow.
Abbreviation comequ
- 27909 ชุดรอกและน้ำหนักบริหารไหล่และแขน แบบดวลเพิล็กซ์ UMDNS 11636
 Duplex Pulley
 Exercisers designed to provide variable resistance to the movement of the shoulders in order to maintain, develop, or restore shoulder muscle strength and endurance. [GMDN = Exercise, shoulder = 11636]
Abbreviation duppul

- 27910 เครื่องวิเคราะห์การก้าวเดิน พร้อมระบบประมวลผล UMDNS 16334
 Gait Analysis
 Neuromuscular function analyzers that measure and evaluate the human walking cycle (gait). To make a complete evaluation of human gait, these analyzers should include measuring instruments capable of determining the movement in space, the forces exerted on the ground, and the muscle function pattern during walking movement. These analyzers are used for gait analysis including dynamic and static body balance and the analysis of joint movement during clinical studies (e.g., cerebral palsy, stroke), posttrauma studies, and monitoring of rehabilitation. **Related Terms:** Electromyographs
 [11-474] Monitors, Telemetric, Physical Activity [17-999]
Abbreviation gaiana
- 27911 โคมไฟอินฟราเรด UMDNS 12278
 Infra – red Lamp
 Lamps used in the physiotherapy department for providing heat treatment to a stiff, painful or inflamed part of the body. Ultraviolet treatment lamps are sometimes wrongly described as heat lamps. Wavelengths delivered are 770 to 12000 nm. Such lamps are also used in the care and treatment of newborns who can be or must be removed from an enclosed incubator for examination and treatment.
Abbreviation infred
- 27912 เครื่องตรวจวัดและฝึกกล้ามเนื้อ และข้อต่อ UMDNS 17681
 Isokinetic Dynamometer
 Exercisers designed to guide, measure, and assess the performance of all major muscle groups in four kinds of muscle activity: passive (movement without exertion), isometric (exertion without movement), isokinetic (variable exertion at a constant rate of movement), and isotonic (constant exertion at a variable rate of movement). These exercisers include an exercise station that provides some form of resistance (e.g., hydraulic, electric, weights) to the muscular force applied for the patient and a computerized unit that controls the sequence and duration of the exercise plan and monitors and assesses the patient's performance and progress. Computerized dynamometric exercisers are used for exercise and physical rehabilitation of weakened or injured muscles and for the assessment of muscle and or joint (e.g., knee, shoulder) performance. **Related Terms:** Dynamometers [15-577] Exercisers, Arm [11-625] Exercisers, Back [17-201] Exercisers, Leg/Ankle [11-630] Exercisers, Shoulder [11-636]
Abbreviation isodyn
- 27913 เครื่องบันทึกการหดตัวของกล้ามเนื้อ UMDNS 12692
 Myographys

Electromyographs [11-474] : Graphic recorders of the intrinsic electrical potential of skeletal muscle. These recorders include an electrode that is usually inserted directly into the muscle, an amplifier that boosts and transmits the bioelectrical potentials to the recorder which in turn reproduces their characteristics in an electromyogram. Some recorders are compatible with personal computers for waveform storage and analysis. A loudspeaker is typically attached so the potentials can be monitored acoustically. Electromyographs are used in the evaluation of abnormalities either when the electrode is at rest within the muscle (spontaneous activity) or during voluntary muscle contraction of graded activity. **Related Terms:** Analyzers, Physiologic, Neuromuscular Function, Gait [16-334] Stimulators, Electrical, Neuromuscular, Diagnostic [16-263]

Abbreviation myogra

27914 ราวคู่ขนาน UMDNS 12957

Parallel Bars

A device used to train muscles or groups of muscles. [GMDN = Exercise, (specify) = 11623]

Abbreviation parbar

27915 Paraffin Bath ไม่มีภาษาไทย UMDNS 12956

Paraffin Bath

Tubs filled with liquid paraffin (wax) and maintained at an elevated temperature in which the patient's appendages (e.g. hands or fingers) are placed to relieve pain and stiffness. Also called wax baths.

Abbreviation parbat

27916 เครื่องรักษาทางกายภาพบำบัดเพื่อการออกกำลังกาย UMDNS 11623

Rehabilitation By Exercise

A device used to train muscles or groups of muscles. [GMDN = Exercise, (specify) = 11623]

Abbreviation rehexe

27917 วงล้อบริหารไหล่ UMDNS 11636

Shoulder Wheel

Exercisers designed to provide variable resistance to the movement of the shoulders in order to maintain, develop, or restore shoulder muscle strength and endurance.

Abbreviation showhe

27918 บันไดสำหรับฝึกผู้ป่วยเดิน UMDNS 11620

Stair Case

ไม่มี Definition

Abbreviation stacas

- 27919 ที่ฝักยืนในการทำกิจกรรม UMDNS 17982
 Standing Frame
 ไม่มี Definition
Abbreviation stafra
- 27920 ถังสำหรับออกกำลังในน้ำอุ่น ชนิดแช่ทั้งตัว UMDNS 13976
 Therapy Tank (Hubbard Tank)
Baths [15-555] : Devices used to influence other objects, media, a human's body or body part in order to transfer the treatment basis for which the bath is intended to the object. Purposes can be, e.g., cleansing, therapeutic, temperature change, chemical reaction, etc. Objects can also be exposed to mechanical influence, e.g., ultrasonic waves, water jets from nozzles for massage, or other forms of reaction. **Baths, Whirlpool [14-450]**: Baths equipped with a mechanism to produce water jets for the purpose of therapeutic massaging effect.
Abbreviation thetan
- 27921 ลู่วิ่งและวิ่งออกกำลังกาย UMDNS 14141
 Treadmills
 Exercisers designed to allow users to walk and/or jog on a moving belt while remaining in one place. These exercisers typically consist of an endless, shock-absorbing, continuous tread (either a platform or rubber strips over rollers); motors, a front-rail-mounted console including a controller to regulate speed and/or elevation; and a display. Most treadmills have front-mounted rails; some devices also include siderails to allow users to steady themselves. The display usually shows treadmill (e.g., speed, elevation) and training (e.g., energy consumption) parameters; some treadmills can also detect and display physiologic parameters (e.g., pulse, breathing rate). Treadmills are used in healthcare facilities, gyms, and at home for exercising, training, and/or rehabilitation; dedicated treadmills intended for cardiac or cardiopulmonary stress exercise and specially designed for use immersed in water are also available.
Abbreviation tremil
- 27922 เครื่องรักษาด้วยคลื่นเหนือเสียง UMDNS 11248
 Ultrasound Therapy Unit
 Ultrasound therapy systems designed to produce and deliver ultrasonic waves that penetrate tissues and produce both thermal and nonthermal (e.g., mechanical and cavitation) effects. These systems consist of a radio-frequency (RF) generator (frequencies from one to three megahertz are typical), a cable that transmits the RF energy to the applicator, and an applicator including a piezoelectric transducer that applies the ultrasonic energy to the patient's tissue through the skin. Physical therapy ultrasound systems are used for pain relief and as an aid in the healing of soft-tissue injuries (e.g., ulcerations; bursitis; muscle, tendon, or joint pain). **Related**

Terms: Stimulators, Electrical, Neuromuscular [13-775] Ultrasound Therapy/Neuromuscular Stimulation Systems, Physical Therapy [17-908]

Abbreviation usther

27923 เครื่องเขย่าปูนปลาสเตอร์ทางทันตกรรม UMDNS 14369

Vibrator

A device designed to provide a vibrating function, the effect of which is used in treatment being applied to the patient. The degree of vibration, oscillation, depends upon the intended purpose. [GMDN =

Vibrator, (specify) = 40497]

Abbreviation vibrat

27924 เครื่องฝึกเดินสี่ขา UMDNS 14393

Walkers

Metal frameworks of four legs designed to aid infirm or disabled patients in walking. They typically are waist-high with bars that frame the front and sides of patients. Walkers can be rigid, wheeled, folding, or adjustable in width or can have seating accessories. **Related Terms:** Walkers, Adjustable Width [17-629] Walkers, Folding [17-628] Walkers, Side [17-631] Walkers, Standard [17-627] Walkers, Wheeled [17-630]

Abbreviation walker

กลุ่มที่ 28 Proctology (ไม่มีข้อมูล)

กลุ่มที่ 29 Pulmonary Medicine

Ventilator

29000 เครื่องช่วยหายใจชนิดควบคุมด้วยแรงดันและเวลาไม่ใช้ท่อหลอดลม UMDNS 15613

Ventilators, Bipap

Devices designed to provide temporary ventilation and/or respiratory assistance by delivering an appropriate volume of gas to the respiratory airways. Most ventilators deliver gas to the lungs using positive pressure by means of a mouthpiece, mask, tracheostomy, or an endotracheal tube, but some of them (e.g., tank ventilators) are based on the application of negative pressure to the body surface or chest wall. Ventilators are used in patients who cannot breathe on their own or who require assistance to maintain adequate ventilation because of illness, trauma, congenital defects, or drugs including anesthetics. **Related Terms:** Respirators [20-358] Resuscitators [13-360] Testers, Ventilator [17-712] Valves, Nonbreathing [14-332] Ventilators, Anesthesia [10-145] Ventilators, Intensive Care [17-429] Ventilators, Intensive Care, Adult [18-792] Ventilators, Intensive Care, Adult, High-Frequency [15-783] Ventilators, Intensive Care, Adult, Negative-Pressure [17-877] Ventilators, Intensive Care, Neonatal/Pediatric [14-361] Ventilators, Intensive Care, Neonatal/Pediatric, High-Frequency [18-793] Ventilators, Intensive Care, Neonatal/Pediatric, Negative-

Pressure [18-794] Ventilators, Noninvasive Positive Pressure [20-746] Ventilators, Portable/Home Care [17-423] Ventilators, Transport [18-098]

Abbreviation venbip

29001 เครื่องช่วยหายใจความถี่สูง UMDNS 15783

High Frequency Ventilator

Adult intensive care ventilators that use positive pressure to deliver breaths at frequencies much higher than the normal breathing rate (usually at 100 or more times per minute) and at a reduced tidal volume. The most common techniques used are conventional high-frequency positive pressure, high-frequency oscillation ventilation, and high-frequency jet ventilation. Conventional positive pressure ventilators typically operate at frequencies up to 150 cycles/minute, while oscillation ventilators operate at frequencies of 400 to 2400 cycles/minute, and jet ventilators operate from 100 to 600 cycles/minute. These ventilators are designed to reduce pressured-induced lung damage (i.e., barotrauma) and the effects of high tidal volume and positive pressure used in conventional ventilation. High-frequency intensive care ventilators are used in patients who cannot tolerate the airway pressures needed for ventilation at typical volumes or when motionless field is required for surgery near the airways; most of them are also capable of ventilation at normal breathing rates.

Abbreviation venhigf

29002 เครื่องช่วยหายใจสำหรับเด็กแรกเกิดและเด็กอ่อน UMDNS 14361

Infant Ventilator

Intensive care ventilators designed for neonatal and/or pediatric respiratory support; most are time-cycled pressure-control devices. These ventilators typically include flexible, small-bore (e.g., 1 cm diameter) tubing and continuous positive airway pressure (CPAP) and/or positive end-expiratory pressure (PEEP) controls. CPAP is useful for infants with restrictive lung disease or decreased lung compliance and alveolar collapse (infants with hyaline membrane disease); PEEP maintains lung volume and prevents alveolar collapse. Neonatal/pediatric intensive care ventilators are used for preterm and critically ill infants with respiratory failure.

Abbreviation veninf

29003 เครื่องช่วยหายใจชนิดควบคุมโดยระบบไมโครโปรเซสเซอร์ UMDNS 15613

Ventilators, Microprocessor

Devices designed to provide temporary ventilation and/or respiratory assistance by delivering an appropriate volume of gas to the respiratory airways. Most ventilators deliver gas to the lungs using positive pressure by means of a mouthpiece, mask, tracheostomy, or an endotracheal tube, but some of them (e.g., tank ventilators) are based on the application of negative pressure to the body surface or chest wall. Ventilators are used in patients who cannot breathe on their own or who require assistance to maintain adequate ventilation because of illness, trauma, congenital defects, or drugs including anesthetics. Related Terms: Respirators [20-

358] Resuscitators [13-360] Testers, Ventilator [17-712] Valves, Nonbreathing [14-332] Ventilators, Anesthesia [10-145] Ventilators, Intensive Care [17-429] Ventilators, Intensive Care, Adult [18-792] Ventilators, Intensive Care, Adult, High-Frequency [15-783] Ventilators, Intensive Care, Adult, Negative-Pressure [17-877] Ventilators, Intensive Care, Neonatal/Pediatric [14-361] Ventilators, Intensive Care, Neonatal/Pediatric, High-Frequency [18-793] Ventilators, Intensive Care, Neonatal/Pediatric, Negative-Pressure [18-794] Ventilators, Noninvasive Positive Pressure [20-746] Ventilators, Portable/Home Care [17-423] Ventilators, Transport [18-098]

Abbreviation venmic

29004 เครื่องช่วยหายใจชนิดเคลื่อนที่ได้ UMDNS 18098

Ventilators, Mobile

Ventilators designed to provide automated ventilatory support to patients during interhospital or intrahospital transport and in emergency situations. The operation and control of these ventilators are intentionally simplified; they are compact, lightweight (i.e., less than 5 kg), rugged devices. Most transport ventilators provide mandatory breaths at preset intervals (control mode), not allowing the patients to breathe spontaneously; operation in assist/control and/or synchronized intermittent mandatory ventilation (SIMV) modes is available in some models. These ventilators usually include an airway pressure monitor and low- and high-pressure alarms. Transport ventilators may be used in vehicles, ambulances, and in field hospitals for medium-term ventilation. **Related Terms:** Ventilators, Portable/Home Care [17-423]

Abbreviation venmob

29005 เครื่องช่วยหายใจสำหรับเด็กโต UMDNS 15613

Pediatric Ventilator

Intensive care ventilators designed for neonatal and/or pediatric respiratory support; most are time-cycled pressure-control devices. These ventilators typically include flexible, small-bore (e.g., 1 cm diameter) tubing and continuous positive airway pressure (CPAP) and/or positive end-expiratory pressure (PEEP) controls. CPAP is useful for infants with restrictive lung disease or decreased lung compliance and alveolar collapse (infants with hyaline membrane disease); PEEP maintains lung volume and prevents alveolar collapse. Neonatal/pediatric intensive care ventilators are used for preterm and critically ill infants with respiratory failure.

