



ALLIED HEALTH PROFESSIONS



Allied Health Professions



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What is allied health?

What's in it for me?

- The **Health Professions Network (HPN)** is a group of volunteers representing health professional associations interested in interdisciplinary communication, discussion, and collaboration, working to positively influence the delivery of quality health care
- The initial meeting to form the HPN was held in August 1995 in Norfolk, VA.
- Ten years later, the HPN continues to be a leading voice on behalf of all allied health professions as they come together and address the many challenges facing the US health care system.

What do you want to be when you grow up?

Little kids often say ..

- Doctor (pediatrician)
- Nurse
- Fireman
- Policeman
- Teacher
- etc



**But you're not a kid any more . . . And it's time
to weigh your options for the future**

How do I get there?
(And where is "there" for me?)

**What about medicine
or nursing?**



Want to become a doctor?

- Very rewarding and honorable career
- Lengthy and challenging education and training (4 yrs college, 5 yrs med school, 2 or more yrs residency)
- Selective process (many applicants for every one medical school spot)
- More than 50% of med students are now women
- Lifetime learning and maintenance of licensure and certification is expected

Want to be a nurse?

- Like medicine, nursing is a noble and rewarding career, and there is no doubt that we need more of them
- With nationwide shortage of nurses, many hospitals have openings and offer educational assistance/hiring bonuses
- More men are becoming nurses
- Three major paths to becoming an RN (associate degree, diploma, bachelors)
- Advanced opportunities include nurse practitioner, clinical nurse specialist, nurse anesthetist, and nurse-midwife

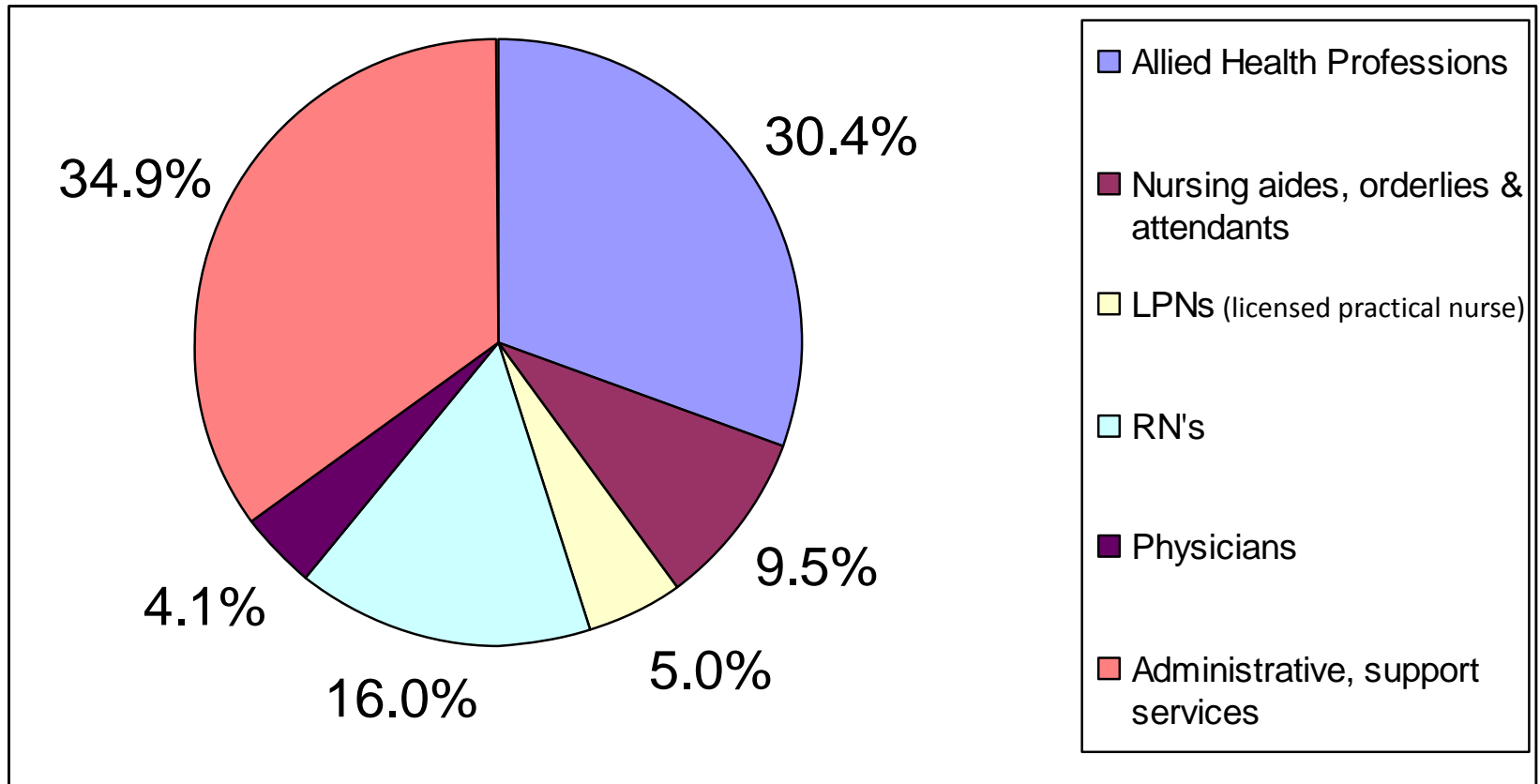
**“Okay, so what other choices
do I have for careers in the health care field?”**

