

AML

DEMOCRATISING MEDICAL INTELLIGENCE

HEALTHCARE NAVIGATOR

Decoding Medical Specialists: Your Guide to Expert Care

Understand who does what in healthcare for informed decision-making.

Navigating the vast landscape of modern medicine can feel overwhelming. This guide is designed to clarify the roles of different medical specialists, providing a clear map to understanding expertise in healthcare. By demystifying who does what, you can approach health decisions with greater confidence and clarity.

aimedilabs.com/resources

The Foundation: General Practitioners and Primary Care

General Practitioners (GPs) serve as the cornerstone of healthcare, offering comprehensive primary care for individuals across all ages. They are typically the first point of contact for non-emergency medical concerns, providing initial diagnosis, treatment for common illnesses, and ongoing management of chronic conditions. GPs play a crucial role in preventive health, offering screenings and vaccinations, and are responsible for coordinating care by referring individuals to specialist physicians when advanced expertise is required.

- ☐ Routine check-ups and physical exams
- ☐ Management of common acute illnesses
- ☐ Chronic disease management (e.g., diabetes)
- ☐ Preventative care and health screenings
- ☐ Vaccinations and immunizations
- ☐ Referrals to medical specialists

Your Health Navigator

Regular visits to a GP are key for maintaining health, catching potential issues early, and navigating the complex healthcare system efficiently.

HEALTHCARE JOURNEY FLOW



Heart, Lungs, and Blood Vessels: Cardiology and Pulmonology

Cardiology is the medical specialty focused on the diagnosis and treatment of conditions affecting the heart and blood vessels. This includes managing heart rhythm disorders, heart failure, and coronary artery disease.

Pulmonology is dedicated to the health of the lungs and respiratory system, addressing conditions such as asthma, chronic obstructive pulmonary disease (COPD), and lung infections. These two fields often overlap due to the close physiological relationship between the circulatory and respiratory systems.

- Cardiology Focuses On: Heart attacks, arrhythmias, hypertension, congenital heart defects, valvular heart disease.
- Pulmonology Focuses On: Asthma, bronchitis, pneumonia, emphysema, sleep apnea, cystic fibrosis, lung cancer.

Interconnected Systems

Cardiovascular and respiratory health are deeply linked; issues in one system can significantly impact the other, underscoring the importance of specialized care.

CARDIOLOGY VS. PULMONOLOGY

Specialty	Primary Organs	Common Conditions
Cardiology	Heart, Blood Vessels	CAD, Arrhythmias, HTN
Pulmonology	Lungs, Airways	Asthma, COPD, Pneumonia

Digestion, Metabolism, and Hormones: Gastroenterology and Endocrinology

Gastroenterology is the branch of medicine concerned with the entire digestive system, from the esophagus to the rectum, including organs like the stomach, intestines, liver, and pancreas. Specialists in this field manage disorders of digestion, nutrient absorption, and waste elimination. Endocrinology is dedicated to the endocrine system, which comprises glands that produce hormones, influencing metabolism, growth, reproduction, and overall bodily functions. These specialists address conditions like diabetes, thyroid disorders, and adrenal gland issues.

- Gastroenterology covers: Inflammatory bowel disease, acid reflux, ulcers, gallstones, irritable bowel syndrome, hepatitis, pancreatitis.
- Endocrinology covers: Diabetes mellitus, thyroid disorders (hypo/hyperthyroidism), osteoporosis, pituitary disorders, adrenal gland dysfunction, polycystic ovary syndrome.

Systemic Impact

Dysfunction in digestive or hormonal systems can have widespread effects on energy levels, mood, weight, and long-term health, necessitating expert evaluation.

KEY BODY REGULATORS

20+

hormones regulated by endocrinologists

9m

US adults with digestive disease

Kidney, Urinary, and Reproductive Systems: Nephrology and Urology

Nephrology is the medical specialty focusing on kidney health, including the diagnosis and treatment of kidney diseases, fluid and electrolyte imbalances, and the management of patients requiring dialysis or kidney transplantation. Urology encompasses the entire urinary tract in both men and women (kidneys, ureters, bladder, urethra) and the male reproductive system. Urologists perform surgical and non-surgical treatments for conditions like kidney stones, urinary incontinence, and prostate disorders.