Abbreviation venped

29006 เครื่องช่วยหายใจชนิดควบคุมด้วยความดัน UMDNS 15613

Ventilators, Pressure Control

Devices designed to provide temporary ventilation and/or respiratory assistance by delivering an appropriate volume of gas to the respiratory airways. Most ventilators deliver gas to the lungs using positive pressure by means of a mouthpiece, mask, tracheostomy, or an endotracheal tube, but some of them (e.g., tank

ventilators) are based on the application of negative pressure to the body surface or chest wall. Ventilators are used in patients who cannot breathe on their own or who require assistance to maintain adequate ventilation because of illness, trauma, congenital defects, or drugs including anesthetics. Related Terms: Respirators [20-358] Resuscitators [13-360] Testers, Ventilator [17-712] Valves, Nonrebreathing [14-332] Ventilators, Anesthesia [10-145] Ventilators, Intensive Care [17-429] Ventilators, Intensive Care, Adult [18-792] Ventilators, Intensive Care, Adult, High-Frequency [15-783] Ventilators, Intensive Care, Adult, Negative-Pressure [17-877] Ventilators, Intensive Care, Neonatal/Pediatric [14-361] Ventilators, Intensive Care, Neonatal/Pediatric, High-Frequency [18-793] Ventilators, Intensive Care, Neonatal/Pediatric, Negative-Pressure [18-794] Ventilators, Noninvasive Positive Pressure [20-746] Ventilators, Portable/Home Care [17-423] Ventilators, Transport [18-098]

Abbreviation venpre

29007 เครื่องช่วยหายใจ

UMDNS 20358

Ventilators

Devices designed to provide temporary ventilation and/or respiratory assistance by delivering an appropriate volume of gas to the respiratory airways. Most ventilators deliver gas to the lungs using positive pressure by means of a mouthpiece, mask, tracheostomy, or an endotracheal tube, but some of them (e.g., tank ventilators) are based on the application of negative pressure to the body surface or chest wall. Ventilators are used in patients who cannot breathe on their own or who require assistance to maintain adequate ventilation because of illness, trauma, congenital defects, or drugs including anesthetics. Related Terms: Respirators [20-358] Resuscitators [13-360] Testers, Ventilator [17-712] Valves, Nonrebreathing [14-332] Ventilators, Anesthesia [10-145] Ventilators, Intensive Care [17-429] Ventilators, Intensive Care, Adult [18-792] Ventilators, Intensive Care, Adult, High-Frequency [15-783] Ventilators, Intensive Care, Adult, Negative-Pressure [17-877] Ventilators, Intensive Care, Neonatal/Pediatric [14-361] Ventilators, Intensive Care, Neonatal/Pediatric, High-Frequency [18-793] Ventilators, Intensive Care, Neonatal/Pediatric, Negative-Pressure [18-794] Ventilators, Noninvasive Positive Pressure [20-746] Ventilators, Portable/Home Care [17-423] Ventilators, Transport [18-098]

Abbreviation ventil

29008 เครื่องช่วยหายใจชนิดควบคุมโดยปริมาตร

UMDNS 15613

Ventilators, Volume Control (Bennett)

Devices designed to provide temporary ventilation and/or respiratory assistance by delivering an appropriate volume of gas to the respiratory airways. Most ventilators deliver gas to the lungs using positive pressure by means of a mouthpiece, mask, tracheostomy, or an endotracheal tube, but some of them (e.g., tank ventilators) are based on the application of negative pressure to the body surface or chest wall. Ventilators are used in patients who cannot breathe on their own or who require assistance to maintain adequate ventilation because of illness, trauma, congenital defects, or drugs including anesthetics. Related Terms: Respirators [20-

358] Resuscitators [13-360] Testers, Ventilator [17-712] Valves, Nonbreathing [14-332] Ventilators, Anesthesia [10-145] Ventilators, Intensive Care [17-429] Ventilators, Intensive Care, Adult [18-792] Ventilators, Intensive Care, Adult, High-Frequency [15-783] Ventilators, Intensive Care, Adult, Negative-Pressure [17-877] Ventilators, Intensive Care, Neonatal/Pediatric [14-361] Ventilators, Intensive Care, Neonatal/Pediatric, High-Frequency [18-793] Ventilators, Intensive Care, Neonatal/Pediatric, Negative-Pressure [18-794] Ventilators, Noninvasive Positive Pressure [20-746] Ventilators, Portable/Home Care [17-423] Ventilators, Transport [18-098]

Abbreviation venvol

Gas

29300 เครื่องวัดความเข้มข้นแก๊สออกซิเจน **UMDNS 12873**

Oxygen Concentrators

A device designed to extract oxygen from atmospheric air. It will typically be an electrically-powered molecular sieve (artificial zeolite) or membrane with a large surface area used to separate nitrogen from room air. Components of the device include an air compressor, filter, dual chambers, and a reservoir. The oxygen concentration is variable, depending on the flow rate being utilized. [GMDN = **Oxygen concentrator = 12873**]

Abbreviation oxycon

29301 เครื่องวัดอัตราการไหลออกซิเจนชนิดใช้กับท่อออกซิเจน **UMDNS 11748**

Oxygen Flow Meter, Tank

A device used to measure the rate of flow of a gas passing through it. The device may be used to measure and indicate the flow of anaesthetic gases by using various methods, e.g. a thorpe flowmeter, bourdon gauge or thermoelectric. [GMDN = **Flowmeter, gas = 11748**]

Abbreviation oxymet

29302 เครื่องวัดอัตราการไหลออกซิเจนชนิดใช้กับระบบไปป์ไลน์ **UMDNS 11748**

Oxygen Flow Meter ,pipeline

A device used to measure the rate of flow of a gas passing through it. The device may be used to measure and indicate the flow of anaesthetic gases by using various methods, e.g. a thorpe flowmeter, bourdon gauge or thermoelectric. [GMDN = **Flowmeter, gas = 11748**]

Abbreviation oxymet-p

29901 เครื่องพ่นละอองไอน้ำชนิดอัลตราโซนิค UMDNS 12719

Ultrasonic Nebulizer

Nebulizers designed to provide an aerosol mist by means of ultrasonic frequency oscillations. These nebulizers typically consist of an electronic oscillator, an ultrasound transducer (piezoelectric crystal), a coupling basin, a nebulizer chamber, and a fan. A high-frequency (typically 1-2 MHz) electrical current is applied to a piezoelectric crystal within the oscillator circuit, which changes the applied electrical signal into mechanical vibrations. These vibrations, in turn, produce 1-2 MHz sound waves in the coupling basin. The coupler (water or saline) transmits the sound waves to the (medicated) solution in the nebulizer chamber. When the sound waves reach the fluid-air interface, the fluid forms a geyser and disperses into a fine-particle aerosol mist. The size of the mist particles is determined primarily by the vibrating frequency; the higher the frequency the smaller the particles. Ultrasonic nebulizers produce particles in the size range of 0.5 to 35 micrometers.

Related Terms: Radiofrequency Generators [20-867]

Abbreviation ulnmem

29902 เครื่องพ่นละอองน้ำ UMDNS 12047

Humidifiers

Equipment designed to increase the moisture of a closed environment by adding water or water vapor. Some humidifiers can control the increase in humidity of the environment. Humidifiers are mostly used in clinical settings to increase the humidity in rooms or directly in the patient's airways. **Related Terms:** Humidifiers, Heat/Moisture Exchange [15-645] Humidifiers, Heated [12-050] Humidifiers, Nonheated [12-051] Humidifiers, Room [16-759]

Abbreviation humidi

29903 กระบอกน้ำทำความชื้นปรับเปอร์เซ็นต์ออกซิเจนได้ UMDNS 12712

สำหรับพ่นละอองไอน้ำ

Nembulizers

Devices designed to provide aerosolized medication and/or humidification to the patient airways. These devices produce both vapor and finely dispersed water droplets in the liquid phase (aerosol mist); they are typically used with a mask or tent or in a breathing circuit. Most nebulizers are either pneumatic (driven by compressed air) or ultrasonic. Most nebulizers include a heating element to provide a warm, humid aerosol.

Abbreviation nembul

29904 เครื่องทดสอบสมรรถภาพปอด UMDNS 17698

Pulmonary Function Test

Physiologic analyzers that assess the ventilation, diffusion, and distribution of gases in the lungs. Pulmonary function analyzers are used to determine the performance of the respiratory system for screening

and diagnosing lung diseases. Related Terms: Analyzers, Physiologic, Pulmonary Function, Adult [13-182] Analyzers, Physiologic, Pulmonary Function, Neonatal/Pediatric [17-699] Flowmeters, Pulmonary Function [15-965] Monitoring Systems, Physiologic, Stress Exercise, Pulmonary [17-724] Plethysmographs, Body [13-059] Pneumographs [13-078] Spirometers, Diagnostic [13-680] Xenon Systems [14-467]

Abbreviation pultes

29905 เครื่องวัดปริมาตรลมหายใจ **UMDNS 13674**
Spirometers

Respiration simulators designed to mimic the pulmonary mechanics of the lungs by taking in air and then expelling it. Typically, they can simulate the normal adult, pediatric, and/or infant breathing characteristics (e.g., breath rate, inspiratory and expiratory times, tidal volume). Most simulators can also simulate abnormal (e.g., diseased) conditions. These simulators typically consist of a mechanism that includes one or more chambers, elastomer bellows, and simulated airways. They may also include measuring instruments (e.g., volume, time, pressure) and capabilities to adjust compliance and airway resistance and/or to simulate leaks. Lung simulators are used to test the performance of mechanical ventilators, spirometers, and anesthesia devices and/or for training purposes. Some lung simulators can display and/or record the performance of devices being tested (e.g., ventilators) using computing capabilities. **Related Terms** : Bags, Test Lung [19-036]

Abbreviation spirom

29906 กล้องส่องตรวจหลอดลม **UMDNS 10491**
Fiberoptic Bronchoscope

Respiratory tract endoscopes designed to view the interior of the respiratory tract, particularly the trachea and the bronchi of the lungs for therapeutic or diagnostic purposes. These endoscopes usually consist of an outer sheath, a lighting system, and a working channel for catheters and operative devices; these endoscopes may be flexible or rigid. Therapeutic bronchoscopes (with operating channels) may be used to perform biopsies and laser surgery, remove foreign objects, aspirate fluids, and administer diagnostic agents or therapy using devices such as lasers, electro-surgical units, or surgical instruments. These endoscopes may be flexible or rigid. **Related Terms**: Endoscopes, Respiratory Tract [20-476]

Abbreviation scobro

29907 กล้องส่องตรวจหลอดลมชนิดตรง **UMDNS 10491**
Rigid Bronchoscope

Bronchoscopes with a nonflexible (i.e., rigid) structure that can only follow a straight path through the respiratory tract; rigid bronchoscopes include illumination and imaging systems that enable the examination and treatment of the trachea and the bronchi of the lungs.

Abbreviation scobro-r

29908 เครื่องตรวจวัดแอลกอฮอล์ในลมหายใจ UMDNS 17475
Alcohol Sensor

Point-of-care breath analyzers used to determine the alcohol (ethanol) content in a breath sample, usually expressed as percentage of blood alcohol concentration.

Abbreviation alcscn

29909 เครื่องวัดปริมาณก๊าซคาร์บอนไดออกไซด์ในลมหายใจออก UMDNS 16938
Capnometer

Respiratory bedside monitors designed to measure the partial pressure of carbon dioxide (PCO₂) in an exhaled breath. These monitors measure PCO₂ either by using a sensor in the patient's breathing circuit (mainstream) or by sampling from the patient's airway (sidestream). The sensor typically consists of an infrared light source, an optical filter, reference and sample chambers, and a detector. Most carbon dioxide respiratory monitors display the results as a maximum value of PCO₂ (i.e., carbon dioxide concentration measured at the end of exhalation and known as end-tidal carbon dioxide concentration); some also have computerized capabilities. Carbon dioxide respiratory monitors are used to monitor patients during anesthesia, detect ventilator failure, check the placement of endotracheal tubes, and assess the pulmonary function or the adequacy of perfusion during cardiopulmonary resuscitation. **Related Terms:** Detectors, Esophageal Intubation, Exhaled Carbon Dioxide [17-614]

Abbreviation capmet

29910 เครื่องเฝ้าติดตามความดันแก๊สคาร์บอนไดออกไซด์ในลมหายใจ UMDNS 16938
End-tidal CO₂ Monitors(capnograph)

Respiratory bedside monitors designed to measure the partial pressure of carbon dioxide (PCO₂) in an exhaled breath. These monitors measure PCO₂ either by using a sensor in the patient's breathing circuit (mainstream) or by sampling from the patient's airway (sidestream). The sensor typically consists of an infrared light source, an optical filter, reference and sample chambers, and a detector. Most carbon dioxide respiratory monitors display the results as a maximum value of PCO₂ (i.e., carbon dioxide concentration measured at the end of exhalation and known as end-tidal carbon dioxide concentration); some also have computerized capabilities. Carbon dioxide respiratory monitors are used to monitor patients during anesthesia, detect ventilator failure, check the placement of endotracheal tubes, and assess the pulmonary function or the adequacy of perfusion during cardiopulmonary resuscitation. **Related Terms:** Detectors, Esophageal Intubation, Exhaled Carbon Dioxide [17-614]

Abbreviation co2mon

29911 ชุดปอดจำลอง

UMDNS 12408

Lung Simulators

Respiration simulators designed to mimic the pulmonary mechanics of the lungs by taking in air and then expelling it. Typically, they can simulate the normal adult, pediatric, and/or infant breathing characteristics (e.g., breath rate, inspiratory and expiratory times, tidal volume). Most simulators can also simulate abnormal (e.g., diseased) conditions. These simulators typically consist of a mechanism that includes one or more chambers, elastomer bellows, and simulated airways. They may also include measuring instruments (e.g., volume, time, pressure) and capabilities to adjust compliance and airway resistance and/or to simulate leaks. Lung simulators are used to test the performance of mechanical ventilators, spirometers, and anesthesia devices and/or for training purposes. Some lung simulators can display and/or record the performance of devices being tested (e.g., ventilators) using computing capabilities. **Related Terms** : Bags, Test Lung [19-036]

Abbreviation lunsim

กลุ่มที่ 30 Radiology

X-Ray

30000 เครื่องเอ็กซเรย์เต้านม

UMDNS 12425

Mammography X-ray Unit

Radiographic units designed for breast imaging. These units include a high frequency or constant potential x-ray generator (usually from 20 to 35kV), an automatic exposure control, filters, a collimator, patient positioning features (e.g. compression devices) and an image recording system. Most mammographic units use intensifying screen-film combinations for image recording; some consist of an electrostatic recording system that uses a charged photoconductive plate in place of x-ray film (xeromammography). Mammographic units are primarily used to detect and diagnose breast cancer in asymptomatic women, and also to evaluate palpable masses and other breast lesions. **Related Terms** : Computer-Aided Detection Systems, Breast Imaging, Mammography [19-697] Radiographic Systems, Digital, Mammographic [18-432] Scanning Systems, Electrical Impedance, Mammographic [19-324] Scanning Systems, Laser, Mammographic [18-447] Scanning Systems, Light, Mammographic [17-786] Stereotactic Systems, Biopsy, Mammographic [17-833]

Abbreviation mammog

30001 เครื่องเอ็กซเรย์และ ฟลูโรสโคป

UMDNS 15952

X-rays And Fluoroscope

Units that combine radiographic and fluoroscopic capabilities. These systems produce instantaneous (i.e., real-time) visual images (fluoroscopies) and latent x-ray images that can be converted using a film processor or a digital imaging system into a visible image (a radiograph) for detailed study and for archiving. **Related Terms**: Fluoroscopic Units [18-433] Radiographic Systems [18-429] Radiographic Units [13-267]

Radiographic/Fluoroscopic Systems [18-436] Radiographic/Fluoroscopic Units, Mobile [11-758]
Radiographic/Fluoroscopic Units, Mobile, Extremity [18-435] Radiographic/Tomographic Systems [18-439]

Abbreviation fluoro

30002 เครื่องเอ็กซเรย์ **UMDNS 13267**

X-ray Units

Units that include an x-ray source to irradiate the portion of the patient to be examined, and an image receptor that converts in some form of latent image the array of x-rays that were differentially attenuated within the patient. This latent image is converted, usually in another device (e.g., a film image processor), into a visible image (i.e., a radiograph) reflecting the internal structure of the irradiated patient region. The interpretation of these images by a physician contributes to a clinically useful diagnosis. Radiographic units do not include patient supports (e.g. tables) or any other additional devices for image processing or transference (e.g., computerized processors). **Related Terms:** Fluoroscopic Units [18-433] Radiographic Systems [18-429]

Radiographic Units, Chest [10-822] Radiographic Units, Chest, Automated [18-425] Radiographic Units, Chest, Manual [18-428] Radiographic Units, Dental [13-269] Radiographic Units, Dental, Extraoral [18-427] Radiographic Units, Dental, Intraoral [18-426] Radiographic Units, Mammography [12-425] Radiographic Units, Mobile [13-272] Radiographic Units, Pneumoencephalographic [16-555] Radiographic Units, Podiatric [17-669] Radiographic Units, Specimen [17-166] Radiographic/Fluoroscopic Systems [18-436] Radiographic/Fluoroscopic Units [15-952] Radiographic/Tomographic Systems [18-439]

Abbreviation xray

30003 เครื่องเอ็กซเรย์เคลื่อนที่ **UMDNS 13272**

Portable X-Ray Unit

Radiographic units consisting of a manually driven or motor-driven wheeled cart that transports an x-ray generator, an x-ray tube and tube stand, collimators, and a film cassette storage drawer. There are three different types of mobile radiographic units, which are categorized according to the generator: line-powered transformers, capacitor-discharge generators, and battery-powered transformers. Mobile radiographic units are used for imaging patients who cannot be moved to the radiology department or when patient transport is contraindicated, such as for patients in intensive care and critical care units or operating and emergency rooms.

