

# **Clinical Prevention and Population Health Curriculum Framework**

## **Evidence-Base for Practice**

1. Epidemiology and Biostatistics
  - Rates of disease, e.g., incidence, prevalence, case-fatality
  - Types of data, e.g., nominal, continuous, qualitative
  - Statistical concepts, e.g., estimation (relative risk/odds ratio and number-needed-to-treat), statistical significance/confidence intervals, adjustment for confounding variables, causation
2. Methods for Evaluating Health Research Literature
  - Study designs, e.g., surveys, observational studies, randomized clinical trials
  - Quality measures, e.g., validity, accuracy, reproducibility, biases
  - Sampling and statistical power
3. Outcome Measurement, including Quality and Costs
  - Measures of mortality, e.g., infant mortality rates, life-expectancy
  - Measures that include quality of life/utility, e.g., quality adjusted life years
  - Measures that include cost, e.g., cost-effectiveness, incremental cost-effectiveness
  - Measures of quality of health care, e.g., health status disparities, health plan employer data and information set (HEDIS)
4. Health Surveillance
  - Vital statistics/legal documents, e.g., birth certificates, death certificates
  - Disease surveillance, e.g., passive surveillance (reportable disease), active surveillance for epidemics and bioterrorism
  - Biological, social, economic, geographic, behavioral risk factors
5. Determinants of Health
  - Burden of illness, e.g., distribution of morbidity and mortality by age, gender, race, socioeconomic status, geography
  - Contributors to morbidity and mortality, e.g., genetic, behavioral, socioeconomic, environmental, health care (access and quality)

## **Clinical Preventive Services - Health Promotion**

### 1. Screening

- Approaches to testing and screening, e.g., range of normal, sensitivity, specificity, predictive value, target population
- Criteria for successful screening, e.g., effectiveness, benefits and harms, cost, patient acceptance
- Evidence-based recommendations

### 2. Counseling

- Approaches to culturally appropriate behavioral change, e.g., counseling skill training, motivation.
- Clinician-patient communication, e.g., patient participation in decision making, informed consent, risk communication, advocacy
- Criteria for successful counseling, e.g., effectiveness, benefits and harms, cost, patient acceptance
- Evidence-based recommendations

### 3. Immunization

- Approaches to vaccination, e.g., live vs. dead vaccine, pre vs. post exposure, boosters, target population, population-based immunity
- Criteria for successful immunization, e.g., effectiveness, benefits and harms, cost, patient acceptance
- Evidence-based recommendations

### 4. Preventive Medication

- Approaches to chemoprevention, e.g., pre vs. post exposure, time limited vs. long term
- Criteria for successful chemoprevention, e.g., effectiveness, benefits and harms, cost, patient acceptance
- Evidence-based recommendations

## **Health Systems and Health Policy**

1. Organization of Clinical and Public Health Systems
  - Clinical health services, e.g., continuum of care – hospital, ambulatory, home, long-term care
  - Public health responsibilities, e.g., public health functions (Institute of Medicine); 10 essential services of public health
  - Relationships between clinical practice and public health
2. Health Services Financing
  - Clinical services coverage and reimbursement, e.g., Medicare, Medicaid, employment based, the uninsured
  - Methods of financing of health care institution, e.g., hospitals, long-term care, community health centers
  - Methods of financing of public health services
  - Other models, e.g., international comparisons
3. Health Workforce
  - Methods of regulation of professions and health care, e.g., certification, licensure, institutional accreditation
  - Discipline specific history, philosophy, roles, responsibilities
  - Racial/ethnic workforce composition including underrepresented minorities
  - Relations of discipline to other health professionals
  - Legal and ethical responsibilities of health care professionals, e.g., malpractice, health care information privacy, confidentiality
4. Health Policy Process
  - Process of health policy making, e.g., local, state, federal governments
  - Methods for participation in the policy process, e.g., advocacy, advisory processes
  - Impact of policies on health care and health outcomes including impacts on vulnerable populations

## Community Aspects of Practice

1. Communicating and Sharing Health Information with the Public
  - Methods of assessing community needs/strengths and options for intervention, e.g., community-oriented primary care
  - Media communications, e.g., strategies of using mass media, risk communication
  - Evaluation of health information, e.g., websites, mass media, patient information (including literacy level and cultural sensitivity)
2. Environmental Health
  - Sources, media, and routes of exposure to environmental contaminants e.g. air, water, food
  - Environmental health risk assessment and risk management e.g., genetic, prenatal
  - Environmental disease prevention focusing on susceptible populations
3. Occupational Health
  - Risks from employment-based exposures
  - Methods for control of occupational exposures
  - Exposure and prevention in health care settings
4. Global Health Issues
  - Roles of international organizations
  - Disease and population patterns in other countries, e.g., burden of disease, population growth, health and development
  - Effects of globalization on health, e.g. emerging and reemerging diseases/ conditions
5. Cultural Dimensions of Practice
  - Cultural influences on clinicians' delivery of health services
  - Cultural influences on individuals and communities e.g., health status, health services, health beliefs
  - Culturally competent health care
6. Community Services
  - Methods of facilitating access to and partnerships for health care
  - Evidence-based recommendations for community preventive services
  - Public health preparedness e.g. terrorism, natural disasters, injury prevention