How about allied health?

- Allied Health disciplines is an alliance of many essential health care professionals who serve as critical partners, or allies, of the health care team.
- The term "allied health" is used to identify a cluster of health professions
- There are approximately **200** recognized allied health professions
- Allied health professionals make up an estimated **60%** of the US health care workforce
- Almost all allied health professions are experiencing shortages

- **Allied health**: Growing like a weed
- Seven of the top 10 fastest growing occupations, according to the US Bureau of Labor Statistics

Allied health is big, very big



Source: Bureau of Labor Statistics

But what is allied health?

- Allied health encompasses a broad group of health professionals who:
 - use scientific principles and evidence-based practice for the diagnosis, evaluation and treatment of acute and chronic diseases;
 - promote disease prevention and wellness for optimum health,
 - apply administration and management skills to support health care systems in a variety of settings
- In addition, health care administration and health systems management are important components of allied health.

Allied Health sciences....

- Allied Health sciences is an emerging field, giving new dimensions to solve the challenges being faced by health services providing communities all over the world.
- Allied Health Sciences deals with all major departments of a hospital like Emergency, ICU, Laboratory, Radiology, Operation Theatre, Public Health, Ophthalmology, Optometry, Pulmonology, Cardiology, Dentistry etc

Allied health professionals

- Allied health professionals are health care practitioners with formal education and clinical training who are credentialed through certification, registration, and/or licensure
- Allied health professionals are concerned with the identification, diagnostic evaluation, and treatment of acute and chronic diseases and disorders;
 - provision of dietary and nutrition services;
 - rehabilitation services;
 - and the management and operation of health systems.

Allied Health Professional...

- Allied Health professionals work directly or indirectly with the patient
- Some allied health professionals practice independently
- Others work as part of a health care team, providing continual evaluation and assessment of patient needs
- They also play a major role in informing the attending clinician of the patient's progress and response to treatment.