- ☐ Nephrology Handles: Chronic kidney disease, acute kidney injury, electrolyte disorders, hypertension related to kidney disease, end-stage renal disease.
- ☐ Urology Handles: Kidney stones, urinary tract infections (UTIs), benign prostatic hyperplasia (BPH), bladder dysfunction, erectile dysfunction, male infertility, bladder cancer.

Vital Filtration and Flow

The kidneys are critical for filtering waste and maintaining fluid balance, while the urinary tract ensures efficient waste expulsion, both essential for life.

COMMON KIDNEY & URINARY CONCERNS



Brain, Nerves, and Spine: Neurology and Neurosurgery

Neurology focuses on the diagnosis and non-surgical treatment of disorders affecting the brain, spinal cord, and peripheral nerves. Conditions managed by neurologists include epilepsy, Parkinson's disease, multiple sclerosis, stroke, and certain types of headaches. Neurosurgery, conversely, is a surgical specialty dedicated to the prevention, diagnosis, treatment, and rehabilitation of disorders that affect any portion of the nervous system. Neurosurgeons perform procedures for brain tumors, spinal cord injuries, aneurysms, and nerve compression.

- Neurology: Conditions like stroke, seizures, dementia, migraines
- Neurosurgery: Surgical intervention for tumors, trauma, spinal issues

When to See Which Specialist

Neurologists manage medical conditions of the nervous system. Neurosurgeons address structural problems requiring surgical repair or intervention.

NEUROLOGY VS. NEUROSURGERY

Specialty	Primary Focus	Treatment Type
Neurology	Nervous system diseases	Medical/Non-surgical
Neurosurgery	Structural nervous issues	Surgical

Bones, Joints, and Muscles: Orthopedics and Rheumatology

Orthopedics is the medical specialty focused on injuries and diseases of the musculoskeletal system, encompassing bones, joints, ligaments, tendons, muscles, and nerves. Orthopedic surgeons manage conditions ranging from fractures and sports injuries to degenerative joint diseases, often through both surgical and non-surgical means. Rheumatology specializes in the diagnosis and treatment of inflammatory and autoimmune conditions that affect joints, muscles, and connective tissues. Rheumatologists manage systemic diseases such as rheumatoid arthritis, lupus, gout, and various forms of vasculitis.

- ☐ Orthopedics: Fractures, sprains, torn ligaments, joint replacements
- ☐ Rheumatology: Autoimmune arthritis, lupus, gout, fibromyalgia

Understanding Musculoskeletal Care

Orthopedists address mechanical and injury-related issues, often with surgical options, while rheumatologists manage systemic inflammatory conditions primarily with medication.

MUSCULOSKELETAL HEALTH INSIGHTS

206

Bones in adult body

100+

Types of arthritis

80%

Adults with back pain

Skin, Hair, and Nails: The Dermatologist

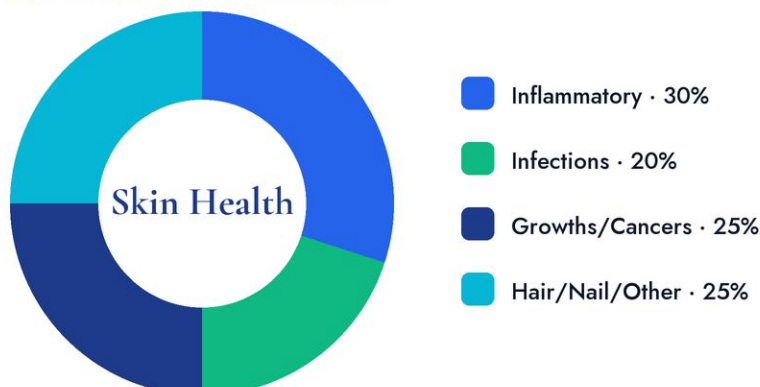
Dermatology is the medical field dedicated to the diagnosis and treatment of conditions affecting the skin, hair, and nails, as well as mucous membranes. Dermatologists manage a vast array of issues, from common ailments like acne, eczema, and psoriasis to more complex autoimmune skin diseases. This specialty also plays a crucial role in detecting and treating various types of skin cancer. They perform diagnostic biopsies, administer topical and systemic therapies, and conduct minor surgical procedures.

- Common conditions: Acne, eczema, psoriasis, rosacea
- Hair disorders: Hair loss, scalp conditions
- Nail issues: Fungal infections, ingrown nails
- Skin cancer: Diagnosis and treatment of melanoma, basal cell, squamous cell

Importance of Skin Checks

Regular professional skin examinations are vital for the early detection of suspicious moles and skin cancers, which can significantly improve treatment outcomes.

