K&T DHC Induction Course
17 August, 2019

PRINCIPLES OF PRIMARY HEALTHCARE

Cindy L.K. Lam
Danny D.B. Ho Professor in Family Medicine
Department of Family Medicine & Primary Care
The University of Hong Kong
clklam@hku.hk

HKU Med
LKS Faculty of Medicine
Department of Family Medicine & Primary Care
香港大學家庭醫學及基層醫療學系

PRESENTATION OUTLINE

- **Core Values of Primary Healthcare (PHC)**
- **PHC Principles of**
  - Health for all
  - Preventive care
  - Person-centred care
  - Multi-disciplinary care

PRIMARY HEALTHCARE

- **Primary healthcare** is the essential health care made universally available to individuals and families, which includes public health & self-care *(WHO 1978)*

- **Primary care** is the first point of contact of the professional health care system. *(AAFP 2009)* - family doctors, specialists, CMP, A&E, other health professionals

VALUE OF PHC - POPULATION

- **Health systems with strong primary healthcare are most cost-effective**
- **Primary care provided by family doctors/ GPs are most cost-effective[1]**
- **A higher supply of GP/FP, but not other primary care doctors, was associated with**
  - More equity of care[2]
  - lower mortality rates[2,3]
  - higher early cancer detection rates[4,5]

1. *Franks P, Fiscella K. J Fam Pract 1998; 47:105-9*
2. *Shi L, Macinko J, Starfield B et al. J Am B Fam Pract 2003; 16:412-22.*
3. *Gulliford, M.C., J Pub Health Med 2002; 24:252-4*
4. *Campbell RJ, et al. Fam Med 2003; 35:60-4*
5. *Ferrante JM, et al. Am B Fam Pract 2000; 13:408-14*

VALUE OF PHC - INDIVIDUAL

Having a Family Doctor in HK

- **Better outcomes of consultations[1]**
  - Patient enablement
  - Person-centered care addressing concerns & expectations
  - Preventive care (healthy life style, screening)
  - Recommendation of doctor to family & friends
- **More effective gate-keeping[2]**
  - Fewer A&E visits
  - Fewer hospital admissions
  - More likely to consult the usual doctor

1. Lam C.L. K., et al. Front. Med. 2014; doi: 10.3389/fmed.2014.00029.
2. Fung CSC., Lam CLK et al. BMC Health Services Research 2015.

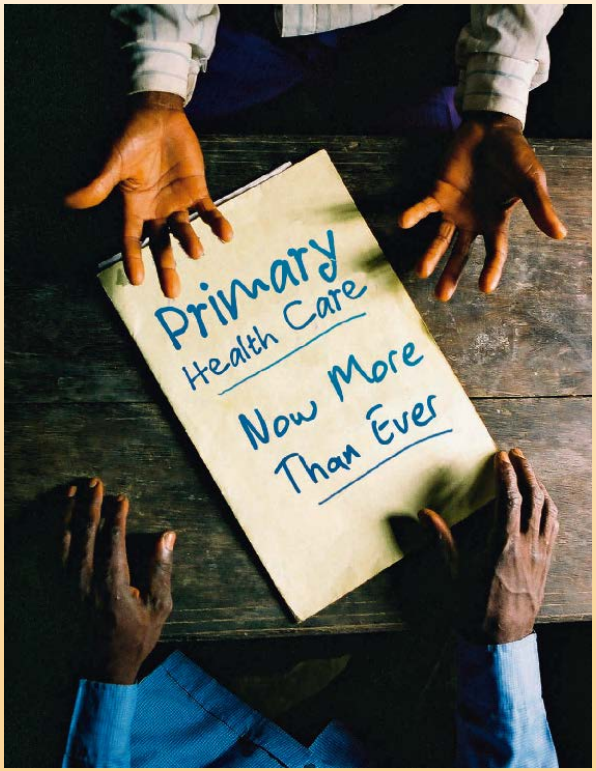
CORE VALUES OF PHC - DECLARATION OF ALMA-ATA

WHO/UNICEF International Conference on PHC, The Lenin Place, Alma Ata, USSR. 6-12 September, 1978

Primary Health Care

- is the key to health for all
- should be universally accessible
- addresses the main health problems
- promotes self-reliance
- should be sustained by a mutually supportive referral system
- requires multi-professional team work