Related Terms: Radiographic/Fluoroscopic Units, Mobile [11-758]

Abbreviation xraym /xray-m

30004 เครื่องเอ็กซเรย์และฟลูโรสโคป ชนิดซีอาร์มพร้อมอุปกรณ์ **UMDNS 11758**

X-rays ,C-Arm with Fluroscope

Systems designed to replicate the motions and beam-positioning ability of specific radiotherapy units (e.g., cobalt units, linear accelerators). These systems perform radiotherapy simulation and establish the area to

be treated using either a radiographic/fluoroscopic device with imaging capabilities or a computed tomography scanner. Radiotherapy simulation systems are used in radiotherapy planning to define the region of the actual tumor and the surrounding tissues that are considered to be at risk (i.e., the tumor volume) and to develop a treatment technique to deliver a homogeneous dose of radiation to the tumor while minimizing the dose to surrounding normal tissue.

Abbreviation xra-ca

30005 เครื่องเอ็กซเรย์หลอดเลือด

UMDNS 16560

Digital Subtraction Angiography

Image digitization systems designed to convert an input signal taken from a television (TV) camera or from a charge-coupled device (CCD) into a digital signal and process the digital signal to obtain images that can be displayed on a TV monitor (usually after a digital-to-analog conversion) or in other computerized imaging systems. Hard-copy x-ray films of final images can also be made using a multi-image camera or a laser imager. These systems consist of an analog-to-digital converter, a high-speed digital memory, a digital storage device (e.g., optical disk), a digital-to-analog converter, and a controlling computer. Angiographic image digitization systems are designed to be added to existing angiographic or cardiovascular radiographic/fluoroscopic systems to perform a variety of computer- assisted x-ray image acquisition, processing, and display functions. Most of these combined systems are primarily used for digital subtraction angiography, a technology that involves the subtraction of a previous digital image from new images obtained after injecting a contrast agent into the patient. **Related Terms:** Radiographic/Fluoroscopic Systems, Angiography/Interventional [16-597]

Radiographic/Fluoroscopic Systems, Cardiovascular [17-192]

Abbreviation bdsa

30006 เครื่องวัดความหนาแน่นของมวลในกระดูก

UMDNS 17152

Bone Mineral Densitometer

Densitometers intended to assess bone mineral content in the skeleton. The primary purpose of these noninvasive measurements is to detect quantitative decreases in bone mass related to metabolic bone diseases such as osteoporosis and to help predict the risk of fracture. **Related Terms:** Densitometers, Bone, Isotope [18-846] Densitometers, Bone, Isotope, Dual-Photon Absorptiometry [17-150] Densitometers, Bone, Isotope, Single-Photon Absorptiometry [17-151] Densitometers, Bone, Ultrasonic [18-382] Densitometers, Bone, X-Ray [17-540] Densitometers, Bone, X-Ray, Dual-Energy Absorptiometry [17-747] Densitometers, Bone, X-Ray, Single-Energy Absorptiometry [17-748]

Abbreviation bonden

30007 เครื่องฉายรังสีแบบ 3 มิติ

UMDNS 13279

Intensity Modulated Radiation Therapy

Systems designed to deliver high-energy ionizing radiation, including photon radiation (e.g., x-rays, gamma rays) and particle radiation (e.g., electrons, neutrons). Most systems are designed for external radiation therapy (teletherapy) using high-energy machines that radiate gamma rays, electrons, or x-rays (e.g., linear accelerators, cobalt units); these systems typically include control units and may also include radiation-delivery devices. The intensity of the beam of radiation, expressed in kilo- or megavolts, determines both the depth of penetration into the body tissues and the energy of the electrons produced by secondary ionization within the tissues. Radiotherapy systems are used in the treatment of malignant neoplasms and occasionally in the treatment of certain benign conditions. **Related Terms** : Brachytherapy Systems [20-352] Radiotherapy Simulation Systems [13-280]

Abbreviation imrt

30008 เครื่องฉายรังสีลิเนียร์

UMDNS 12364

Linear Accelerators

Radiotherapy systems designed to produce electron beams of varying energies in addition to high-energy photons using a linear accelerator (linac) as a generator. A linear accelerator consists of a modulator, an electron gun, a radio-frequency power source (either a magnetron or a klystron), and an accelerator guide. The range of the energy levels provided by linacs is very wide, from 4- to 6-megavolt (MV) photons for low-energy units to 25 MV photons and up to 22 mega-electron-volt electrons in high-energy units. These systems also include control units, filters, and collimators. Low-energy linear accelerator systems are mostly used to treat tumors of the head, neck, and breast; high-energy systems are used to treat deep-seated neoplasms and tumors of the pelvis and thorax. **Related Terms** : Radiotherapy Systems, Neutron Beam [20-544]

Abbreviation linacc

30009 เครื่องฉายรังสีโคบอลต์

UMDNS 16972

Telecobalt Unit

Radiotherapy systems that use cobalt-60 as a radiation source to produce gamma radiation at photon energies of 1.17 and/or 1.33 MeV. The source is fitted into a treatment head that contains massive shielding (about one ton) and a mechanism for exposing or hiding the source, either by rotating it away from the collimator or by rotating the collimator to shield the source. The gamma-ray beam is directed at the tumor to be treated via a set of collimators and moved during the treatment so that maximum radiation dose is delivered to the point at the center of the rotation, other parts being irradiated less. Cobalt radiotherapy systems also include a control unit and appropriate filters and collimators. Because cobalt radiation reaches its maximum dose about 0.5 cm below the skin surface, cobalt units are especially suited for treatments of the head, neck, and breast, as well as for tumors in other parts of the body located within 5 cm of the skin surface.

Abbreviation telcob

30010 เครื่องวัดการจับของสารกัมมันตรังสีในต่อมไทรอยด์ UMDNS 16567

Thyroid Uptake

Systems designed to measure the amount of radioactive iodine in the thyroid gland after a predetermined length of time following ingestion (i.e., thyroid uptake). These systems typically consist of a detector system (composed of a scintillation crystal and a photomultiplier tube), collimators, a high-voltage power supply, amplifiers, a pulse-height analyzer, and a display unit; many systems include computerized capabilities for data processing. Thyroid uptake systems are used to assess thyroid gland activity; the normal range for thyroid uptake 24 hours after administration varies from 13% to 33%.

Abbreviation thyupt

30011 เครื่องเอ็กซเรย์ถ่ายปอดฟิล์มเล็ก UMDNS 10822

Mass Chest Survey Unit

Radiographic units used for imaging the thorax, the most common radiologic procedure. The standard examination is performed at a long source-to-image distance (typically 182 cm [72 in]). These radiographic units are used for diagnosing lung disorders (e.g., tuberculosis, cancer), assessing respiratory function, identifying cardiac problems, indicating the need for additional diagnostic tests, and imaging inhaled objects.

Related Terms: Radiographic Systems, Digital, Chest [18-431]

Abbreviation xramas

X-Ray accessories

30200 เครื่องจำลองการฉายรังสี UMDNS 13280

CT Simulator

Systems designed to replicate the motions and beam-positioning ability of specific radiotherapy units (e.g., cobalt units, linear accelerators). These systems perform radiotherapy simulation and establish the area to be treated using either a radiographic/fluoroscopic device with imaging capabilities or a computed tomography scanner. Radiotherapy simulation systems are used in radiotherapy planning to define the region of the actual tumor and the surrounding tissues that are considered to be at risk (i.e., the tumor volume) and to develop a treatment technique to deliver a homogeneous dose of radiation to the tumor while minimizing the dose to surrounding normal tissue.

Abbreviation ct-sim

30201 เครื่องล้างฟิล์มเอ็กซเรย์อัตโนมัติ UMDNS 15938

Automatic X-Ray Processor

Processors that develop film exposed to various forms of energy, ranging from x-ray to visible light. They mechanize film processing by automatically developing, fixing, washing, and drying films.

Abbreviation xrapro

- 30202 ฉากตะกั่วเอกซเรย์ UMDNS 14490
 X-ray Screen
 Shields used for protection from x-ray radiation. These shields are intended to attenuate or block x-ray energy. **Related Terms:** Shields, Nuclear Radiation [18-317]
Abbreviation xrascr
- 30203 เครื่องจำลองการเอ็กซเรย์ UMDNS 13280
 X-ray Simulator
 Systems designed to replicate the motions and beam-positioning ability of specific radiotherapy units (e.g., cobalt units, linear accelerators). These systems perform radiotherapy simulation and establish the area to be treated using either a radiographic/fluoroscopic device with imaging capabilities or a computed tomography scanner. Radiotherapy simulation systems are used in radiotherapy planning to define the region of the actual tumor and the surrounding tissues that are considered to be at risk (i.e., the tumor volume) and to develop a treatment technique to deliver a homogeneous dose of radiation to the tumor while minimizing the dose to surrounding normal tissue. **Related Terms:** Radiotherapy Systems [13-279] Simulators [15-059]
Abbreviation xrasim
- 30204 ชุดแขวนหลอดเอกซเรย์ UMDNS 15975
 X-ray Tube Support
 Assemblies typically consisting of an X-ray tube housing encasing an x-ray tube and a set of lead plates or shutters (i.e., collimators) attached to the housing aperture (port). X-ray tube assemblies are usually mounted in tube supports (e.g., floor, ceiling, wall), they may be also mounted under fluoroscopic tables and/or in the arms of mobile or C-arm units.
Abbreviation xrasup
- 30205 ตลับฟิล์มพร้อมสกรีน UMDNS 14474
 X-ray Film Cassettes
 Cassettes designed for holding a sheet of x-ray film during exposure to radiation by an x-ray (radiography) diagnostic unit. typically, a screen that converts x-rays to light is also inserted in the cassette. The cassettes are usually placed in an x-ray cassette holder in the radiography unit. These devices typically consist of a metal or plastic housing with appropriate inserts to facilitate film transport and provide protection from environmental light. After x-ray exposure, the cassette with the film is transferred to a manual or automated processor to develop the radiographic image on the film.
Abbreviation xracas

30206 เครื่องเอกซเรย์ Generator

UMDNS 16602

X-ray Generators

Equipment designed to provide an appropriate voltage and current, usually measured in kilovolt (kV) and milliamperere (mA), to an x-ray tube that in turn delivers an x-ray beam with the desire characteristics; some devices may include the x-ray tube as an integral part of the generator unit. These generators typically consist of a step-up transformer, a high-voltage circuit including rectifiers, a filament circuit, a timing circuit, and a control panel with time, kV, and mA controls. Many generators are microprocessor controlled. The control panel is used to initiate radiographic exposures and to select technical factors for radiographic and fluoroscopic examinations. The secondary voltage waveform supplied to the x-ray tube can be in a diversity of forms (e.g., single-phase, full-wave rectified; three-phase, six-pulse; high-frequency, multi-pulse; or constant potential). Additional features include automatic exposure control, automatic brightness control, anatomic programming, and falling load technique. X-ray generators are an integral part of radiographic, and radiographic/fluoroscopic units and systems, including mammographic units and computed tomography (CT) scanners; some x-ray generators are designed for radiotherapy units.

Abbreviation xragen

30207 เครื่องผสมน้ำยาถ่ายภาพฟิล์ม

UMDNS 17235

X-ray Mixture

ชุดผสมสารเคมีน้ำยาถ่ายภาพฟิล์มเอกซเรย์

Abbreviation xramix

30208 เสื้อตะกั่ว

UMDNS 14490

X-ray Sheild

Shields used for protection from x-ray radiation. These shields are intended to attenuate or block x-ray energy. **Related Terms:** Shields, Nuclear Radiation [18-317]

Abbreviation xralea

30209 แผ่นกริด

UMDNS 15954

Grid Plate

แผ่นกำหนดจุดในการถ่ายภาพเอกซเรย์

Abbreviation xragri

30210 เครื่องพิมพ์ข้อมูลผู้ป่วยนอกห้องมืด

UMDNS 16246

Day Light Printer

Equipment designed for diagnostic x-ray film processing in any room under normal lighting conditions. This equipment may consist either of a centralized unit that integrates cassette loading, unloading,

and processing functions into a single unit that automatically unloads the exposed film and passes it to the attached or integral processor; or a modular system that includes specially designed or modified conventional cassettes, a film-loading dispenser, a cassette film unloader with an integral identification-labeling system, and an automated x-ray film processor to which the unloader is attached. X-ray daylight film handling equipment allows an unassisted technologist, or one in an area remote from a darkroom, to process a diagnostic examination without leaving the area or losing sight of the patient. The use of daylight film handling equipment reduces the time spent waiting for film processing, sometimes eliminating the need for darkrooms and darkroom personnel.

Abbreviation daypri

30211 เครื่องตรวจอวัยวะด้วยสนามแม่เหล็กและคลื่นวิทยุ **UMDNS 17863**
MRI Compatible Hemodynamic Monitor

Mobile modular medical facilities typically divided into a patient treatment area, a magnet room, a control room including the operator console, and an auxiliary equipment (e.g., electric generator, air conditioning) room. These facilities include a primary magnet, gradient magnets, a radio-frequency subsystem, a patient table, and a computer subsystem including software, display monitors, and a data-storage unit.

Abbreviation mrimon

30212 ชุดฉีดสีเข้าเส้นเลือดแดง **UMDNS 16545**
Angiography Set

Prepackaged collections (either custom or standard) of the equipment and supplies intended for use during the patient preparation and performance of the radiographic visualization of the arteries of a particular organ system or body part (i.e., an angiography procedure). **Related Terms:** Angiography Kits, Controller Assembly, Disposable [23-123] Angiography Kits, Digital [16-546] Angiography Kits, Manifold Assembly, Disposable [23-116] Angiography Kits, Special Procedure [16-547] Angiography Kits, Syringe Assembly, Reusable [23-115] Angiography Kits, Syringe/ Manifold Assembly [23-117]

Abbreviation angset

30213 เครื่องสำเนาฟิล์ม **UMDNS 13259**
Film Duplicator

Devices designed to produce diagnostic-quality copies of radiographic images on duplicating film that has a layered silver-based emulsion on one side. The duplicating film is laid over the original x-ray film, and both films are placed or fed into the duplicator. The films are then exposed to a light source (usually ultraviolet), and the image of the original film is transferred onto the duplicating film. The duplicate is then processed in an x-ray processor. Some duplicators are capable of image subtraction, enlargement, reduction, and enhancement. X-ray film duplicators are used to make copies of films from all imaging technologies (e.g.,

computed tomography, magnetic resonance imaging, dental radiography); duplicates are used by surgeons, as teaching aids, as evidence in legal proceedings, and for record keeping at patient transfer. The originals can then be stored to maintain the integrity of central files.

Abbreviation fildup

30214 เครื่องใส่แร่

UMDNS 13276

Afterload Radioisotope Unit

Cabinets, Storage, Isotope [20-608] : Cabinets designed for safe storage of radioisotopes during a relatively short period of time, protecting healthcare providers and patients from harmful radiation. These cabinets typically consist of a lead-lined (e.g., 6 mm/0.25 in) heavy metallic structure that may include dose storage and decay drawers (with leaded fronts) and compartments for flood phantoms. Some cabinets also have a thicker lined (e.g., two-inch) lead-lined compartment to storage high-energy radiation sources, including syringes for isotope infusion. Isotope storage cabinets are used mainly in nuclear medicine laboratories and nuclear medicine treatment units.

