



Why Family Medicine? Strengthening Health Systems for Healthy Communities

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Goals and Objectives

- At the conclusion of this presentation, participants will be able to:
- Identify common Family Medicine training requirements in the US and other developed nations.
 - Evaluate the role of family physicians addressing non-communicable diseases that threaten global health security.
 - Discuss the role of family physicians in health promotion and preventive medicine efforts.

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True or False?

- Family physicians are trained to care for babies and children.
- Family physicians are trained to care for patients over age 65
- Family physicians are trained to care for patients with acute illnesses and minor injuries
- Family physicians are trained to provide care for patients with chronic illnesses
- Family physicians are trained to address each organ system and provide provisional diagnosis and initial treatment for disease entity
- Family physicians are trained to care for patients with behavioral health conditions
- Family physicians participate in disease surveillance programs

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Core Competencies of a Family Physician



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Core Competencies of a Family Physician: Primary Care Management

- Point of first medical contact within the health care system
- Open and unlimited access to its users
- Address all health problems regardless of person's demographics
- Cover the full range of health conditions
- Co-ordinate care with other specialists
- Makes efficient use of health care resources
- Taking an advocacy role for the patient when needed



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Core Competencies of a Family Physician: Person-Centered Care

- Address patients and problems in the context of patient's circumstances
- Develop an effective doctor-patient relationship
- Communicate, set priorities and act in partnership
- Promote patient empowerment
- Provide longitudinal continuity of care



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Core Competencies of a Family Physician: Specific Problem-Solving Skills

- Consider prevalence and incidence of illness in the community
- Gather data and apply it to an appropriate management plan
- Use "time as a tool" and tolerate uncertainty
- Intervene urgently when necessary
- Manage undifferentiated conditions
- Make effective and efficient use of diagnostic and therapeutic interventions.



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Core Competencies of a Family Physician: Comprehensive Approach

- Manage simultaneously multiple complaints and pathologies
- Manage acute and chronic health problems in the individual
- Apply health promotion and disease prevention strategies
- Manage and co-ordinate health promotion, prevention, cure, care and palliation and rehabilitation.



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Core Competencies of a Family Physician: Community Orientation

- Reconcile the health needs of individual patients and the health needs of the community in which they live in balance with available resources.



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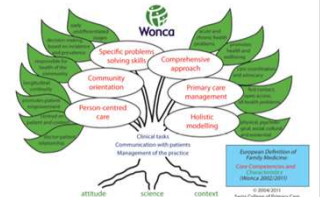
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Core Competencies of a Family Physician: Holistic Approach

- use a bio-psycho-social model taking into account cultural and existential dimensions.

"If health care systems are to become more effective and more equitable, care must become more focused on patients than on disease"

Starfield B. Towards International Primary Care Reform. CMAJ 2009 MAY;180(11):1091-92.



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Family Medicine Residency Curriculum in the USA per the ACGME

- 36 months long
- One primary clinical site with at least 40 weeks of continuity clinic per year
- minimum of 1650 patient visits
- 10% kids, 10% geriatrics
- 6 months inpatient medicine; 1 month ICU
- 2 months inpatient pediatrics (including at least 40 newborns)
- 2 months outpatient pediatrics
- 1 month geriatrics
- 2 months OB; 1 month gynecology
- 2 months emergency medicine (75 pediatric patients)
- 2 months orthopedics/sports medicine
- 1 month surgery

<https://www.acgme.org/Specialties/Overview/pfcatid/8>

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Standards of Accreditation for Residency Programs in Family Medicine

- Core two-year family medicine program
- "Triple C" Competency-based curriculum
 - Comprehensive Care
 - Continuity of education and Patient Care
 - Centred in Family Medicine
- Certificate of Added Competence in
 - Emergency Medicine
 - Care of the Elderly
 - Anesthesia
 - Clinician Scholar
 - Sport and Exercise Medicine
 - Palliative Care
 - Addiction Medicine
 - Enhanced Surgical Skills
 - Obstetrical Surgical Skills


College of Family Physicians of Canada. Standards of Accreditation for Residency Programs in Family Medicine. Mississauga, ON: College of Family Physicians of Canada; 2020.

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WONCA's Academic Members

- Australia
- Bangladesh
- Bhutan
- Canada
- Cyprus
- Egypt
- Germany
- Haiti
- Indonesia
- Jamaica
- Kuwait
- Malawi
- Netherlands
- Norway
- Pakistan
- Palestine
- South Africa
- Tajikistan
- Tanzania
- UK
- USA



<https://www.globalfamilydoctor.com/AboutWonca/Regions/Academicmembers.aspx>

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WONCA's "Must Have" Components of Family Medicine Training Programs

- At least 50% of postgraduate training time should be in FM settings, with family physicians as lead teachers.
- continuum of health promotion, disease prevention, acute/emergency, chronic, rehabilitative, and palliative care.
- all ages from birth to death, all genders, all variety of problems
- continuity of care
- undifferentiated patient care problems
- psychosocial and cultural aspects of health care
- communication skills, doctor patient relationship
- medical records
- bioethics
- medical legal issues
- quality assurance
- community medicine/public health, determinants of health
- health care system

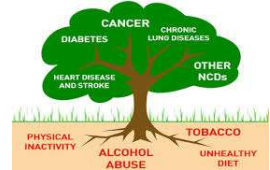
The Contribution of Family Medicine to Improving Health Systems: A guidebook from the World Organization of Family Doctors, Second Edition. Published: June 2013. Ed: Kidd, M.