CORE VALUES OF PHC - WHO WORLD HEALTH REPORT 2008



Four reforms to translate "health for all" from aspiration to implementation

1. Universal coverage: ↓ service gaps & fees
2. Service delivery: comprehensive & skilled
3. Public policy: financing & resources
4. Leadership: collaborative & strategic

CORE VALUES OF PHC - ASTANA DECLARATION, WHO 2018

- **Governments and societies** that prioritize, promote and protect people's health … through strong health systems;
- **PHC & health services** that are high quality, safe, comprehensive, integrated, accessible, available and affordable … by health professionals who are well-trained…;

- **Enabling and health-conducive environments** in which individuals and communities are empowered …;
- **Partners and stakeholders** aligned in providing effective support to national health policies, strategies & plans.

SCOPE OF PRIMARY HEALTHCARE

- Care for all & at all times: care continuum from health to sickness
- Preventive care: case finding to address the main health problems & target the at-risk
- Person-centred care: bio-psycho-social needs, enable & empower self-reliance
- Multi-disciplinary care: integrative, high quality, safe, comprehensive & collaborative

MADAM IP

71 year-old divorced retired waitress living with her son; health screening found:

TC 8.1, HDL1.9, LDL 5.53 ,TG 1.5 mol/L; TC/ HDL = 4.3

She was asymptomatic and had no past or family history of HT/DM/CVD. She does not smoke and her BP was 120/80

10 year CVD risk = 11.4%

MANAGEMENT OF MADAM IP

- She was advised on diet and exercise
- Her son supervised her diet closely
- Her weight decreased from 49 to 45 Kg in 3 months.

Video: Let’s hear Madam Ip

CARE FOR ALL

Care continuum to meet the changing needs from health to sickness

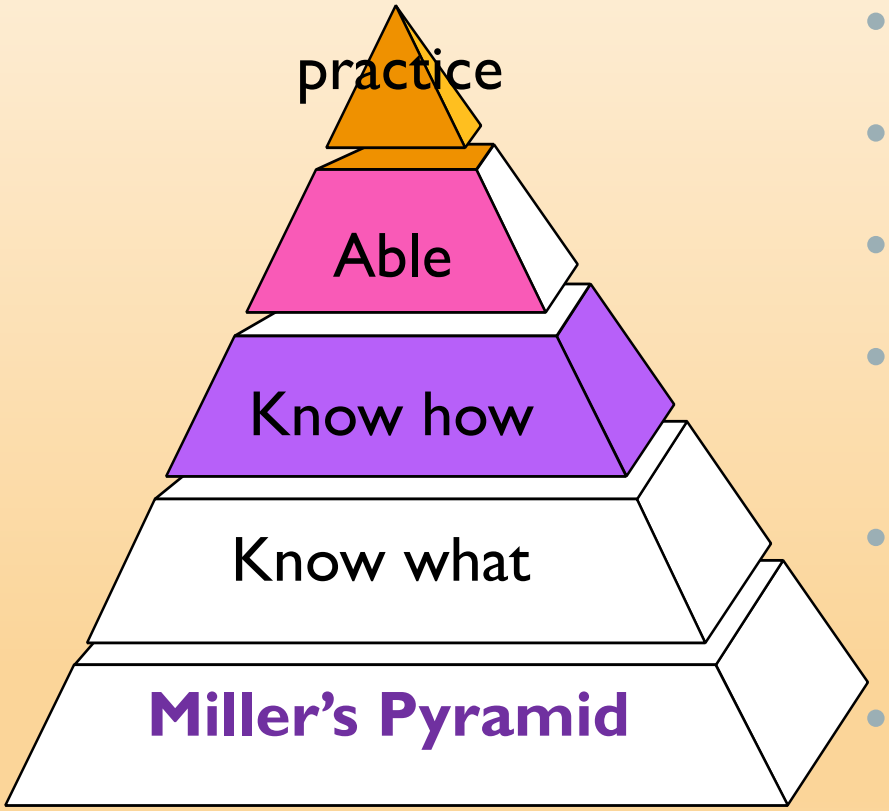
- Asymptomatic → Prevention & screening
- Symptomatic → Accurate diagnosis
- Diagnosis → Appropriate effective management
- Chronic illness→ Monitor coping, control, prevent complications & optimize management
- Multi-morbidity → Prioritize, co-ordinate & integrate
- Complications → Rehabilitation, support & care