Abbreviation loarad

30215 เครื่องตรวจวัดรังสีปริมาณสูง

UMDNS 11295

Radiation Dosimeter

Detectors, Environmental, Ionizing Radiation [20-506] : Environmental detectors designed for automated discovery and/or ascertainment (i.e., detection) of ionizing radiation, usually in the form of gamma rays and/or alpha or beta particles. The sample is typically taken from the atmosphere, but water and/or particle samples are sometimes used. Ionizing radiation environmental detectors are available mainly as portable, handheld, or individually worn units; some detectors are computerized and detect, identify, and warn of a hazardous condition when predetermined values of radiation are reached or exceeded. These devices are used by healthcare personnel, rescuers, and firefighters in radioactive or radioactive contaminated areas.

Abbreviation raddos

30216 เครื่องตรวจวัดปริมาณรังสีทั่วไป

UMDNS 17211

Survey Meter Unit

Radiation survey meters designed to be sufficiently sensitive to detect a single ionization event. These meters usually consist of a cylinder that is pressurized (typically from 70 to 200 mm Hg) and contains a mixture of helium, neon, or argon and a quenching gas. A metal rod running through the center of the cylinder acts as an anode, and the cylinder wall acts as a cathode. Ionization radiation enters the chamber through a window on the front of the cylinder, producing an ionization avalanche. Over a period of time (e.g., a minute), a pulse counter registers each ionization avalanche and quenching as a pulse and displays the results on a meter. An audio speaker may be added to broadcast each ionization avalanche as a cracking sound. Geiger-Muller survey meters

are used to detect low-level radiation (less than 100 milliroentgen/hour); they are useful for detecting radioactive spills and contamination of work areas as well as in instrumentation. **Related Terms:** Detectors, Environmental, Ionizing Radiation [20-506]

Abbreviation radmet

30217 ตู้อ่านฟิล์มเอกซเรย์ UMDNS 14498

View Box

View boxes that include visible light lamps covered by a translucent surface appropriate for observation of medical radiographs. X-Ray view boxes are available for a single radiograph observation or as a multiple set (i.e., a panel) that permits the simultaneous observation of several radiographies.

Abbreviation xrabox

CT

30300 เครื่องซีทีสแกน UMDNS 13469

CT Scan

Scanning systems that use a radiographic technique and computerized processing to generate thin cross-sectional (tomographic) images, or "slices" of a transverse plane of the body. Most computed tomography (CT) scanning systems are capable of three-dimensional (3-D) image reconstruction. During a scan, the x-ray beam is moved across the patient so that the x-ray attenuations along many lines in the tissue slice can be determined and stored in a computer. A CT scanning system consists of an x-ray subsystem (i.e., x-ray generator, x-ray tube, gantry); a computer subsystem, including software for image processing, display monitors, and a data storage unit; and an operator console. The set of tomographic images of the human body reconstructed by the computer are used for a wide variety of medical procedures and examinations. **Related Terms :** Modular Medical Facilities, Mobile, Computed Tomography [17-878] Scanning Systems, Computed Tomography, Axial [18-446] Scanning Systems, Computed Tomography, Axial, Full-Body [15-956] Scanning Systems, Computed Tomography, Axial, Head [15-955] Scanning Systems, Computed Tomography, Electron Beam [16-899] Scanning Systems, Computed Tomography, Spiral [18-443] Scanning Systems, Computed Tomography/Positron Emission Tomography [20-161]

Abbreviation ctscan

30301 เครื่องถ่ายภาพอวัยวะด้วยสารกัมมันตรังสี UMDNS 18448

Single Proton Emission Computed Tomography , Gamma Camera

ไม่มี Definition

Abbreviation spect

Radioactive

30400 เครื่องเอ็กซเรย์พาโนรามิก UMDNS 18429

Panoramic and Cephalometric Radiography

Systems that consist of a patient support unit (usually one or more tables), an x-ray tube and collimator, x-ray generators, support for the x-ray tubes and image receptors (e.g., a cassette holder), and a control panel. These systems are used to perform diagnostic x-ray procedures by obtaining a latent image of the irradiated portion of the patient. This latent image is converted into a visible image (i.e., a radiograph) using a film or digital image processor. The interpretation of these images by a physician contributes to a useful clinical diagnosis.

Abbreviation xrapan

30401 เครื่องตรวจวัดปริมาณคั่งของน้ำปัสสาวะด้วยคลื่นความถี่สูง UMDNS 16241

Bladder Scan

Ultrasonic scanning systems consisting of an ultrasonic scanner, transducers (typically from 2 to 5 MHz), abdominal calculation package software (e.g., renal), an image recorder (e.g., videocassette), and a printer. Abdominal ultrasonic systems usually include linear array and mechanical and/or electronic sector scanning configurations. These systems are used for abdominal examination (e.g., cysts, tumors) and diagnoses (e.g., hernias). **Related Terms:** Scanning Systems, Ultrasonic, General-Purpose [15-976] Scanning Systems, Ultrasonic, Obstetric/Gynecologic [15-657]

Scanning Systems, Ultrasonic, Portable [18-143]

Abbreviation blasca

30402 เครื่องวัดความหนาของกระจกตาด้วยคลื่นเสียงความถี่สูง UMDNS 11389

Ultrasonic Corneal Thickness Measuring Device

Ultrasonic scanning systems that include an ultrasonic scanner (usually operated in A or B mode), transducers (frequencies of 7.5 to 10.0 MHz are typically used because high-resolution imaging is needed), dedicated software, a recording subsystem, and a printer. Most ophthalmic ultrasonic scanning systems are used to measure the axial length of the eye, to assess eyes in which opacity prevents direct ophthalmologic examinations, and to study both intraocular and orbital tumors. **Related Terms:** Scanning Systems, Laser, Optical Tomography [18-191]

Abbreviation corthi

30403 เครื่องตรวจหลอดเลือดและอวัยวะภายในด้วยคลื่นเสียงความถี่สูง UMDNS 14278

Digital Color Doppler Ultrasonography

Scanning systems that use sound waves at frequencies (typically in the range of 2 to 15 MHz) well above the level of human hearing to generate an image of tissue in a transverse plane of the body. These

systems convert an electrical signal into ultrasonic energy that is transmitted into tissues. The intensity, time, and direction of the echoes are measured and processed to generate an amplitude display (A-mode), a two-dimensional "brightness modulated" image display (B-mode), or a one-dimensional graphic display of a moving structure (M-mode). Ultrasonic scanners are composed of transducers (to convert electrical signals to sound waves and sound waves to electrical signals); scanners that measure the intensity, time, and direction of the reflected (echoed) sound waves; and scan converters that display the image on a TV monitor (usually a high-resolution monitor). Ultrasonic scanning systems are used in many diagnostic procedures, including gynecologic, obstetric, cardiac, vascular, endoscopic, thyroid, and breast procedures.

Abbreviation dopult

Ultrasound

30500 เพทสแกน

UMDNS 16375

Pet scan

Scanning systems that detect back-to-back gamma ray (photon) emissions as the result of the combination of an emitted positron and a free electron and that use computerized processing to generate in vivo cross-sectional images of an administered positron-emitting radiopharmaceutical. These systems consist of scintillation detectors arranged in stationary rings around the patient and photomultiplier tubes; coincidence circuits; a patient table; a computer subsystem, including software for image processing, display monitors, and a data storage unit; and an operator console. Clinical uses of these systems include demonstration of biological functions and the assessment of the physiology and pathology of various organs and tissues. **Related Terms:** Scanning Systems, Computed Tomography/Positron Emission Tomography [20-161]

Abbreviation petsca

30501 เครื่องตรวจอวัยวะและสิ่งแปลกปลอมในลูกตาด้วยคลื่นเสียงความถี่สูง **UMDNS 11389**

A-B Scan Ultrasonogram

Ultrasonic scanning systems that include an ultrasonic scanner (usually operated in A or B mode), transducers (frequencies of 7.5 to 10.0 MHz are typically used because high-resolution imaging is needed), dedicated software, a recording subsystem, and a printer. Most ophthalmic ultrasonic scanning systems are used to measure the axial length of the eye, to assess eyes in which opacity prevents direct ophthalmologic examinations, and to study both intraocular and orbital tumors. **Related Terms:** Scanning Systems, Ultrasonic, Abdominal [16-241] Scanning Systems, Ultrasonic, Abdominal, Liver Stiffness [23-996] Scanning Systems, Ultrasonic, Cardiac [17-422] Scanning Systems, Laser, Optical Tomography [18-191]

Abbreviation ultson

30502 หัวตรวจอวัยวะภายในด้วยคลื่นความถี่สูง

UMDNS 16272

Ultrasound Probes

Probes designed to transmit ultrasonic energy to and receive energy from a patient when connected to an ultrasonic device that includes a radiofrequency generator (e.g., echocardiograph, ultrasonic scanner). These probes typically consist of an enclosure (housing), with ultrasonic transducers (typically piezoelectric) that convert electrical signals into ultrasonic signals and vice versa and an integral cable to transmit and receive the electrical signal to and from the ultrasonic equipment. Ultrasonic probes are frequently placed on the skin after an acoustic coupling gel has been applied; dedicated probes intended for specific ultrasonic equipment and/or applications are also available. **Related Terms:** Probes, Ultrasonic, Phacoemulsification Unit [23-436] Transducers, Ultrasonic [14-121]

Abbreviation probe

30503 เครื่องตรวจอวัยวะภายในด้วยคลื่นเสียงความถี่สูง

UMDNS 14278

Ultrasound

Scanning systems that use sound waves at frequencies (typically in the range of 2 to 15 MHz) well above the level of human hearing to generate an image of tissue in a transverse plane of the body. These systems convert an electrical signal into ultrasonic energy that is transmitted into tissues. The intensity, time, and direction of the echoes are measured and processed to generate an amplitude display (A-mode), a two-dimensional "brightness modulated" image display (B-mode), or a one-dimensional graphic display of a moving structure (M-mode). Ultrasonic scanners are composed of transducers (to convert electrical signals to sound waves and sound waves to electrical signals); scanners that measure the intensity, time, and direction of the reflected (echoed) sound waves; and scan converters that display the image on a TV monitor (usually a high-resolution monitor). Ultrasonic scanning systems are used in many diagnostic procedures, including gynecologic, obstetric, cardiac, vascular, endoscopic, thyroid, and breast procedures. Some ultrasonic devices using the Doppler principle are used to display blood flow information. **Related Terms:** Echoencephalographs [11-387] Modular Medical Facilities, Mobile, Ultrasound [17-879] Power Meters, Ultrasound, Diagnostic Unit [16-842] Radiofrequency Generators [20-867] Scanning Systems, Ultrasonic, Endoscopic [20-378] Scanning Systems, Ultrasonic, General-Purpose [15-976] Scanning Systems, Ultrasonic, Intravascular [17-746] Scanning Systems, Ultrasonic, Mammographic [15-656] Scanning Systems, Ultrasonic, Obstetric/Gynecologic [15-657] Scanning Systems, Ultrasonic, Ophthalmic [11-389] Scanning Systems, Ultrasonic, Portable [18-143] Scanning Systems, Ultrasonic, Small-Parts [18-052] Scanning Systems, Ultrasonic, Vascular [15-957]

Abbreviation ultras

30504 เครื่องตรวจเส้นเลือดหัวใจด้วยคลื่นเสียงความถี่สูง

UMDNS 17746

Intravascular Ultrasound

Scanning systems that include an ultrasonic scanner, high-frequency (typically 20 and 30 MHz) miniature transducers mounted on the tip of a catheter, intravascular analysis package software, an image recorder (e.g., videocassette), and a printer. Some systems include color-flow mapping capabilities. Intravascular ultrasonic scanning systems produce 360-degree (cross-sectional) images of blood vessels for diagnostic and therapeutic applications, including the identification of arterial plaque and vessel lesions, the measurement of vessel dimensions and stenosis, the monitoring of balloon angioplasty and atherectomy procedures, and the deployment of intravascular stents. **Related Terms:** Catheters, Vascular, Ultrasound, Image [18-672] Scanning Systems, Ultrasonic, Vascular [15-957]

Abbreviation ultvas

PET (30600) ไม่มี

MRI

30700 เครื่องตรวจอวัยวะด้วยสนามแม่เหล็กและคลื่นวิทยุ

UMDNS 16260

Magnetic Resonance Imaging (MRI)

Scanning systems that use strong magnetic fields, radio-frequency (RF) radiation, and computerized processes to translate hydrogen nuclei distribution (some systems can translate other nuclei exhibiting nuclear magnetic resonance) in body tissue into images of anatomic structures. Following exposure to high magnetic and RF fields, body-tissue nuclei emit low-power RF signals that are detected by the system RF receiver. The computer uses these RF data to construct an image of the exposed tissue. Magnetic resonance imaging (MRI) systems consist of a primary magnet (resistive, superconductive, or permanent); gradient magnets; an RF subsystem, including an RF transmitter/receiver and coils; a patient table; a computer subsystem, including software for image processing, display monitors, and a data storage unit; and an operator console. MRI scanning systems are used to obtain high-resolution images with good contrast of tissues without using ionizing radiation. Most of these systems are used to distinguish normal from diseased tissue and to diagnose and track the progress and treatment of diseases (e.g., cancer, brain edema, iron storage).

Abbreviation mri

Other

30800 เครื่องเลเซอร์สำหรับงานเวชศาสตร์ฟื้นฟู

UMDNS 12296

Low Level Laser Therapy

A laser (Light Amplification by Stimulated Emission of Radiation) is a device in which input energy excites the active medium (the substrate) to emit a beam of intense, coherent, monochromatic electromagnetic radiation. This beam may be optically directed to an aperture or tissue. A laser is mostly used for surgical

intervention and can be used over a large spectrum of clinical specialities. It may also be used for therapeutic purposes. Some lasers are used as positioning devices. [GMDN = Laser, (specify) = 12296]

Abbreviation laslth

30801 เครื่องมือผ่าตัดด้วยแสงเลเซอร์สำหรับกล้องส่องตรวจ UMDNS 12296

Scope, Laser

A laser (Light Amplification by Stimulated Emission of Radiation) is a device in which input energy excites the active medium (the substrate) to emit a beam of intense, coherent, monochromatic electromagnetic radiation. This beam may be optically directed to an aperture or tissue. A laser is mostly used for surgical intervention and can be used over a large spectrum of clinical specialities. It may also be used for therapeutic purposes. Some lasers are used as positioning devices. [GMDN = Laser, (specify) = 12296]

Abbreviation scolas

30802 เครื่องวัดรังสีแกมมา UMDNS 16381

Gamma Counters

Instruments based on the principle of photoluminescence that are used to measure trace quantities of many diagnostically significant substances that occur in patient samples of serum, urine, or other body fluids.

Related Terms: Detectors, Beta/Gamma Radiation [11-825]

Abbreviation gamcou

กลุ่มที่ 31 Surgery

Operative instruments

31000 รถเข็นทำแผล UMDNS 15891

Dressing Carts

Carts used to store and transport the sterile supplies and instruments necessary for each surgical procedure to the operating room and transport contaminated supplies from it. These carts can be either open or closed; they are designed to facilitate the cleaning, loading, and unloading. Surgical supply carts are typically used in a daily closed cycle, from the sterile central supply to the operating room (transporting sterile supplies) and vice versa (transporting contaminated supplies).