Allied Health Professions

- The allied health professions are a diverse group of professionals who deliver high quality care to patients and clients across a wide range of care pathways and in different settings including hospitals, the community, people's homes and schools.
- They might also work in the independent sector or for charities

Allied Health Professions

- Professions that are often listed as “allied health” include many well-known non-nurse, non-physician health care providers including
- Diagnostic medical personnel (medical laboratory scientists, cytogenetic technologists, diagnostic molecular scientists, and histotechnologists);
- Imaging specialists (radiographers, imaging technologists, nuclear medicine technologists);
- Surgery/OT technologists
- Public Health Technologists
- Audiologists and speech language pathologists;
- Dental hygienists and dental technologists
- Emergency medical personnel (EMTs)
- Counselors (genetic, mental health counselors, family therapists);
- Pharmacy personnel (pharmacy technologists)

Roles of Allied health professionals

- Allied health professionals support diagnosis, recovery, and quality of life.
- They provide direct patient care in virtually every specialty;
- deliver scientific support in clinical laboratories;
- offer numerous rehabilitation services;
- manage and provide data critical to seamless patient care and diagnosis;
- operate sophisticated diagnostic equipment;
- contribute to broader public health outcomes;
- provide critical care support in intensive care units;
- develop hospital and educational nutrition programs;
- illustrate medical textbooks; and more

Allied Health Professionals...

Physiotherapy:

- Physical therapy (or physiotherapy), often abbreviated PT, is a health care profession primarily concerned with the remediation of impairments and disabilities and the promotion of mobility, functional ability, quality of life and movement potential through examination, evaluation, diagnosis and physical intervention carried out by physical therapists.



Pathology Lab Sciences /Pathology Technology/Medical Laboratory Technology:



- A pathology lab scientist (PLS) (also referred to as a medical technologist or Pathology technologist or clinical laboratory technologist) is a healthcare professional who performs chemical, hematological, immunologic, microscopic, and bacteriological diagnostic analyses on body fluids such as blood, urine, sputum, stool, cerebrospinal fluid (CSF), peritoneal fluid, pericardial fluid, and synovial fluid, as well as other specimens.
- Pathology (Medical) laboratory scientists work in pathology laboratories at hospitals, physician's offices, reference labs, and biotechnology labs.

Radiology Lab Sciences/Medical Imaging Technology

- Medical imaging/Radiography is the technique and process used to create images of the human body (or parts and function thereof) for clinical purposes (medical procedures seeking to reveal, diagnose, or examine disease) or medical science (including the study of normal anatomy and physiology).
- play a key part in treating people who have life-threatening cancers



RADIOLOGY

- Radiology is the branch of science which is concerned with the use of radiation for viewing internal structures and functions to diagnose the diseases.
- Medical Radiology and Imaging Technology is the health profession concerned with the direct administration of radiations, primarily x-rays, in disease diagnosis and injury assessment and treatment.

Few responsibilities of Radiology technologist are;

- Patient care: dealing with patients in various states of health
- Position patient correctly so desired anatomy is visualized
- Radiation protection: time, distance, shielding
- Live X-ray exams: Fluoroscopy (X-ray video)
- Responsible for cleaning and stocking all X-ray exam rooms
- Obtaining and documenting patient history
- perform diagnostic imaging examinations on patients
- Operate the computerized equipment to take the images
- Work with physicians to evaluate the images and to determine whether additional images need to be taken
- **Mammographers** use low-dose x-ray systems to produce images of the breast
- might administer therapeutic doses of radiation to treat diseases such as cancer.

INTERNATIONAL CERTIFICATIONS

- American Registry of Radiologic Technologists (ARRT)
- Nuclear Medicine Technology Certification Board (NMTCB)

Injuries and Illnesses for Radiologic Technologists

- may be exposed to infectious diseases
- work with imaging equipment that uses radiation, they must wear badges that measure radiation levels in the radiation area
- **Radiation hazards**, minimized by the use of protective lead aprons, gloves, and other shielding devices, and by badges that monitor exposure to radiation.

Surgery/Operation Theatre Lab Sciences (OT Technology):

- A surgical technologist, also called "operating room technologist", is an allied health professional working as a part of the team delivering surgical care and manages operating rooms.
- A formal body called the Commission on Accreditation of Allied Health Education Programs (CAAHEP) officially recognize the AHPs



Roles of Surgical Technologist

- As key member of operating room team, the surgical technologist must anticipate the needs of the patient and the surgeon to ensure that each operation goes as smoothly as possible.