CONTINUITY OF CARE – PERSONAL & SYSTEM

Build up a mutual trusting relationship

- Personal family doctor & PC home
- Accumulate medical & personal Hx
- Communicate effectively
- Improve diagnostic precision
- Enhance management adherence
- Use time as a diagnostic & therapeutic tool
- Co-ordinate & facilitate care of multiple illnesses and disciplines

PREVENTIVE CARE



- Informed choice
- Joint decision making
- Empower & enable change
- Engage the right person at the right time & context
- Consistent & persistent information
- Evidence-based

PRINCIPLES OF SCREENING

WILSON J.M..G , JUNGNER WHO, 1968

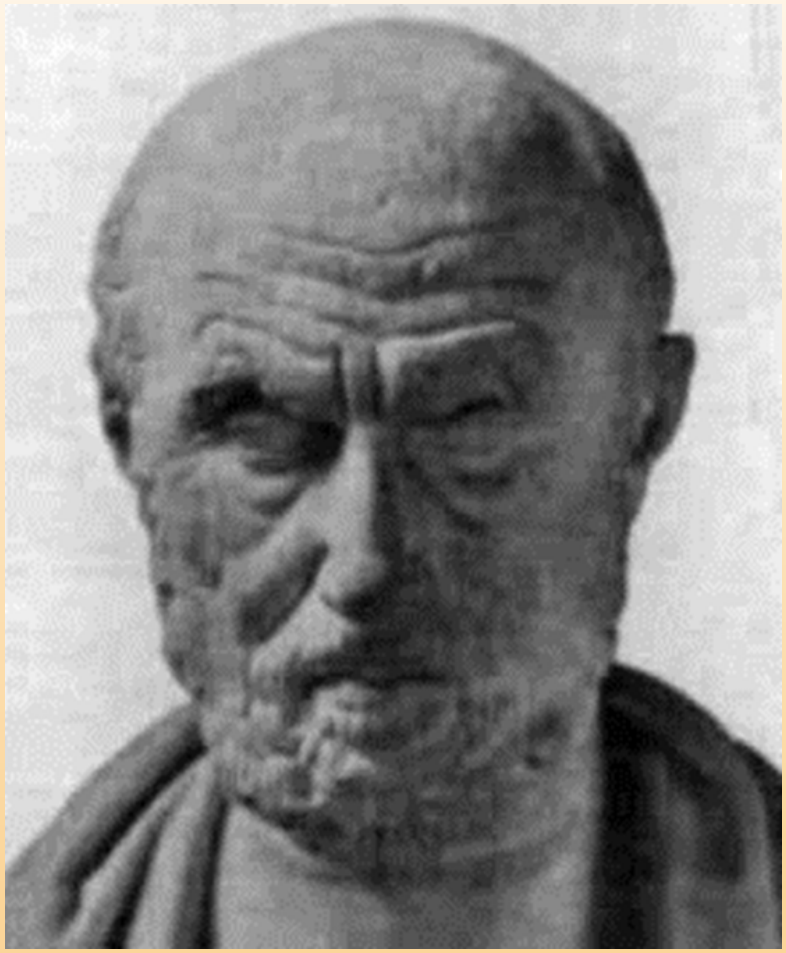
1. Should be an important health problem
2. An accepted treatment, which makes a difference to the outcome
3. Facilities for diagnosis & treatment should be available & accessible
4. A recognizable latent or early symptomatic stage
5. A suitable (and accurate) test or examination
6. Test should be available & acceptable to the population
7. The natural history from latent to disease should be understood
8. An agreed policy on whom to treat as patients
9. The cost (& potential harm) of case-finding balanced against benefit
10. Case-finding should be a continuing process

THE ARROGANCE OF SCREENING

(SACKETT D.L. CMAJ 2002; 167:363-4)

- Aggressively assertive
  - Target the asymptomatic
  - Turn the ‘well’ to the ‘ill’
- Presumptuous
  - Intervention is beneficial
  - Benefit is more than harm
- Overbearing
  - Critical of those who don’t conform
- Expensive

FIRST DO NO HARM



“ It is more important to know what sort of person has a disease than what disease a person has.”