Abbreviation cardre

31001 เครื่องมือผ่าตัดจุลศัลยกรรมทั่วไป UMDNS 15621

Microsurgery Set

ไม่มี Definition

Abbreviation setmic

- 31002 กล่องใส่เครื่องมือผ่าตัดสำหรับอบฆ่าเชื้อ UMDNS 16349
 Instrument Container
 A device designed as, e.g., a closed compartment, vessel, envelope, intended for the purpose of containing another object for a period of time, or possibly permanently. Such objects could be, e.g. other devices, instruments, organs, samples or chemicals that are to be kept free from moisture. [GMDN = Container, (specify) = 16767]
Abbreviation inscon
- 31003 โต๊ะวางเครื่องมือทางการแพทย์ UMDNS 13959
 Instrument Tables
 Tables including an appropriate (e.g., stainless steel) top surface with no crevices, screws, or rivets. Most tables include telescoping pedestals for height adjustment and swivel caster bases. These tables are designed for keeping and handling sterile instruments and to facilitate their cleaning and decontamination.
Related Terms : Tables, Instrument, Anesthesia [13-951] Tables, Instrument, Surgery [18-381]
Abbreviation instab
- 31004 ชุดเจาะไขกระดูก UMDNS 16833
 Bone Marrow Aspiration Set
 Prepackaged collections (either custom or standard) of equipment and supplies used for performance of a bone marrow biopsy (e.g., a procedure designed to remove a small sample of bone marrow [usually from the hip] through a needle or other device for examination under a microscope to see whether cancer cells are present). **Related Terms:** Needles, Biopsy, Intraosseous, Bone Marrow [20-241]
Abbreviation bm-asp
- 31005 ชุดเข็มเจาะไขกระดูก UMDNS 20241
 Bone Marrow Needle Aspiration Set
 Prepackaged collections (either custom or standard) of equipment and supplies used for performance of a bone marrow biopsy (e.g., a procedure designed to remove a small sample of bone marrow [usually from the hip] through a needle or other device for examination under a microscope to see whether cancer cells are present). **Related Terms:** Needles, Biopsy, Intraosseous, Bone Marrow [20-241]
Abbreviation bm-asp-n
- 31006 clampชนิดต่างๆ UMDNS 10861
 Clamps
 Devices designed to compress a structure and/or to bring together several isolated objects and/or anatomic structures by pressing, fastening, or binding them firmly. Clamps are usually handheld, manual

instruments with a working end that permits a large jaw opening and a handle and without a preferred resting state; dedicated clamps are available in a variety of shapes and sizes according to the procedure to be performed or the object to be held. Clamps are clinically used as dental, surgical, and postmortem instruments and/or to hold ancillary devices during those procedures; other clamps are intended to hold objects (e.g., test tubes, small instruments). **Related Terms:** Clamps, Beaker/Flask, Laboratory [21-252] Clamps, Cannula [16-449] Clamps, Dental [21-193] Clamps, Dental, Gingiva [21-194] Clamps, Dental, Rubber Dam [15-712] Clamps, Examination/Operating Table [21-258] Clamps, External Occlusion [21-247] Clamps, External Occlusion, Penis/Incontinence [12-109] Clamps, External Occlusion, Umbilical Cord [10-876] Clamps, Other [15-212] Clamps, Postmortem [21-243] Clamps, Skull [15-025] Clamps, Surgical [21-195] Clamps, Surgical, Bone [10-866] Clamps, Surgical, Bone, Fracture Reduction [21-196] Clamps, Surgical, Bone, Fracture Reduction, Reposition [21-197] Clamps, Surgical, Bone, Meniscus [21-198] Clamps, Surgical, Bone, Plate Holding [21-199] Clamps, Surgical, Bronchus [10-867] Clamps, Surgical, Cartilage [21-200] Clamps, Surgical, Eye [16-450] Clamps, Surgical, Eye, Eyelid [21-201] Clamps, Surgical, Eye, Orbital Muscle [21-202] Clamps, Surgical, Fallopian Tube [21-203] Clamps, Surgical, Heart Auricle [21-241] Clamps, Surgical, Intestinal [10-871]

Abbreviation clamp

31007 Clip Applier

UMDNS 10894

Clip Applier

Surgical instruments designed for the atraumatic (i.e., without intentional piercing) delivery of clips to tissue, either for temporary or permanent occlusion of anatomic tubular structures. Clip appliers may consist of a metallic forceps-like instrument with special jaws to hold and deliver the clips or instruments including a mechanism for single or multiple insertions of clips. Dedicated clip appliers are available for specific procedures, including fallopian tubal occlusion and hemostasis (both direct blood vessel occlusion and gastrointestinal lining closure); some clip appliers are intended for use through the working channel of endoscopes or through laparoscopes. **Related Terms:** Clip Appliers, Fallopian Tube [21-263] Clip Appliers, Fallopian Tube, Laparoscopic [21-267] Clip Appliers, Gastrointestinal, Endoscopic [21-268] Clip Appliers, Skin Suture [21-269] Clip Appliers, Vascular [17-685] Clip Appliers, Vascular, Disposable [17-684] Clip Appliers, Vascular, Disposable, Scalp [21-270] Clip Appliers, Vascular, Reusable [16-445] Clip Appliers, Vascular, Reusable, Aneurysm [16-443] Clip Appliers, Vascular, Reusable, Aneurysm, Intracranial [21-273] Clip Appliers, Vascular, Reusable, Scalp [21-272]

Abbreviation cliapp

31008 Clip Remover

UMDNS 10895

Clip Remover

A scissors or tweezers-like surgical instrument with two blades which are joined at their proximal end or midpoint. The blades are designed for grasping, opening and removing a clip. = Clip remover (G.M.D.N)

Abbreviation clirem

31009 เครื่องจักรด้วยความเย็น

UMDNS 18051

Cryosurgery Unit

Equipment designed to regulate the flow and application of a gaseous or liquid coolant (cryogen) to destroy or remove tissue by freezing (i.e, perform cryosurgery). Cryosurgical units induce freezing in target tissue either through direct application of liquid cryogen or indirectly through contact with a cryogen-cooled probe. Some units use liquid nitrogen, while others use nitric oxide (NO₂) or carbon dioxide (CO₂) as a refrigerating medium. **Related Terms:** Cryosurgical Units, General-Purpose [11-067] Cryosurgical Units, Ophthalmic [11-068]

Abbreviation crycau

31010 เครื่องไซเบอร์ไนฟ์

UMDNS 18054

Cyber Knife

Radiosurgical stereotactic systems that use a linear accelerator (linac) as the source of x-ray radiation. These systems typically consist of a dedicated linac with a movable gantry and a single or multileaf collimator; standard linacs may be adapted for limited radiosurgery applications by the addition of stereotactic accessories. Linac-based stereotactic systems used for intracranial or neck procedures typically employ a metal head frame attached to the patient's skull for precise targeting of the radiation beam; other systems incorporate a miniature linac mounted on a flexible robotic arm and an image-guidance system that can track target location during treatment using fiducials as references without the need for the invasive head frame. Systems that can be used in any location in the body and employ computer-controlled beam-shaping (known as Intensity Modulated Radiation Therapy [IMRT]) to conform the radiation dose to the shape of the tumor or other lesion are also available, but those systems may not be as accurate in targeting and are used mainly for multiple treatment sessions

Abbreviation cybkni

31011 เครื่องมือตัดปะผิวหนัง

UMDNS 11179

Dermatomes

Surgical instruments designed to rapidly excise (harvest) and/or process large, uniform-thickness skin slices. These instruments may be a manually operated device (e.g., a handheld mechanical frame and cutting blade) or, more frequently, a powered (e.g., electrical, pneumatic) device with a cutting blade. Powered (e.g., Castroviejo, Reese, Padgett-Hood, Brown, Davol-Simon, Zimmer) dermatomes typically use a rapidly oscillating blade that is manually advanced over the skin. Dermatomes are used mainly to obtain skin grafts from donor sites, but they are sometimes used in other procedures (e.g., to remove tattoos). Dedicated instruments are available to expand the skin graft (i.e., expanded mesh dermatomes), increasing the area of damaged skin that can be covered with a given graft. **Related Terms:** Dermabrasion Units [11-177]

Dermatomes, Electric [22-123] Dermatomes, Manual [22-122] Dermatomes, Manual, Expanded Mesh [13-614]
Dermatomes, Pneumatic [22-129]

Abbreviation dermat

31012 เครื่องมือถ่างขยาย **UMDNS 11254**

Dilators

Surgical dilators designed for mechanical augmentation of the internal lumen of the fallopian tubes. These dilators are typically manual, solid, cylindrical, handheld instruments with a very thin tapered blunt distal tip, either straight or angled, that are attached to a solid handle with a bigger diameter. Fallopian tube dilators are used in surgical and microsurgical gynecologic and obstetric procedures.

Abbreviation dilato

31013 เครื่องมือแซะกระดูก **UMDNS 11504**

Periostium Elevators

Handheld surgical instruments used to displace and remove teeth and roots that cannot be engaged by the beaks of a forceps or to loosen teeth and roots before forceps application. They use a blade to engage the teeth or roots and elevate them from the alveoli through leverage applied to the handle.

Abbreviation elevat

31014 ปากคีบ **UMDNS 11774**

Forceps

Instruments that consist of two handles or sides, either joined or separate, each attached to a blade, that are used during surgical procedures to handle, compress, join, pull, grasp, hold firmly, or exert traction upon tissue, equipment, or supplies that are inconvenient or impractical to seize with the fingers. They are usually constructed of stainless steel. Different types of forceps are used during procedures in the following categories: surgery, dentistry, dermatology, gastroenterology, gynecology, home care, internal medicine, nephrology, neurosurgery, obstetrics, oncology, ophthalmology, otolaryngology, pathology, plastic surgery, pulmonary medicine, and urology. **Related Terms:** Forceps, Biopsy [11-775]Forceps, Biopsy, Flexible Endoscopic [16-268]Forceps, Biopsy, Other [16-270]Forceps, Biopsy, Rigid Endoscopic [16-269]Forceps, Bone [15-670]Forceps, Dental [15-710]Forceps, Dissecting [15-800]Forceps, Dressing [11-777]Forceps, Electrosurgical [11-502]Forceps, Epilation [11-780]Forceps, Fixation [11-781]Forceps, Gallbladder [11-782]Forceps, Grasping, Flexible Endoscopic [15-628]Forceps, Hemostatic [11-784]Forceps, Intestinal [11-785]Forceps, Kidney [16-519]Forceps, Laparoscopic [11-779]Forceps, Laparoscopic Swab [17-584] Forceps, Lung [11-787]Forceps, Obstetric [11-788]Forceps, Ophthalmic [16-209]Forceps, Other [15-221] Forceps, Rubber Dam Clamp [16-651]Forceps, Specimen [11-790]Forceps, Sponge [11-791]

Forceps, Sterilizer Transfer [11-792] Forceps, Stone Manipulation [11-793] Forceps, Suction [11-794] Forceps, Tissue [11-797] Forceps, Tonsil [15-672] Forceps, Utility [11-798]

Abbreviation forcep

31015 ค้อนสำหรับตอกกระดูก UMDNS 11947

Hammers

A metal, usually stainless steel, instrument comprising a handle, shaft and head. The handle is designed to fit into the palm of the hand and is usually round. This handle tapers distally into a shaft which terminates in a head. Hammer heads are usually cylindrical in shape although variations exist. Some hammer heads are fitted on one or both ends with a material, rubber or plastic, to absorb the shock of impact. [GMDN = **Hammer, (specify) = 11947**]

Abbreviation hammer

31016 หมุดที่ยึดแผล UMDNS 12028

Hooks

A surgical instrument having a shaft-like handle, which may vary in shape but which tapers as it approaches its distal end. The distal portion of the instrument is curved or bent towards its tip which culminates in a blunt or pointed end. [GMDN = **Hooks, surgical, (specify) = 35105**]

Abbreviation hooks

31017 มีดผ่าตัด UMDNS 12239

Knife

A device used for cutting and dissection of body tissue during surgical intervention. It is typically designed as a surgical instrument with a handle and a blade of various shapes and sizes. Some devices classified as knives are designed to use other techniques to provide a cutting effect. A knife may also be used for the cutting of samples and objects other than tissue. [GMDN = **Knife, (specify) = 35130**]

Abbreviation knife

31018 เครื่องบดและขยายผิวหนัง UMDNS 13614

Mesh Graft Tissue Expansion Instrument

Manual dermatomes designed to expand large, uniform-thickness skin slices, increasing the area of damaged skin that can be covered with a given graft. These dermatomes are typically manually operated, benchtop instruments that include a drum, a handle, a graft fixation piece, and a set of cutting blades. The blades are used to perform parallel superficial cuttings on a previously excised graft (i.e., to expand the graft as a mesh), improving graft stretching capabilities and making the graft permeable to subcutaneous secretions.

Expanded mesh dermatomes facilitate skin graft conformance to the contour of damaged (e.g., burnt) skin areas.

Abbreviation meshgr

31019 ชุดห้ามเลือดในโพรงจมูก UMDNS 13886

Nasal Packing Set

A sterile gauze usually provided on a roll. The gauze may be of various widths, e.g. 1/4 inch, 1/2 inch, and may be impregnated with other compounds, e.g. petroleum jelly or povidone iodine. Surgical packing is used to fill surgical incisions that must heal in a controlled manner, usually internal to external. **[GMDN = Surgical packing = 13886]**

Abbreviation naspac

31020 เครื่องมือจับเข็มเย็บแผล UMDNS 12726

Needle Holders

A ring handled surgical instrument whose blades distal to the pivot point culminate in various shapes designed to grasp suture needles during suturing. **[GMDN = Holder, needle = 12726]**

Abbreviation neehol

31021 ชุดถอดเหล็กเย็บผิวหนัง UMDNS 16787

Off Staple Set

Handheld instruments designed for removing staples from the skin. These removers typically consist of a stainless steel, two-handle, pivoted, tonglike instrument ended in a fine point. Staple removers permit a quick removal of skin staples with minimal trauma.