DERMATOLOGICAL CONDITIONS



Cancer and Blood Disorders: Oncology and Hematology

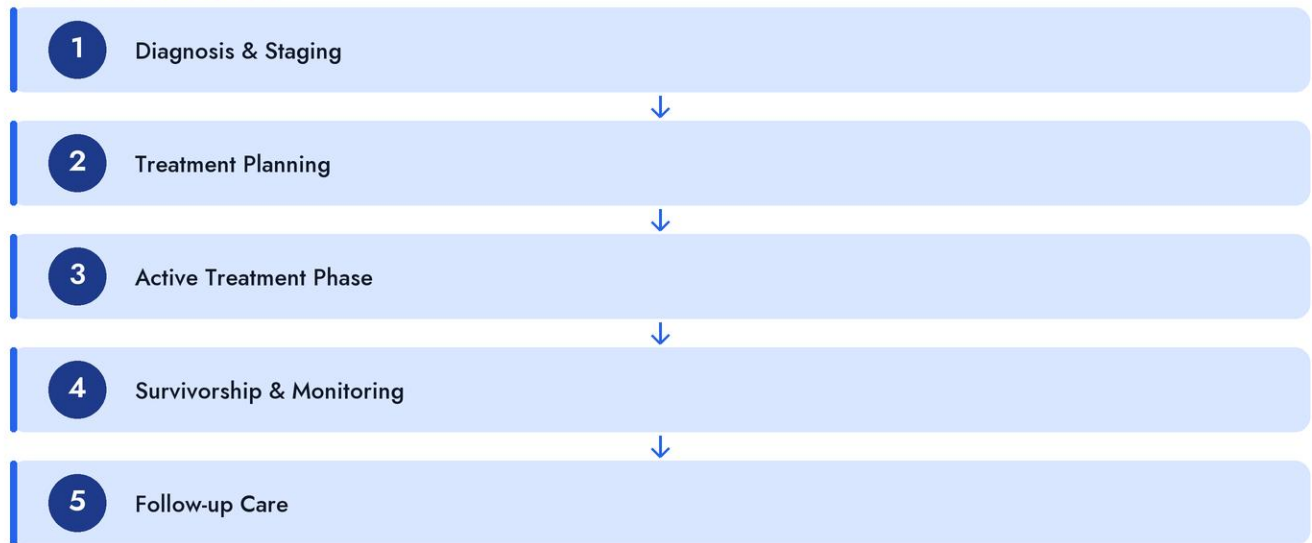
Oncology is the branch of medicine focused on the prevention, diagnosis, and treatment of cancer. Oncologists develop comprehensive treatment plans, which can include chemotherapy, radiation therapy, targeted therapies, immunotherapy, or hormonal therapy, often collaborating with surgical and radiation oncologists. Hematology is the study of blood, blood-forming organs, and blood diseases, involving the diagnosis and treatment of conditions such as anemia, clotting disorders, hemophilia, and blood cancers like leukemia and lymphoma. Hematologists often work closely with oncologists when treating blood-related cancers.

- Oncology: Solid tumor cancers, staging, treatment planning
- Hematology: Anemia, bleeding disorders, leukemia, lymphoma, myeloma

Multidisciplinary Approach

Care for cancer and complex blood disorders often involves a team of specialists to provide comprehensive, individualized treatment strategies.

CANCER CARE JOURNEY



Women's Health Through the Lifespan: Gynecology and Obstetrics

Gynecology focuses on the health of the female reproductive system, addressing conditions of the uterus, ovaries, fallopian tubes, cervix, and vagina throughout a woman's life, excluding pregnancy. Obstetricians specialize in pregnancy, childbirth, and the postpartum period, providing comprehensive care from conception through delivery and recovery. These specialists manage a wide range of reproductive health concerns, perform crucial screenings, and guide patients through significant life stages.

- ☐ Routine gynecological exams
- ☐ Contraceptive counseling and management
- ☐ Pregnancy planning and prenatal care
- ☐ Management of menstrual irregularities
- ☐ Menopause symptom assessment and care

Comprehensive Care

Gynecologists and obstetricians offer continuous care, from adolescent reproductive health to fertility challenges, pregnancy management, and menopausal transitions, ensuring tailored support at every stage.