Preoperative:

- Carefully dons his or her operating room attire, including scrubs
- Prepare and sterilize the room
- Gathers all of the equipment and surgical tools that the surgery requires
- Sterilizes, counts and carefully arranges them
- Sterile fields can be compromised in a variety of ways, the most common is moisture. To prevent this arranging dry drapes around the operating table and keeping all surfaces in a sterile condition

Roles of Surgical Technologist

Intraoperative:

- Help prepare medications and administer them to the patient
- Assist in retracting tissues from the patient
- Help the surgeons during operation

Postoperative: Tying Things Up

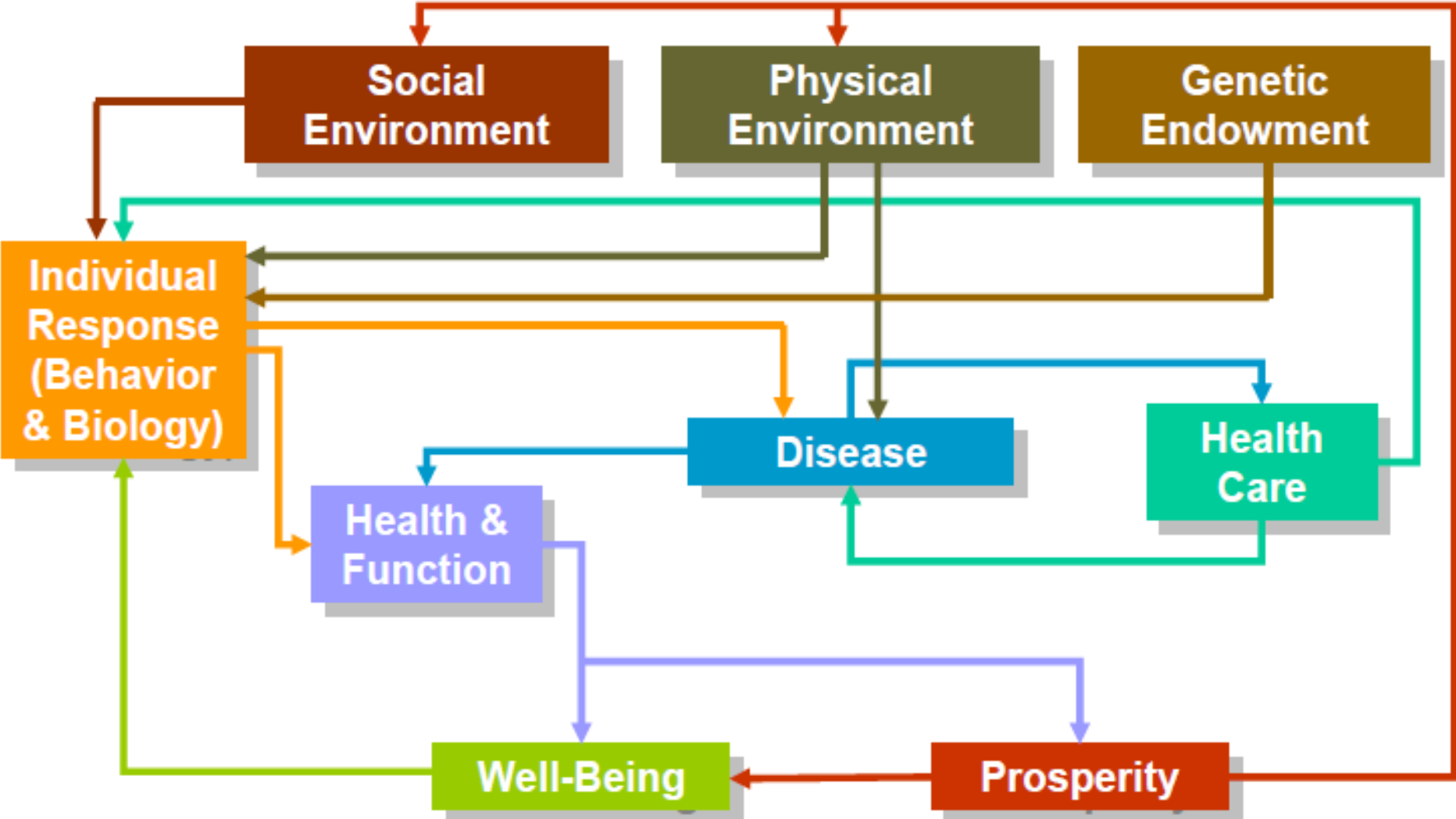
- Counting all of the tools and instruments used during surgery to ensure that nothing is left behind in a patient
- Suture the incision and apply disinfected dressings to the area
- Dispose of items such as needles and gauze, and continue to maintain the OR's sterile environment until the patient is sent to the recovery ward