Abbreviation offsta

31022 เครื่องมือสับและเกี้ยว UMDNS 12844

Osteotomeset,Gouge

Surgical instruments designed to cut and/or shape bone. These devices are typically handheld chisel-like instruments with a sharp distal end that is often beveled on both sides; they are usually stronger than surgical chisels. Dedicated osteotomes are available for several orthopedic, plastic (e.g., nasal), spinal, and oral surgery procedures; they are also used in dentistry. **Related Terms:** Osteotomes, Orthopedic [12-845] Osteotomes, Other [15-235] Osteotomes, Plastic Surgery [12-846]

Abbreviation ostgou

- 31023 กรรไกรปากเล็กตัดกระดูก UMDNS 13231
Punchs
A surgical instrument used to punch holes in bone, typically for the purposes of biopsy procedures or fixation procedures. The instrument can be ring handled, pistol grip or shaft like in design. Ring handled or pistol grip designs feature extended shafts which terminate in a punch-like or mechanical jaw mechanism at the distal tip. The shaft-like instrument is a hollow tube, sharpened on one end, and is usually used with a trocar. [GMDN = Punch, surgical, bone = 35287]
Abbreviation punches
- 31024 ชุดเข็มเจาะไต พร้อมอุปกรณ์ UMDNS 16834
Renal Biopsy Needle Set
Prepackaged collections (either custom or standard) of the necessary equipment and supplies needed to perform in vivo sampling of kidney tissue.
Abbreviation renbio
- 31025 คีมขบกระดูก UMDNS 13416
Bone Rongeurs
A surgical or dental instrument designed to remove hard or tough body tissues, e.g. cartilage or bone, by applying a biting / cutting action. The instrument is typically robust in design to withstand the forces which are applied in order to bite over such tissue. [GMDN = Rongeur, (specify) = 13416]
Abbreviation ronger
- 31026 กรรไกร UMDNS 13480
Scissors
Instruments designed to cut objects, materials, and/or tissues using two metallic (e.g., stainless steel) blades with sharp edges that slide past each other (i.e., shearing action). The blades are usually attached to handles with the proximal end conformed as a ring to facilitate holding and operation with the fingers; both parts are joined by a swivel pin in the center. Squeezing the two handles together and then pulling them apart causes the cutting edges to cut the material placed between the blades. Some scissors intended for delicate surgical procedures (e.g., ophthalmology, neurosurgery, microsurgery) have flat handles and frequently flat springs, providing a more uniform and/or sensitive manipulation. High-quality scissors are often manufactured using tungsten carbide blades to increase precision and durability; scissors intended to facilitate smooth tissue cutting with a razor-sharp edge (super-cut blade) are also available. Dedicated scissors are clinically used to cut materials (e.g., bandages, dressings, sutures), tissues during surgical (e.g., ophthalmic, plastic, obstetric), dental, and postmortem (e.g., autopsy, dissection) procedures, and also for grooming and hygienic purposes (e.g., to cut the fingernails).
Abbreviation scisso

- 31027 กล้องเมดิโอสเตอร์นิโอสโคป UMDNS 12499
 Mediasternoscope
 Endoscopes designed for percutaneous insertion in the jugular notch of the sternum (the notch on the upper border of the sternum between the clavicular notches) for visual examination, biopsy, and treatment of lesions of the tissues and organs in the cavity between the lungs (i.e., mediastinum), including the heart and its large vessels. Mediastinoscopes usually consist of a rigid outer sheath, a lighting system, and a working channel for catheters and operative devices. **Related Terms:** Endoscopes [20-475] Thoracoscopes [14-047]
Abbreviation scomed
- 31028 ชุดเย็บแผล UMDNS 13892
 Suture Set
 Prepackaged collections (either custom or standard) of the necessary equipment and supplies used to suture lacerations and other cuts, superficial wounds, etc. Typical items included in these kits are lidocaine vials, needles, syringes, sutures, suture needles, scissors, disinfectant swabs, and dressings.
Abbreviation setsut
- 31029 เครื่องมือลับคมเครื่องมือแพทย์ UMDNS 13549
 Medical Instrument Sharpeners
 A device used to create or re-establish a thin, keen edge or find point on an instrument or blade used to cut or puncture. [GMDN = Sharpener = (specify) = 13549]
Abbreviation sharp
- 31030 ฟอ์เซฟแบบซ็อน UMDNS 11791
 Sponge Forceps
 ไม่มี Definition
Abbreviation spofor
- 31031 ชุดตัดไหม UMDNS 13894
 Stitch-off Set
 Prepackaged collections (either custom or standard) of the necessary equipment and supplies used to remove nonabsorbable sutures from tissue (e.g., following wound healing, to remove sutures holding a device [e.g., an arterial catheter, a central venous catheter] in place, etc.). Typical components of suture removal kits include gauze sponges, forceps, suture cutters, suture removers, and/or suture scissors. These kits are typically provided as sterile, single-use items.
Abbreviation stioff

31032 เครื่องมือผ่าตัดเส้นเลือดขอด UMDNS 13828

Vein Stripper

A surgical instrument for excising a length or segment of a blood vessel. A stripper may be designed for excising a portion of either a vein or an artery. Vascular strippers are of two general designs : 1. a flexible stainless steel cable with a stripping cup or disk at one end and a guide tip at the other; 2. a rigid rod terminating in a closed ring or loop, i.e an external stripper. [GMDN = Stripper, surgical, blood vessel = 35377]

Abbreviation veistr

Electro surgical unit

31200 เครื่องจี้ด้วยไฟฟ้าแบบไบโพล่า UMDNS 18230

Bipolar Cautery

Electrosurgical units in which two electrodes (generally the two tips of a pair of forceps or scissors) serve as the equivalent of the active and dispersive leads in the monopolar mode. Bipolar electro-surgery is primarily used to coagulate fine tissue (e.g., in neurosurgical, gynecologic, and ophthalmic procedures).

Abbreviation bipcau

31201 เครื่องจี้และตัดด้วยไฟฟ้า UMDNS 11490

Electric Cautery

Monopolar electro-surgical units (ESU's) that are equipped with a system (typically either housed in a separate mobile cart or incorporated into the ESU generator housing) for delivery of argon gas. The electro-surgical current forms an ionized channel, or arc, within an argon gas stream that flows between the active electrode and the tissue surface. The argon-enhanced ESU can provide rapid, uniform coagulation over large bleeding surfaces such as capillary beds. **Related Terms:** Electro-surgical Units, Monopolar/Bipolar, Argon-Enhanced Coagulation [18-232] Gas Delivery Units, Argon-Enhanced Coagulation [17-738]

Abbreviation elecau

31202 เครื่องจี้และตัดด้วยไฟฟ้าพร้อมเครื่องควบคุมการจ่ายก๊าซอาร์กอน UMDNS 17739

Electrosurgical Unit Argon Plasma Coagulation

Monopolar electro-surgical units (ESU's) that are equipped with a system (typically either housed in a separate mobile cart or incorporated into the ESU generator housing) for delivery of argon gas. The electro-surgical current forms an ionized channel, or arc, within an argon gas stream that flows between the active electrode and the tissue surface. The argon-enhanced ESU can provide rapid, uniform coagulation over large bleeding surfaces such as capillary beds. **Related Terms:** Electro-surgical Units, Monopolar/Bipolar, Argon-Enhanced Coagulation [18-232] Gas Delivery Units, Argon-Enhanced Coagulation [17-738]

Abbreviation elecau-a

31203 เครื่องจี้ด้วยไฟฟ้าชนิดโมโนและไบโพลาร์ UMDNS 18231

Monopolar/Bipolar Cautery

Electrosurgical units capable of both monopolar and bipolar functionality.

Abbreviation monbip

31204 เครื่องจี้ด้วยไฟฟ้าชนิดโมโนโพลาร์ UMDNS 18229

Monopolar Cautery

Electrosurgical units in which the high-frequency electric current is delivered to the patient by an active cable and electrode and returns to unit through a return (dispersive) electrode.

Abbreviation moncau

Saw, Drill

31300 เลื่อยไฟฟ้าสำหรับตัดกระดูกหน้าอก UMDNS 16718

Electric Sternal Bone Saw

Saws, Surgical, Bone, Electric, Reciprocating, Sternum [22-764] : Electric bone surgery saws designed to cut bone and other hard tissue using a serrated blade that reciprocates alternately along the machine axis. These saws are typically small, handheld, powered instruments with an electric motor to drive the blades, an electric cable, and a detachable, toothed, curved blade. Electric bone surgery saws are used in orthopedic, cardiothoracic, and other surgical procedures to cut bone with minimal damage to the surrounding tissue.

Abbreviation stesaw

31301 เลื่อย UMDNS 13448

Saw

Instruments designed to cut objects and tissue using one or more thin metal blades with a serrated edge. Saws are single-piece, handheld, manual instruments including the blade and a handle or, less frequently, stationary, powered (e.g., electrical, pneumatic) instruments with a combination of a driving mechanism and appropriate blades; power saws may include other attachments. Dedicated saws and blades are available according to the object or tissue to be cut and the procedure to be performed (e.g., surgery, cast cutting, amputation, postmortem). **Related Terms:** Saws, Cast [22-727] Saws, Cast, Electric [16-340] Saws, Cast, Electric, Oscillating [22-734] Saws, Cast, Electric, Reciprocating [22-736] Saws, Cast, Manual [22-742] Saws, Cast, Pneumatic [17-523] Saws, Cast, Pneumatic, Oscillating [22-740] Saws, Cast, Pneumatic, Reciprocating [22-741] Saws, Laboratory, Electric, Rotary [22-786] Saws, Postmortem [15-174] Saws, Postmortem, Electric [22-750] Saws, Postmortem, Electric, Oscillating [22-751] Saws, Postmortem, Electric, Rotary [22-752] Saws, Postmortem, Manual [22-754] Saws, Postmortem, Manual, Spinal [22-755] Saws, Postmortem, Pneumatic [22-757] Saws, Surgical [22-758] Saws, Surgical, Amputation [22-759] Saws, Surgical, Amputation, Finger/Toe [22-760] Saws, Surgical, Bone [22-761] Saws, Surgical, Bone, Electric [13-450] Saws, Surgical, Bone, Electric,

Oscillating [22-762] Saws, Surgical, Bone, Electric, Reciprocating [22-763] Saws, Surgical, Bone, Electric, Reciprocating, Sternum [22-764] Saws, Surgical, Bone, Electric, Sagittal [22-766] Saws, Surgical, Bone, Manual [22-768] Saws, Surgical, Bone, Manual, Wire [22-769] Saws, Surgical, Bone, Pneumatic [13-452] Saws, Surgical, Bone, Pneumatic, Oscillating [22-774] Saws, Surgical, Bone, Pneumatic, Reciprocating [22-775]

Abbreviation saw

31302 เครื่องเลื่อยกระดูกใบหน้า **UMDNS 13449**

Saw,Bone

ไม่มี Definition

Abbreviation saw

31303 เครื่องสว่านเจาะตัดกระดูกชนิดเปลี่ยนหัวต่อได้ **UMDNS 11331**

Compact Air Drive

Drills powered by surgical handpieces and used in operative procedures on dental enamel or for dissecting bone and cartilage.

Abbreviation drilco

31304 เครื่องกรอกระดูก **UMDNS 11331/11329**

Drills

A device that is manual or powered by , e.g. air, nitrogen, battery or mains electricity ; used as a single piece or a motor piece with a number of attachments, e.g. a chuck, reaming attachment , wire inserter / guide or percussion hammer. When powered it may either have an integral drive device within it, or have a separate rotating power source connected via a remote drive unit to dedicated handpiece. The device may be cannulated to allow use over a guide wire and may be a micro or macro design. The attachments may allow use in a number of disciplines, e.g. general / plastic surgery, neurosurgery, orthopaedic surgery or dentistry.

[GMDN = Drill, (specify) = 11329]

Abbreviation drill

31305 เครื่องสว่านเจาะตัดกระดูกเปลี่ยนหัวต่อได้ขนาดเล็ก **UMDNS 11331**

Mini Compress Air

Drills powered by surgical handpieces and used in operative procedures on dental enamel or for dissecting bone and cartilage.

Abbreviation drilm

31306 ส่วนมือเจาะกระดูก UMDNS 17954

Hand Drills

A device that is made up of a power hand - piece and a variety of attachments including drill bits, burs and saw blades. This system may be powered by, e.g., air, nitrogen or a battery. This flexible configuration allows the system to be used in a number of different surgical procedures. [GMDN = **Drill, surgical, system = 37251**]

Abbreviation handri

31307 เครื่องรอกกระดูกความเร็วสูง สำหรับกระดูกสันหลังและกะโหลกศีรษะ UMDNS 11331

High Speed Drills

Drills powered by surgical handpieces and used in operative procedures on dental enamel or for dissecting bone and cartilage.

Abbreviation higdri

31308 เครื่องมือรอกกระดูกหู UMDNS 11339

Micro Drills

A device that is manual or powered by , e.g. air, nitrogen, battery or mains electricity ; used as a single piece or a motor piece with a number of attachments, e.g. a chuck, reaming attachment , wire inserter / guide or percussion hammer. The device may be cannulated to allow use over a guide wire and may be of the micro and macro design. The attachments may allow use in a number of surgical disciplines.

Abbreviation otodri

Retractor

31400 Retractor of Maxillofacial Surgery UMDNS 13387

Retractor of Maxillofacial Surgery

An instrument, used in plastic surgery, for drawing aside tissue or other body parts to expose or access underlying anatomical structure. [GMDN = **Retractor, plastic surgery = 13387**]

Abbreviation retmax

31401 เครื่องมือถ่างแผล UMDNS 13373

Retractors

A surgical instrument for separating tissue or other anatomical parts to expose or access organs or tissue to permit examination or intervention. [GMDN = **Retractor, (specify) = 13373**]

Abbreviation retrac

- 31402 เครื่องถ่างกระดูกสันหลัง UMDNS 13384
 Spinal Retractor
 ไม่มี Definition
Abbreviation spiret
- Scope (31500) ไม่มี**
- laser**
- 31600 เครื่องรักษาจอประสาทตาด้วยแสงอาร์กอนเลเซอร์ชนิดยิงภายในลูกตา UMDNS 12296
 Laser
 A laser (Light Amplification by Simulated Emission of Radiation) is a device in which input energy excites the active medium (the substrate) to emit a beam of intense, coherent, monochromatic electromagnetic radiation. This beam may be optically directed to an aperture or tissue. A laser is mostly used for surgical intervention and can be used over a large spectrum of clinical specialities. It may also be used for therapeutic purposes. Some lasers are used as positioning devices. **[GMDN = Laser, (specify) = 12296]**
- Abbreviation** laser
- 31601 เครื่องมือผ่าตัดด้วยแสงเลเซอร์สำหรับผิวหนัง UMDNS 12296
 Skin, Laser
 A laser (Light Amplification by Simulated Emission of Radiation) is a device in which input energy excites the active medium (the substrate) to emit a beam of intense, coherent, monochromatic electromagnetic radiation. This beam may be optically directed to an aperture or tissue. A laser is mostly used for surgical intervention and can be used over a large spectrum of clinical specialities. It may also be used for therapeutic purposes. Some lasers are used as positioning devices. **[GMDN = Laser, (specify) = 12296]**
- Abbreviation** lasski
- 31602 เครื่องกำเนิดแสงเลเซอร์ UMDNS 17881
 Laser Sources
 Systems designed for transmission (delivery) of laser energy from the laser generator to the tissue or organ to be treated. Laser delivery systems typically consist of fiber optics cables, waveguides, or hollow articulated arms with mirrors. **Related Terms:** Laser Delivery Systems, Fiberoptic [17-807] Laser Delivery Systems, Waveguide [17-866]
- Abbreviation** lassou

- 31603 เครื่องมือผ่าตัดด้วยแสงเลเซอร์ชนิดคาร์บอนไดออกไซด์ UMDNS 18203
Carbondioxide Laser Surgical Unit
Gas lasers with carbon dioxide as the active medium. Their emission wavelength is 10,600 nm (far infrared). These lasers are operated in continuous-wave and pulsed modes. The laser energy can be delivered to the tissue through a handpiece or through a rigid non-fiber-optic endoscope or adapted to an operating microscope. **Related Terms:** Lasers, Carbon Dioxide, Dental [18-204] Lasers, Carbon Dioxide, Surgical/Dermatologic [16-942] Lasers, Carbon Dioxide, Transmyocardial Revascularization [20-379]
Abbreviation lasco2
- Other**
- 31700 เครื่องดูดของเหลวและเลือดแรงสูงสำหรับงานผ่าตัด UMDNS 10217
High Pressure Suction
Aspirators used to evacuate large volumes of gas, fluid, tissue, or other foreign materials from a body cavity by means of deep vacuum suction during surgical procedures.
Abbreviation higsuc
- 31701 อุปกรณ์ควบคุมแรงดูด UMDNS 13325
Suction Regulator
Regulators, Suction, Surgical [15-051] : Suction regulators designed to control the high levels of negative pressure (usually from 400 to 600 mm Hg) applied at the surgical site; some regulators permit the application of full line suction from wall vacuum outlets. These regulators usually include the pressure-regulation mechanism, pressure-adjusting controls, and a calibrated manometer. Surgical suction regulators are usually a component of a suction system connected to the wall outlet of a central vacuum system; they are used to control the removal of secretions (e.g., vomitus, mucus, blood) during surgical procedures as well as secretions in wound cavities after surgery.
Abbreviation sucreg
- 31800 เครื่องทำการรักษาด้วยสัญญาณความถี่วิทยุ UMDNS 18808
Radio Frequency Ablation System
Tissue ablation radio-frequency (RF) therapy systems designed to ablate regions of solid organs (e.g., liver). These systems consist of an RF generator; interstitial or intracavitary arrays of electrodes, temperature sensors, and a feedback system for power control; and computed tomography, ultrasound, or magnetic resonance guidance. Interstitial tissue ablation systems are mostly used for coagulation necrosis of unresectable tumors at temperatures between 60 and 100 degrees C.
Abbreviation radabl