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Non-Communicable Diseases

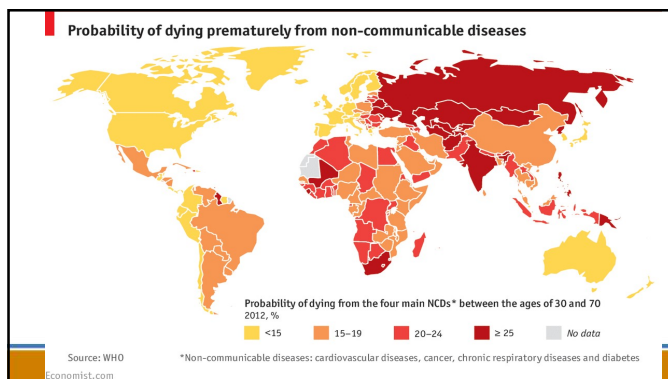
- Chronic diseases that are the result of genetic, physiological, environmental, and behavioral factors
- NCDs kill 41 million people each year
- Four Groups of diseases account for over 80% of all NCD deaths:
 - Cardiovascular disease: nearly 18 million death annually
 - Cancer: 9 million deaths
 - Chronic respiratory disease: nearly 4 million deaths
 - Diabetes: 1.6 million deaths



<https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

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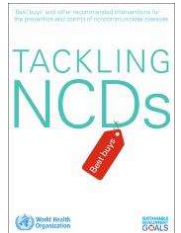
NCD Modifiable, Behavioral Risk Factors

- Tobacco Use
- Physical Inactivity
- Unhealthy Diet
- Harmful use of alcohol



WHO recommends "Best Buys" interventions that score high on

- Health impact
- Cost-effectiveness (less than \$100/DALY)
- Cost of implementation
- Feasibility of scale-up in resource constrained systems



<https://www.who.int/publications/item/WHO-NMH-NVI-17.9>

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Reduce Tobacco Use

- Responsible for 9% of annual deaths globally
- WHO "Best Buy" recommendations:
 - Raise taxes and prices on tobacco products
 - Implement plain packaging and/or graphic health warnings
 - Ban advertising, promotion, and sponsorship
 - Protect people from second-hand smoke
 - Warn about the dangers of tobacco
 - * Provide population-wide support for tobacco cessation



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Reduce Harmful Alcohol Use

- Harmful drinking habits contribute to deaths from NCDs
- WHO "Best Buys"
 - Increase excise taxes on alcoholic beverages
 - Ban alcohol advertising
 - Restrict access to retail alcohol
 - Enforce bans on alcohol advertising
 - * Provide brief psychosocial intervention for persons with hazardous and harmful alcohol use



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Reduce Unhealthy Diet

- Diets high in refined cereals and low in fruits and vegetables contribute to NCDs
- WHO "Best Buys"
 - Reduce salt intake in food
 - Replace trans fat with polyunsaturated fat
 - * Promote and support exclusive breastfeeding for first 6 months of life



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Reduce Physical Inactivity

- Globally, responsible for 6% of annual deaths and 9% of premature mortality
- WHO "Best Buys"
 - Promote public awareness about physical activity (via mass media)
 - *Provide physical activity counselling and referral as part of routine primary health care services

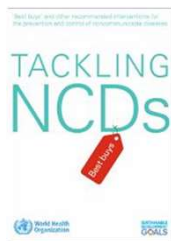


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Four Groups of Diseases Account for Over 80% of All NCD Deaths

- Cardiovascular disease
- Diabetes
- Cancer
- Chronic respiratory disease



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Manage Cardiovascular Disease

- Drug therapy for HTN and DM (esp if high risk or have had a stroke or MI)
- Treatment of acute MI with either: ASA, or ASA and clopidogrel,
 - *in the hospital setting, include thrombolysis and/or PCI, follow up carried out through primary health care facilities
- Treatment of acute ischemic stroke with IV thrombolytic therapy
- Primary prevention of rheumatic fever and rheumatic heart diseases by treating Strep pharyngitis at the primary care level
- Secondary prevention of rheumatic fever and rheumatic heart disease by developing a register of patients who receive regular prophylactic penicillin

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Managing Diabetes

- Preventive foot care
- Drug therapy for DM
- Home glycemic monitoring for patients on insulin
- **Diabetic retinopathy screening for all DM patients
- **Laser photocoagulation for prevention of blindness
- Lifestyle interventions for prevention of DM
- Flu vaccine for patients with DM
- Screening for proteinuria/ACE-i for prevention of CKD