KEY STAGES OF WOMEN'S REPRODUCTIVE HEALTH



Caring for Children: Pediatricians and Pediatric Subspecialties

Pediatricians are medical doctors who provide comprehensive healthcare for infants, children, and adolescents, typically from birth through age 18 or 21. Their expertise includes preventive care, diagnosis and treatment of acute and chronic illnesses, and monitoring growth and development milestones. Pediatric subspecialists offer focused care for complex conditions, covering areas such as cardiology, oncology, neurology, and endocrinology in young patients.

- Routine well-child check-ups and physicals
- Vaccinations and immunization schedules
- Management of common childhood illnesses
- Developmental and behavioral screenings
- Nutritional guidance for optimal growth

Foundation for Future Health

Regular pediatric care is vital for monitoring healthy development, addressing emerging health concerns early, and establishing a strong foundation for lifelong well-being in children.

COMMON PEDIATRIC SUBSPECIALTIES

Specialty	Focus Area
Pediatric Cardiology	Heart conditions
Pediatric Neurology	Brain & nervous system
Pediatric Endocrinology	Hormone disorders
Pediatric Gastroenterology	Digestive system
Pediatric Oncology	Cancers in children

Eyes, Ears, Nose, and Throat: Ophthalmology and Otolaryngology

Ophthalmologists are medical and surgical specialists focused on the eyes and vision, providing comprehensive care for various eye conditions, performing intricate surgeries, and prescribing corrective lenses.

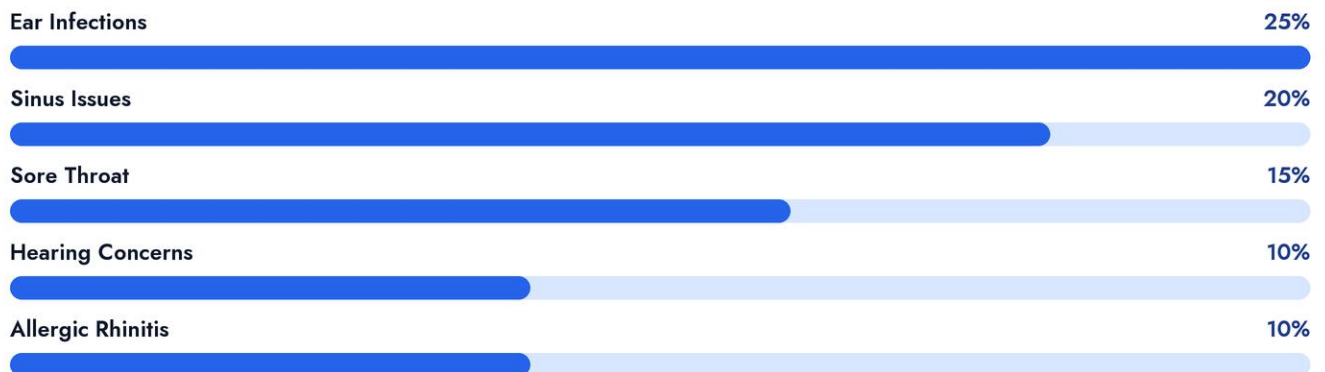
Otolaryngologists, often referred to as ENT specialists, manage disorders of the ear, nose, throat, and related structures of the head and neck. They address issues ranging from hearing loss and sinus problems to voice disorders and head and neck tumors.

- ☐ Vision screenings and comprehensive eye health exams
- ☐ Cataract and glaucoma management
- ☐ Hearing loss assessment and rehabilitation
- ☐ Chronic sinusitis and allergy treatment
- ☐ Voice and swallowing function evaluations

Sensory System Specialists

These specialists play a crucial role in maintaining vital sensory functions, ensuring clear vision, effective hearing, and proper function of the respiratory and digestive upper tracts.