- 31801 เครื่องจี้เนื้อสมองระบบเรดิโอฟรีเควนซ์ UMDNS 18808
Radio Frequency Generator
Tissue ablation radio-frequency (RF) therapy systems designed to ablate regions of solid organs (e.g., liver). These systems consist of an RF generator; interstitial or intracavitary arrays of electrodes, temperature sensors, and a feedback system for power control; and computed tomography, ultrasound, or magnetic resonance guidance. Interstitial tissue ablation systems are mostly used for coagulation necrosis of unresectable tumors at temperatures between 60 and 100 degrees C.
Abbreviation radfre
- 31900 ชุดกำเนิดแสงของกล้องส่องตรวจ UMDNS 12343
Scope Light Source
Fiberoptic light sources that can be connected to a flexible endoscope via a flexible fiberoptic cable.
Abbreviation scolig
- 31901 เครื่องมือผ่าตัดแลปพาลอสโคปทางศัลยกรรม UMDNS 12291
Laparovideoscopic Operation Set , Surgery
Endoscopes inserted through an artificial orifice in the abdominal wall (i.e., percutaneously) for observation, diagnosis, and treatment of the organs in the abdominal cavities. These endoscopes usually include a system of relayed lens optics or fiberoptic light systems for illumination and imaging that facilitates the examination and performance of therapeutic and/or surgical procedures. Most laparoscopes incorporate camera heads that employ charged-coupled devices (CCDs) for external display, documentation, and processing of the endoscopic images. Laparoscopes are usually manufactured in two different types: one for diagnostic (viewing laparoscopes) and other for surgery (operating laparoscopes). **Related Terms:** Choledochoscopes, Laparoscopic [20-481] Endoscopes [20-475] Video Systems, Endoscopic [15-967]
Abbreviation setlap-s
- 31902 กระเป๋าพยาบาล UMDNS 12500
Medical Bag
Bags designed for transportation of medical devices, instruments, and/or supplies. These bags are typically portable, strong handheld containers made of plastic, fabric, or leather and typically include attachments for easy handling and mechanisms for closure and/or locking. The internal space is typically appropriately configured for the intended contents (e.g., stethoscopes, sphygmomanometers, drugs). Dedicated medical transportation bags are available for a variety of purposes and/or users, including specialized bags for physicians, nurses, first-aid providers, and paramedics.
Abbreviation emebag

- 31903 เครื่องแกมมาไนฟ์ UMDNS 17641
Gamma Knife
Radiosurgical stereotactic systems that use gamma radiation sources.
Abbreviation gamkni
- 31904 เครื่องตรวจหาปริมาณก๊าซดมยาสลบพร้อมอุปกรณ์ UMDNS 20177
Multigas Analyzer Monitor with Accessories
Bedside monitors designed to simultaneously and continuously sample, measure, and display the concentrations of several anesthetic gases, such as nitrogen oxide, halothane, and isoflurane. Some monitors are also capable of determining the concentrations of the anesthetic gases using the principle that different gases absorb infrared light (IR) at different wavelengths (IR spectrometry); other monitors use the change of resonant frequency in a quartz crystal as its mass increases when a special coating absorbs the anesthetic agent. Anesthetic gas monitors are used during anesthetic administration to ensure that appropriate levels of these agents are administered to patients.
Abbreviation gasmon
- 31905 เครื่องจี้ด้วยคลื่นความถี่สูง UMDNS 18049
Harmonic Scalpel
Devices designed to perform surgery using ultrasound frequency energy; the heating effect that causes tissue cutting and coagulation is provided by friction when tissue contacts with a vibrating blade. These units typically include a high frequency generator (typically frequencies of 23.5 and 55.5 kHz); a hand-piece where electrical energy is transformed into mechanical ultrasonic vibration and blades (e.g. shears) to apply the ultrasound energy to the target tissue. Ultrasound surgical units are mostly used in laparoscopic surgery procedures (e.g. splenectomy) to coagulate and cut tissue, providing proper hemostasis in vessels up to three millimeters in diameter without significant desiccation or charring. **Related Terms:** Electrosurgical Units [11-490] Microwave Surgical Units [18-840] Radiofrequency Generators [20-867] Ultrasound Therapy Systems, Tissue Ablation [18-825]
Abbreviation harsca
- 31906 โคมไฟส่องผ่าตัดชนิดสวมศีรษะ UMDNS 11963
Headlights
Devices designed to be worn on a user's head (e.g., mounted on a band or helmet) that provide a light source to aid visualization during surgical, diagnostic, or therapeutic procedures.
Abbreviation healig

- 31907 เครื่องมือยึดศีรษะคนไข้แบบเมย์ฟิลด์ UMDNS 11964
 Mayfield Headrest Set
 A device used to support, and in some cases immobilize, the patient's head during surgical procedures. It is usually affixed to an operating/examination table or chair. [GMDN = **Holder, patient, head, (specify) = 11964**]
Abbreviation heares
- 31908 เครื่องรักษามะเร็งด้วยความร้อน UMDNS 18820
 Hyperthermia Unit
 Microwave therapy systems designed to heat solid tumors several degrees Celsius above core temperature, typically from 42 degrees to 45 degrees C (108 degrees to 113 degrees F); these temperatures do not damage normal tissues. These systems include a microwave generator, appropriate delivery systems (e.g., coaxial cable), and antennas for selectively heating and maintaining the tumors at elevated temperatures. Hyperthermia microwave systems are used to treat solid malignant tumors, frequently in combination with ionizing radiation (thermoradiotherapy) or chemotherapy (thermochemotherapy). The procedure typically lasts from 30 to 60 minutes; it is usually repeated several times (e.g., every other day). **Related Terms:** Microwave Therapy Systems, Hyperthermia, Interstitial [18-822] Microwave Therapy Systems, Hyperthermia, Superficial [18-821]
Abbreviation hypert
- 31909 โคมไฟผ่าตัดใหญ่ UMDNS 12282
 Operative Lamps
 Lights that illuminate the surgical site, over a prolonged period of time, for optimal visualization of small, low-contrast objects at varying depths or through small incisions. In addition to providing enough illumination, the lights should reduce shadows and produce minimal color distortion. Also called surgical lamps, OR lights.
Abbreviation ligope
- 31910 แว่นส่องขยายสำหรับผ่าตัด UMDNS 15652
 Loupe Glass
 Convex lenses for magnifying or for concentrating light upon an object. **Related Terms :** Magnifiers, Operating [15-653]
Abbreviation loupe

31911 โต๊ะวางเครื่องมือผ่าตัดแบบเมโย UMDNS 13959
Mayo Stand

Tables including an appropriate (e.g., stainless steel) top surface with no crevices, screws, or rivets. Most tables include telescoping pedestals for height adjustment and swivel caster bases. These tables are designed for keeping and handling sterile instruments and to facilitate their cleaning and decontamination.

Related Terms : Tables, Instrument, Anesthesia [13-951] Tables, Instrument, Surgery [18-381]

Abbreviation maysta

31912 ชุดเครื่องมือตัดย่อยชิ้นเนื้อโดยใช้ระบบไฟฟ้า UMDNS 19321
Morcellators

Devices designed to divide solid tissue (e.g., tumors, the uterus) into pieces, followed by removal of the pieces (morcellation). Morcellators may consist either of a system combining an electrically powered unit and all the instruments needed for this procedure or a set of appropriate manually operated instruments (e.g., scissors, blades, grasping instruments). **Related Terms:** Arthroscopic Shaver Systems [17-918] Morcellators, Endoscopic [19-322]

Abbreviation morcel

31913 กล้องจุลทรรศน์สำหรับผ่าตัด UMDNS 12539
Operating Microscopes

Light microscopes used to magnify minute structures (e.g., nerves, vessels) in the performance of delicate surgical procedures which require high magnification and adjustable focusing. Operating microscopes typically consist of a stereo microscope (standard or modified) and a mobile floor stand or wall or ceiling mount. The microscope is usually held by an adjustable arm attached to the support mechanism. Most operating microscopes are equipped with motorized focusing, adjustable magnification systems (manual, zoom, or both), backup lamps, and inclined tubes that permit the surgeon to see the field from a vertical perspective while keeping the head erect. Dual- or multiple-observation capability and the optical integration of still, motion picture, and TV cameras are common features of these microscopes.

Abbreviation opemic

31914 โต๊ะผ่าตัดพร้อมอุปกรณ์ UMDNS 13961
Operating Tables

Tables that include an appropriate (e.g., metal, plastic) top surface supported by a fixed pedestal or a movable swivel caster base. Most tables are divided into three or more hinged sections (e.g., head, body, legs) and are raised and lowered by mechanical or hydraulic systems using manual or electric controls. These tables support the patient's body during surgical procedures, stabilizing the patient's position and providing for optimal

exposure of the surgical field. Operating tables are also designed to protect the patient from excessive manipulation, trauma, and abrasion.

Abbreviation opetab

31915 เครื่องดูดกลิ่นและควัน

UMDNS 16262

Smoke Evacuation System

Smoke evacuation systems designed to capture smoke generated during open-surgical procedures (e.g., laser surgery, electrocautery, electrosurgery) in which there is tissue ablation. These systems capture the plume (smoke composed of carbonized cell fragments, water vapor, and hydrocarbons) from vaporized tissue near its origin before it becomes air-dispersed and deposits in the respiratory tracts of the surgical team. Surgical smoke evacuation systems consist of a single-use or reusable capture tube or wand and four elements to evacuate surgical smoke: user interface, filters, suction source, and exhaust; they are used to minimize staff exposure and reduce potential health risks to create a more comfortable working environment. Some systems are also used during closed-surgical procedures (e.g., endoscopy, laparoscopy). **Related Terms:** Electrodes, Electrosurgical, Active, Foot-Controlled, Smoke Evacuation [19-328] Electrodes, Electrosurgical, Active, Hand-Controlled, Smoke Evacuation [19-327] Smoke Evacuation Systems, Surgical, Mobile/Portable [18-855] Smoke Evacuation Systems, Surgical, Stationary [18-856] Wands, Smoke Evacuation, Electrosurgical Electrode [18-175] Wands, Smoke Evacuation, Surgical Laser Handpiece [19-326]

Abbreviation smoeva

31916 เก้าอี้สำหรับนั่งผ่าตัดปรับระบบด้วยไฮดรอลิก

UMDNS 18790

Adjustable Hydrolic Surgical Stool

Height-adjustable stools that also include an adjustable backrest comfortable enough for long surgical procedures and armrests that can be appropriately placed and adjusted (e.g., swing forward, up, and down) for performing delicate and accurate surgical procedures (e.g., microsurgery). Some of these stools include a five- or six-caster base, locking casters, and/or foot-controlled mechanisms to help in keeping the operating field sterile. Microsurgery adjustable stools are used by the surgeon and also by the assistant; the assistant stool usually includes a longer armrest.

Abbreviation stool-h

31917 ชุดขาเทียมหัดเดินชั่วคราว

UMDNS 13131

Temporary Prosthesis

Functional, reconstructive, and/or cosmetic artificial or, less frequently, biological passive replacements for missing, disabled, or abnormal tissues, organs, or other body parts. These devices may be externally attached to the body (e.g., nose, earlobe, upper limb, denture) or totally or partially implanted (e.g., joint prosthesis, ossicles). Prostheses intended for insertion into tubular body structures (e.g., biliary duct,

ureter) to provide support and/or to maintain patency are usually called stents or endoprotheses; implantable prosthetic devices intended mainly for passive replacement of body parts (e.g., tooth root, ureter) are usually known as implants. Dedicated prostheses are available in many different sizes, shapes, and materials. They are used mainly in orthopedic (e.g., limbs, joints), cardiac (e.g., valves, heart ventricles), and other surgical procedures; to improve a patient's capabilities (e.g., dentures, eye lenses); and for reconstructive and/or cosmetic purposes (e.g., facial and body muscle enhancements).

Abbreviation 13131

31918 เครื่องรัดห้ามเลือดอัตโนมัติ

UMDNS 14074

Tourniquet Machine

A device primarily designed to occlude the blood flow and to obtain a bloodless field during limb surgery or amputation. It typically consists of three main components: a special cuff, a means for inflating the cuff bladder, and a controller, i.e. a pressure indicator and regulator. By using a double cuff and a switching, or automatic, valve, the pressure point is regularly changed. The device will also typically have a timer or elapsed-time meter. It may also be used in combination with intravenous local anaesthesia to limit the area affected by the anaesthesia. **[GMDN = Tourniquet, pneumatic = 14074]**

Abbreviation tourni

กลุ่มที่ 32 Urology

32000 กล้องส่องตรวจในกระเพาะปัสสาวะ

UMDNS 11112

Cystoscopes

Urinary tract endoscopes designed for visual examination, biopsy, removal or crushing of stones, and treatment of lesions of the urethra and urinary bladder. They usually consist of an outer sheath, an optical system, and a working channel for catheters and operative devices.

Abbreviation scocys

32001 กล้องส่องตรวจไต

UMDNS 15591

Renal Scope

Endoscopes designed for percutaneous insertion through an incision in the renal pelvis for visual examination, biopsy, removal or crushing of stones, and treatment of lesions of the interior of the ureters and kidneys. Nephroscopes usually consist of an outer sheath, a lighting system, and a working channel for catheters and operative devices; they may be flexible or rigid. **Related Terms:** Endoscopes, Urinary Tract [20-483] Ureterorenoscopes [17-690]

Abbreviation scoren

32002 เครื่องมือส่องตรวจและผ่าตัดต่อมลูกหมากโต UMDNS 18187

Resectoscope Set

Resectoscopes designed for transurethral removal or biopsy of lesions of the bladder, prostate, or urethra; they typically include electric cautery and coagulating capabilities. Urinary tract resectoscopes usually consist of an outer sheath, a lighting system (e.g., fiberoptic), a wide-angle telescope, electro-surgical wire loops, and a working channel for catheters and operative devices. They may also include a television camera on the distal tip, typically in the form of a microchip (a charge-coupled device [CCD]). The image is electronically transmitted through wires in the endoscope for external processing, display, and recording of video images.

Related Terms: Cystoscopes [11-112] Endoscopes, Urinary Tract [20-483]

Abbreviation scores

32003 กล้องส่องตรวจระบบทางเดินปัสสาวะพร้อมอุปกรณ์ UMDNS 18188

Fiberoptic Ureteroscope

Ureteroscopes designed with a nonrigid (i.e., flexible) structure, capable of being manipulated through the lumen of the curved path of the upper urinary tract. The sheath is usually made of plastic. **Related Terms:** Cystoscopes, Flexible [17-144] Ureterorenoscopes [17-690]

Abbreviation scouro

32100 เครื่องมือขยายท่อทางเดินปัสสาวะ UMDNS 11265

Urethral Dilator

Bougies designed to explore (e.g., to search for stones) and/or dilate the urethra. These manual, handheld devices are typically hollow metallic or plastic cylinders that often have a tapered working end. Some urethral bougies permit the introduction of an extremely slender solid tube (a filiform) through their lumen for use as a guide or for dilation of very thin strictures. **Related Terms:** Bougies, Urethra, Filiform [21-007] Catheters, Urinary, Urethral, Dilatation [18-738] Dilators, Urethral [11-265] Sounds, Urethral [13-643]

Abbreviation dilure

32101 ชุดสวนกระเพาะปัสสาวะ UMDNS 16781

Retains Foley's Cath Set

Prepackaged collections (either custom or standard) of the equipment and supplies needed for inserting a Foley urinary catheter into the bladder via the patient's urethra. Foley urinary catheters are for single use and are intended to remain in the bladder for an extended period of time. Typical components of these kits include the materials used for prepping the patient (e.g., sterile drape, germicide, underpad, sterile gloves, cotton/ rayon balls, forceps), as well as the supplies needed for catheter insertion (e.g., lubricant, urinary catheter, syringe for inflating the Foley balloon). Containers for collecting and/or measuring the urine (e.g.,

urine collection bags, urinometers) and urine drainage tubing are also usually included. These kits are typically packaged as sterile, single-use items. **Related Terms:** Catheters, Urinary, Urethral, Drainage, Self-Retained [10-720] Urinary Collection Bags [14-298]

Abbreviation folcat

32102 ชุดล้างกระเพาะปัสสาวะ UMDNS 10406
Bladder Irrigation Set

Prepackaged collections of the necessary equipment and supplies for the liquid cleansing of the urinary bladder for treatment of inflammation or infection. Items in these kits include a syringe, a container, a tip protector, a waterproof drape, and an alcohol prep pad.