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Managing Cancer

- Risk factors include: Smoking, alcohol use, indoor air pollution, and asbestos in construction materials
- WHO "Best Buys" include
 - Vaccination against HPV for 9-13yo girls
 - Prevention of cervical cancer for women age 30-49 through visual inspection of pre-cancerous cervical lesions to prevent cervical cancer
 - Breast cancer screening and early treatment and colorectal cancer screening starting at age 50, are "cost effective" but are not feasible without a tertiary care medical system in place
 - Basic palliative care for cancer: home-based and hospital care with multi-disciplinary team and access to opiates and essential supportive medicine

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Manage Chronic Respiratory Disease

- Symptom relief for patients with asthma with inhaled salbutamol
- Symptom relief for patients with chronic obstructive pulmonary disease with inhaled salbutamol
- Treatment of asthma using low dose inhaled beclometasone and short acting beta agonist
- Influenza vaccine for patients with COPD
- Decrease smoking
- Decrease indoor air pollution



www.cleancookingalliance.org

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Minimal Requirements to Address NCDs at the Primary Care Level

- | | |
|--|--|
| <ul style="list-style-type: none"> • NCD-related tests <ul style="list-style-type: none"> – blood pressure – weight – height – blood sugar – cholesterol tests – urine strips for albumin. | <ul style="list-style-type: none"> • NCD medicines <ul style="list-style-type: none"> – aspirin – a statin – an angiotensin-converting enzyme inhibitor – a thiazide diuretic – a long-acting calcium channel blocker – a beta-blocker – Metformin – Insulin – a bronchodilator – a steroid inhalant |
|--|--|

<https://www.who.int/medicines/publications/essentialmedicines/en/>

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Global Health Security and the Impact of NCDs

- "Health Security" first described by the UN in 1994
- "Global Health Security" refers to those public health activities that minimize the impact of health events across geographic regions and international boundaries
- 2011: UN meeting on Prevention and Control of NCDs
- NCDs undermine social and economic development
- NCDs increase inequalities between countries and within populations
- Limited resources spent treating NCDs instead of on prevention

WHO's "Tackling NCDs" Objective #1: To raise the priority accorded to prevention and control of NCDs...

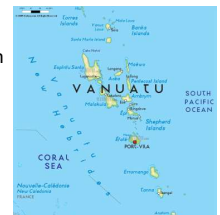
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Impact on Prevention on Health Expenditures

- Vanuatu: island nation in South Pacific Ocean, population ~250,000.
- Government spends \$157 per person per year in health expenditure
- For every person successfully avoids becoming a newly diagnosed Type 2 diabetes, the government saves a minimum of \$347 per year.
- For every person diagnosed Type 2 diabetes and stabilized through secondary prevention (avoiding progressing to insulin treatment), the government saves an *additional* \$484 per year



Anderson I, et al. Economic Costs of NCDs in the Pacific Islands, Nov 2012

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Kidney Disease in Samoa

- Samoa is an independent island nation with a population of nearly 200,000
- Government spends about \$180 per person per year on health programs
- Samoa's National Kidney Foundation gets >7% of total appropriation to Ministry of Health
- Less than 5% of health funds go towards prevention of kidney disease
- Cost per year for dialysis: ~\$40,000
- 31% of patients die within a year after starting dialysis
- 73% of all patients in National Kidney Foundation have diabetes and/or HTN as the primary cause of serious kidney disease

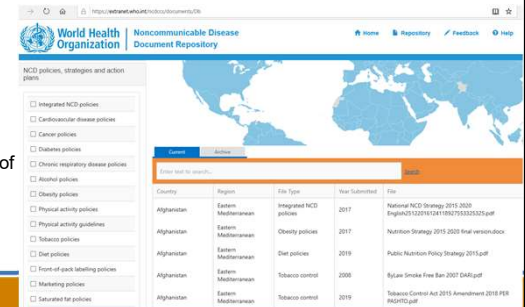


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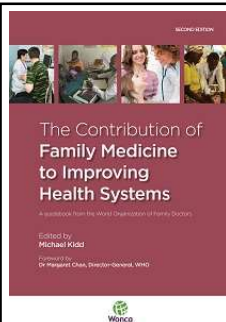
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Health System Requirements to Address NCDs

- Infrastructure
- Policy
- Surveillance
- Referral network for management of NCDs
- Partnerships and health promotion



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- "Their competence is developed through participating in rigorous preparation deliberately based on the needs of the population they serve."
- "They coordinate care among health providers, thus linking the community to the academic medical centers, the village health workers to the consultant medical specialists, and their patients to a wide array of available resources."
- "Their flexibility allows them to adapt to the specific needs of the community they serve as well as to its changing epidemiological patterns and variations in available resources."

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Values and Benefits of Family Medicine

"Primary care is a great investment for a high-performing health care system. Research demonstrates that greater use of primary care is associated with **lower costs, higher patient satisfaction, fewer hospitalizations and emergency department visits, and lower mortality**. ... health care markets with a larger percentage of primary care physicians spend less and provide higher quality of care."



Koller, C. F. (2017, July 31). Measuring Primary Care Health Care Spending. Retrieved from <https://www.milbank.org/>

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Why Family Medicine: Strengthening Health Systems for Healthy Communities

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Mahalo!

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