COMMON REASONS FOR ENT CONSULTATIONS



Immunity, Allergies, and Infections: Immunology and Infectious Disease

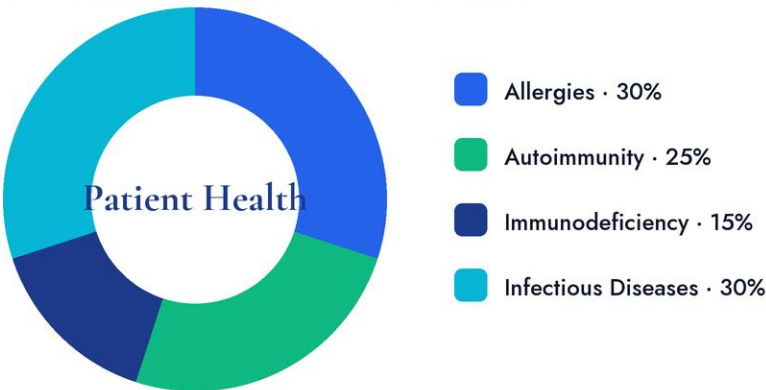
Immunologists specialize in the study and treatment of the immune system, addressing conditions such as allergies, asthma, autoimmune diseases, and immunodeficiency disorders. Infectious disease specialists diagnose, treat, and manage infections caused by bacteria, viruses, fungi, and parasites. These physicians often work together to understand the body's response to pathogens and to develop effective treatment strategies.

- Diagnosis and management of severe allergies
- Treatment of autoimmune conditions
- Evaluation of immunodeficiency disorders
- Management of complex or rare infections
- Guidance on infection prevention and control

Defense System Expertise

These fields are critical for understanding how the body defends itself, identifying when the immune system malfunctions, and effectively combating microbial threats to health.

CORE AREAS OF IMMUNE & INFECTION CARE



Understanding Mental Health: Psychiatry and Psychology

Mental health encompasses emotional, psychological, and social well-being, influencing cognition, behavior, and daily functioning. Psychiatry and psychology are distinct yet often collaborative fields dedicated to understanding and addressing mental health concerns. Psychiatrists are medical doctors who focus on the biological aspects of mental health, diagnosing conditions and prescribing medication, while psychologists are non-medical professionals who specialize in understanding behavior, emotions, and thought processes, primarily through various forms of therapy.

- Psychiatrist: A medical doctor (MD) trained in mental health, capable of prescribing medication, ordering medical tests, and providing psychotherapy.
- Psychologist: Typically holds a PhD or PsyD, focuses on psychotherapy, psychological testing, and research, but cannot prescribe medication in most jurisdictions.

Holistic Mental Healthcare

For comprehensive care, individuals often benefit from a team approach, combining psychiatric medication management with psychological therapy to address both biological and psychosocial factors influencing mental well-being.

PSYCHIATRIST VS. PSYCHOLOGIST

Role Focus	Primary Tools
Medical Diagnosis	Medication, hospital care
Therapy & Behavior	Counseling, assessments

Emergency, Diagnostic, and Rehabilitative Medicine

These three areas represent critical stages in patient care, addressing acute events, uncovering health conditions, and restoring function. Emergency medicine provides immediate care for sudden illnesses or injuries, often in critical situations requiring rapid assessment and intervention. Diagnostic medicine utilizes specialized tests, such as imaging and laboratory analysis, to accurately identify diseases and conditions. Rehabilitative medicine, through various therapies, aims to help individuals regain maximum physical, cognitive, and functional abilities following illness, injury, or surgery.

- ☐ Emergency Medicine: Focuses on life-threatening conditions, trauma, and acute medical crises.
- ☐ Diagnostic Medicine: Involves specialists like radiologists and pathologists for accurate disease identification.
- ☐ Rehabilitative Medicine: Encompasses physical therapy, occupational therapy, and speech-language pathology to improve daily living.

Integrated Care Pathway

A patient's journey through the healthcare system can often involve a seamless transition from emergency stabilization to diagnostic confirmation, followed by a personalized rehabilitation plan to ensure optimal recovery and quality of life.

KEY ASPECTS OF ACUTE & RECOVERY CARE

Immediate

Emergency care focus

Precise

Diagnostic clarity goal

Restorative

Rehabilitation aim

Key takeaways

- 1 Primary care doctors are often the first point of contact for most health concerns.
- 2 Specialists focus on specific body systems, diseases, or patient populations.
- 3 Referrals from a general practitioner often streamline access to specialized care.
- 4 Understanding a specialist's focus helps in identifying the appropriate expert.
- 5 Healthcare involves a team approach, with various specialists collaborating.
- 6 This guide empowers individuals to better understand their healthcare options.

AML

DEMOCRATISING MEDICAL INTELLIGENCE

Empowered with this knowledge, you are better equipped to understand the diverse world of medical expertise. Use this guide as a resource to navigate healthcare discussions with informed confidence.

Follow [@aimedilabs](#) for more health education

Evidence-based health & wellness, simplified.

aimedilabs.com/resources