Public Health Lab Sciences

- “To promote health and quality of life by preventing and controlling disease, injury, and disability.” (CDC Mission Statement)
- Public health is the science and art of promoting and protecting health and well-being, preventing ill-health and prolonging life through the organized efforts of **society** (C.E.A. Winslow, 1920)
- “**Health** is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO Definition of Health)



Broad Understanding of Health



Public Health Lab Sciences

- AHPs contribute to this through their work on physical, mental and social health with individuals, communities and populations across the 4 domains of public health (Fig).
- AHP's actions contribute to primary, secondary and tertiary prevention and address health inequalities.

- Screening programs
- Infection control
- Medicines management
- Radiation protection

Health
Protection

- Influencing strategy
- Promoting healthy environments
- Access to education & employment
- Supporting vulnerable communities

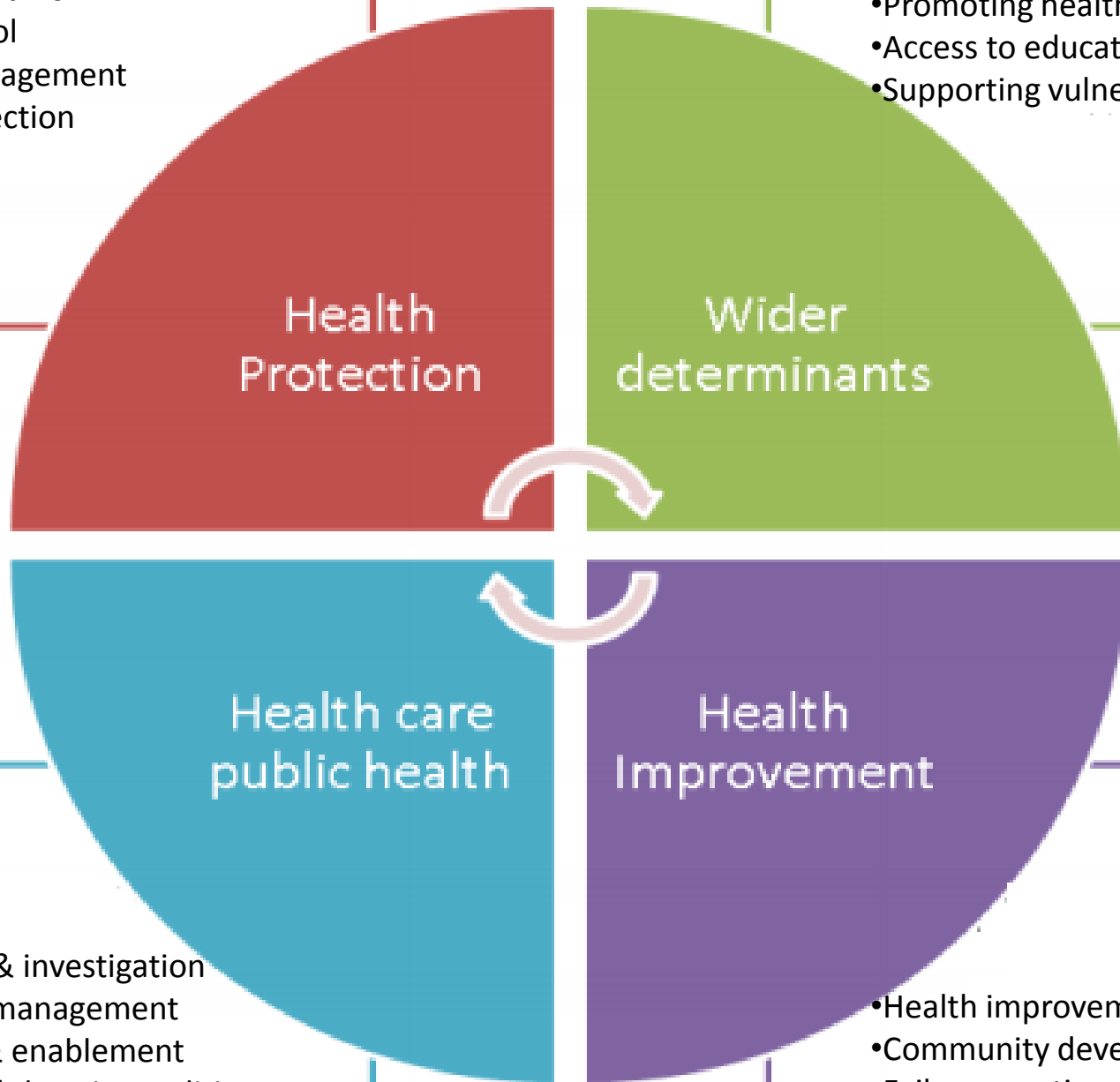
Wider
determinants

Health care
public health

- Early diagnosis & investigation
- Supported self management
- Rehabilitation & enablement
- Management of chronic condition

Health
Improvement

- Health improvement compaigns
- Community development programs
- Fails prevention
- Occupational health orgonomics



Emergency & Intensive Care Sciences

- Emergency medical services are a type of emergency service dedicated to providing out-of-hospital acute medical care, transport to definitive care, and other medical transport to patients with illnesses and injuries which prevent the patient from transporting themselves.



Respiratory Therapy:

- Respiratory therapists educate, diagnose, and treat people who are suffering from heart and lung problems.
- Specialists in airway management;
- actively maintaining an open airway during management of trauma, intensive care,