Abbreviation irrset

32103 เครื่องขบนิ้วในกระเพาะปัสสาวะ UMDNS 16471
Bladder Stone Compression

เครื่องขบนิ้ว

Abbreviation stocom

32104 เครื่องมือระบายปัสสาวะทางหน้าท้อง UMDNS 16421
Suprapubic Trocar Cystostomy

แทงเหล็กเจาะกระเพาะปัสสาวะ

Abbreviation suptro

32105 โต๊ะตรวจระบบทางเดินปัสสาวะ UMDNS 13969
Urological Examination Table

Adjustable examination/treatment tables including an appropriate (e.g., metal, plastic) top surface supported by a fixed pedestal. Most tables include knee crutches and traction handles and may be raised, lowered, and tilted by mechanical or hydraulic systems using manual or electric controls; also, they may incorporate supports for irrigation containers and instrument trays. These tables support the patient's body in adequate position during urological examinations, cystoscopic procedures, and both transurethral and open surgery of the urinary tract.

Abbreviation taburo

32106 เครื่องตรวจวัดอัตราการไหลของปัสสาวะ UMDNS 14308
Urine Flow Meter

Systems designed to measure and evaluate the storage and transportation of urine in the urinary tract. Uroflowmeters are used in diagnosing neurogenic bladder diseases, stress incontinence, urinary path obstructions, and spastic sphincters.

Abbreviation uriflo

32107 เครื่องตรวจวินิจฉัยการทำงานของกระเพาะปัสสาวะ

UMDNS 14307

Urodynamic

Systems designed to measure and evaluate the storage and transportation of urine in the urinary tract. These systems consist of a set of units that are combined to perform all the measurement functions as well as display and recording devices. The systems include uroflowmeters and uroflow transducers for external measuring of the urinary flow, volume voided, peak flow, and voiding time; manometers to determine the urethral pressure profile; cystometers either liquid or gaseous to measure bladder capacity and response; and recorders with appropriate sensors to assess sphincter and other muscle activity. Many systems also include video urodynamics capabilities to allow radiographic and urodynamic studies to be performed with synchronous display and recording of urodynamic studies and cystourethrography imaging. Urodynamic measuring systems are used in diagnosing neurogenic bladder diseases, stress incontinence, urinary path obstructions, and spastic sphincters.

Abbreviation urodyn

ภาคผนวก



คำสั่งกระทรวงสาธารณสุข

ที่ 56 / 2551

เรื่อง แต่งตั้งคณะกรรมการพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์

ตามที่ สำนักนโยบายและยุทธศาสตร์ สำนักงานปลัดกระทรวงสาธารณสุข มีบทบาทหน้าที่หนึ่งในการบริหารจัดการข้อมูล พัฒนาคุณภาพข้อมูลและสารสนเทศสุขภาพ ให้สามารถนำไปใช้ในการวางแผนงานด้านสุขภาพต่างๆ ได้อย่างมีประสิทธิภาพ เพื่อการสร้างสุขภาพที่ดีให้กับประชาชนไทย ดังนั้นจึงต้องการข้อมูลที่ถูกต้อง ครบถ้วน มีความหมาย และทันกาล ฉะนั้นระบบบริหารจัดการข้อมูลทางการแพทย์และสุขภาพที่ดี จำเป็นต้องอาศัยฐานรากของข้อมูลเป็นสำคัญ เช่น รหัสมาตรฐานด้านสุขภาพต่าง ๆ และสำนักนโยบายและยุทธศาสตร์ ได้รับอนุมัติให้จัดตั้งศูนย์มาตรฐานรหัสและข้อมูลสุขภาพแห่งชาติ ซึ่งอยู่ในความรับผิดชอบของกลุ่มภารกิจด้านข้อมูลข่าวสารและสารสนเทศสุขภาพ โดยมีภารกิจหลักในการพัฒนามาตรฐานรหัสด้านสุขภาพนั้น

ในการนี้ สำนักนโยบายและยุทธศาสตร์ จะดำเนินการพัฒนาและจัดทำมาตรฐานรหัสเครื่องมือแพทย์ให้มีมาตรฐานกลาง เพื่อประโยชน์ในการประสานและเชื่อมโยงข้อมูลได้ในระดับประเทศ ทำให้การบริหารจัดการในระบบสุขภาพมีประสิทธิภาพยิ่งขึ้น ซึ่งในปัจจุบันนี้ในแต่ละหน่วยงานมีความหลากหลายในการใช้รหัสเครื่องมือแพทย์ ทำให้ไม่สามารถเชื่อมโยงข้อมูลได้ ดังนั้น สำนักนโยบายและยุทธศาสตร์ จึงขอแต่งตั้งคณะกรรมการพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์ โดยคณะกรรมการดังกล่าวมาจากหน่วยงานที่เกี่ยวข้อง ดังมีรายชื่อและบทบาทหน้าที่ ดังนี้

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|--------------------------------|--|----------------------|
| 1. นพ.ศุภกิจ ศิริลักษณ์ | ผู้อำนวยการสำนักนโยบายและยุทธศาสตร์ | ที่ปรึกษา |
| 2. นพ.ณรงค์ กฤษิติประดิษฐ์ | รองผู้อำนวยการสำนักนโยบายและยุทธศาสตร์ | ประธาน
คณะกรรมการ |
| 3. พล.ท. อิศระชัย จุลโมกข์ | โรงพยาบาลพระมงกุฎเกล้า | คณะกรรมการ |
| 4. พ.ท.หญิง สมหมาย สัมมาจันทร์ | โรงพยาบาลพระมงกุฎเกล้า | คณะกรรมการ |

5. นพ.ชัยโรจน์ ซึ่งสนธิพร	สำนักงานกลางสารสนเทศบริการสุขภาพ	คณะทำงาน
6. ผศ.นพ. วรรณษา เปาอินทร์	คณะแพทยศาสตร์ มหาวิทยาลัยธรรมศาสตร์	คณะทำงาน
7. นายสุรศักดิ์ ปริสัณญกุล	ผู้อำนวยการกองรังสีและเครื่องมือแพทย์ กรมวิทยาศาสตร์การแพทย์	คณะทำงาน
8. ญ.ยุวดี พัฒนวงศ์	ผู้อำนวยการกองควบคุมเครื่องมือแพทย์ สำนักงานคณะกรรมการอาหารและยา	คณะทำงาน
9. นายชาพล รัตนพันธุ์	กองควบคุมเครื่องมือแพทย์ สำนักงานคณะกรรมการอาหารและยา	คณะทำงาน
10. ผู้แทนกองงานด้านอาหาร และยา	สำนักงานคณะกรรมการอาหารและยา	คณะทำงาน
11. นายวิชัย จิตติกรยุทธนา	หัวหน้ากลุ่มเทคโนโลยีสารสนเทศ กรมสนับสนุนบริการสุขภาพ	คณะทำงาน
12. นายธันวา โทณวิรัตน์	กองวิศวกรรมการแพทย์ กรมสนับสนุนบริการสุขภาพ	คณะทำงาน
13. นพ.ถาวร สกุลพานิชย์	สำนักงานหลักประกันสุขภาพแห่งชาติ	คณะทำงาน
14. นางวิไลลักษณ์ วิสาสะ	สำนักงานหลักประกันสุขภาพแห่งชาติ	คณะทำงาน
15. นายชฎิล สุภวรรณกิจ	ผู้อำนวยการกลุ่มพัฒนาระบบการจัดซื้อ จัดจ้างภาครัฐ กรมบัญชีกลาง	คณะทำงาน
16. นพ.พินิจ ฟ้าอำนวยผล	ผู้อำนวยการสำนักพัฒนาระบบ ข้อมูลข่าวสารสุขภาพ	คณะทำงาน
17. พ.ท. หญิง พรพิมล นักร้า	กองส่งกำลังบำรุง กรมแพทย์ทหารบก	คณะทำงาน
18. นายประเสริฐ เสริมสุข	หัวหน้างานอุปกรณ์ทางการแพทย์ โรงพยาบาลศิริราช	คณะทำงาน
19. นายสันสกฤต รักประเทศ	งานอุปกรณ์ทางการแพทย์ โรงพยาบาลศิริราช	คณะทำงาน
20. นางฉันทจิต พ่วงทิพากร	โรงพยาบาลจุฬาลงกรณ์	คณะทำงาน
21. นางมัลลิกา ลดาวัลย์ ณ อยุธยา	ผู้จัดการสมาคมอุตสาหกรรมเทคโนโลยี เครื่องมือแพทย์	คณะทำงาน
22. นางมะลิวัลย์ ยืนยงสุวรรณ	สำนักนโยบายและยุทธศาสตร์	คณะทำงานและ เลขานุการ

23. นางเหมวรรณ ศิริรัตน์	สำนักนโยบายและยุทธศาสตร์	คณะทำงานและ ผู้ช่วยเลขานุการ
24. น.ส. กัญญาวิรี สักวาลัยรุจิ	สำนักนโยบายและยุทธศาสตร์	คณะทำงานและ ผู้ช่วยเลขานุการ

โดยคณะทำงานพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์ มีบทบาทและหน้าที่ ดังนี้

1. ศึกษาและวิเคราะห์รหัสเครื่องมือแพทย์ที่มีอยู่ในต่างประเทศและในประเทศไทย และหน่วยงานที่เกี่ยวข้อง
2. พิจารณาแนวทางการดำเนินการพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์ให้เหมาะสมสำหรับการใช้งานในประเทศไทย
3. พัฒนา ปรับปรุง และจัดทำร่างมาตรฐานกลางรหัสเครื่องมือแพทย์
4. พิจารณาแนวทาง พร้อมข้อเสนอแนะระบบและกลไกในการบำรุงรักษารหัสมาตรฐานกลางเครื่องมือแพทย์ ต่อไปในอนาคต
5. อื่น ๆ ที่เกี่ยวข้อง

ทั้งนี้ ตั้งแต่บัดนี้เป็นต้นไป

สั่ง ณ วันที่ 18 มกราคม พ.ศ. 2551

จักรธรรม ธรรมศักดิ์
รองปลัดกระทรวง รักษาราชการแทน
ปลัดกระทรวงสาธารณสุข

สำเนาถูกต้อง
มะลิวัลย์ ยืนยงสุวรรณ
(นางมะลิวัลย์ ยืนยงสุวรรณ)
เจ้าหน้าที่เวชสถิติ 7

ตำนาน

อนุสนธิคำสั่งกระทรวงสาธารณสุข

ที่ 550 / 2551

เรื่อง ณะทำงานพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์

ตามที่ คำสั่งกระทรวงสาธารณสุข ที่ 56/2551 ลงวันที่ 18 มกราคม 2551 ได้แต่งตั้ง ณะทำงานพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์ ไปแล้วนั้น เนื่องจากเครื่องมือแพทย์ที่ใช้อยู่ ในระบบปัจจุบัน มีความหลากหลาย และเพื่อให้การทำงานพัฒนามาตรฐานรหัสเครื่องมือแพทย์มี ความคล่องตัว และรวบรวมข้อมูลได้ครอบคลุม ครบถ้วน จึงมอบหมายและมีคำสั่งให้คณะทำงาน กลุ่มย่อย และส่วนที่มีรายชื่อเพิ่มเติม ดำเนินการพัฒนามาตรฐานกลางรหัสเครื่องมือแพทย์ โดย ศึกษา วิเคราะห์ และรวบรวมรหัสเครื่องมือแพทย์ที่มีอยู่ในระบบการใช้งานในหน่วยงานที่เกี่ยวข้อง และร่างรายละเอียดรหัสเครื่องมือแพทย์ และแนวทางการจัดกลุ่ม (Classification) ที่เหมาะสม สำหรับการใช้งานในประเทศไทย พร้อมทั้งพิจารณาร่างแนวทางข้อเสนอแนะระบบและกลไกใน การบำรุงรักษารหัสมาตรฐานกลางเครื่องมือแพทย์ เพื่อเสนอคณะทำงานพัฒนามาตรฐานกลางรหัส เครื่องมือแพทย์ต่อไป โดยมีรายชื่อ ดังนี้

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|---------------------------------|--|----------------|
| 1. พล.ท. อิศระชัย จุลโมกษ์ | โรงพยาบาลพระมงกุฎเกล้า | ประธานคณะทำงาน |
| 2. พ.ท.หญิง สมหมาย สัมมาพันธ์ | โรงพยาบาลพระมงกุฎเกล้า | คณะทำงาน |
| 3. พ.ท.หญิงพรพิมล นักร้า | กองส่งกำลังบำรุง กรมแพทย์ทหารบก | คณะทำงาน |
| 4. นายธันวา โทณวิรัตน์ | กองวิศวกรรมการแพทย์
กรมสนับสนุนบริการสุขภาพ | คณะทำงาน |
| 5. นายประเสริฐ เสริมสุข | หัวหน้างานอุปกรณ์ทางการแพทย์
โรงพยาบาลศิริราช | คณะทำงาน |
| 6. นายสันสกฤต รัทประเทศ | งานอุปกรณ์ทางการแพทย์
โรงพยาบาลศิริราช | คณะทำงาน |
| 7. นางมัลลิกา ลดาวัลย์ ณ อยุธยา | ผู้จัดการสมาคมอุตสาหกรรม
เทคโนโลยีเครื่องมือแพทย์ | คณะทำงาน |

8. นางไสวรินทร์ เรืองแสง	สมาคมอุตสาหกรรมเทคโนโลยีเครื่องมือแพทย์	คณะทำงาน
9. นายจรูญ ปิตะเหล็ก	หน่วยงานอุปกรณ์ชีวการแพทย์ โรงพยาบาลราชวิถี	คณะทำงาน
10. ผศ.สมศรี ดาวฉาย	ผู้อำนวยการ โครงการวิจัยและ พัฒนาอุปกรณ์ชีวการแพทย์ ม.มหิดล	คณะทำงาน
11. นางสาววิภาดา ลอยฟ้า	หัวหน้ากลุ่มพัฒนาข้อมูลทรัพยากรสุขภาพ สำนักนโยบายและยุทธศาสตร์	คณะทำงาน
12. นางมะลิวัลย์ ยืนยงสุวรรณ	หัวหน้ากลุ่มพัฒนามาตรฐานรหัสด้านสุขภาพ สำนักนโยบายและยุทธศาสตร์	คณะทำงาน และเลขานุการ
13. น.ส. กัญญาวิรี์ สังกวาลัยวรุดิ	กลุ่มพัฒนามาตรฐานรหัสด้านสุขภาพ สำนักนโยบายและยุทธศาสตร์	คณะทำงาน และผู้ช่วยเลขานุการ

ทั้งนี้ ตั้งแต่บัดนี้เป็นต้นไป

สั่ง ณ วันที่ 2 มิถุนายน พ.ศ. 2551

จักรธรรม ธรรมศักดิ์

รองปลัดกระทรวง รักษาราชการแทน

ปลัดกระทรวงสาธารณสุข

สำเนาถูกต้อง

มะลิวัลย์ ยืนยงสุวรรณ

(นางมะลิวัลย์ ยืนยงสุวรรณ)

เจ้าหน้าที่เวชสถิติ 7