- and may administer anesthesia for surgery or conscious sedation



Optometry/ Vision Sciences/Ophthalmology

- Vision Science is the branch of medicine that deals with the anatomy, physiology and diseases of the eye.
- A Vision Scientist is a specialist in medical and surgical eye problems.
- Since Vision Scientists perform operations on eyes, they are considered to be both surgical and medical specialists.



Speech & Language Pathology

- Speech-Language Pathology professionals (Speech-Language Therapists) specialize in communication disorders as well as swallowing disorders.



Dental Technology:

- A dental technologist is a member of the dental team who, upon prescription from a dental clinician, constructs custom made restorative and dental appliances.



Audiology



- An audiologist is health-care professional specializing in identifying, diagnosing, treating and monitoring disorders of the auditory and vestibular system portions of the ear, manage and/or treats hearing or balance problems.
- They dispense hearing aids and recommend and map cochlear implants.
- counsel families through a new diagnosis of hearing loss in infants, and help teach coping and compensation skills to late-deafened adults.
- help design and implement personal and industrial hearing safety programs, newborn hearing screening programs, school hearing screening programs, and provide audiologists are trained to diagnose, special fitting ear plugs and other hearing protection devices to help prevent hearing loss.

Allied Health Professionals can give services to

- hospitals,
- research organizations,
- medical and health service companies,
- rescue organizations,
- surgical manufacturing and suppliers,
- diagnostics,
- public and private sector health projects, WHO, UNICEF (United Nations International Children's Emergency Fund), USAID (The United States Agency for International Development) **and to multiple NGOs (non-governmental organizations) present in market.**