Hippocrates (460-377 BC)

PERSON-CENTRED CARE (1)

Bio-psycho-social Diagnosis

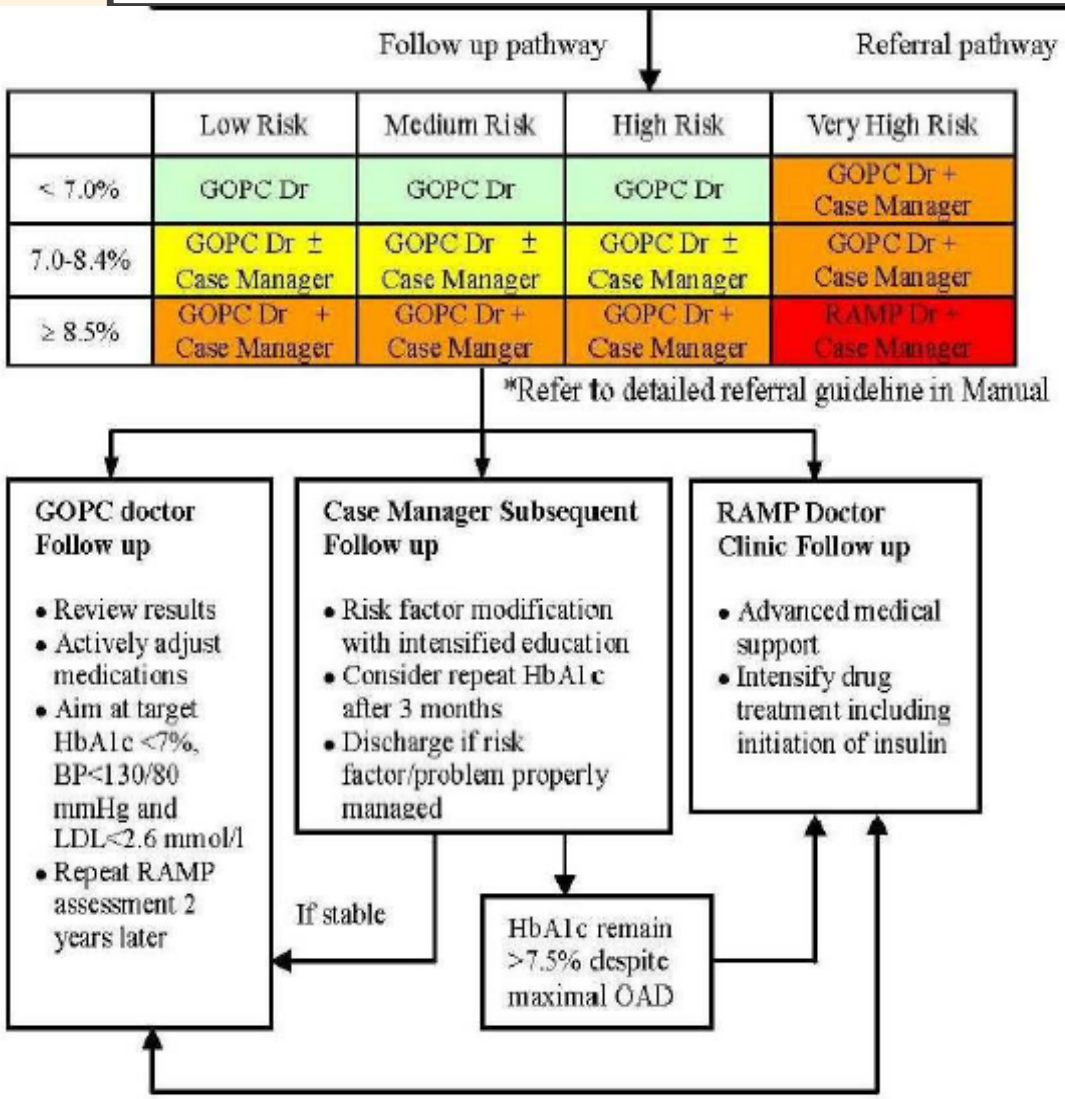
- **Biology:** physiological constitution, health risk, illness, co-morbidity
- **Psychology**: beliefs, perspective, expectations, feelings, fears, suffering
- **Social:** culture, experience, norm, family function & dynamics, peers, work, role functioning, ADL
- **R.I.C.E.:** Meaning of health & illness to the patient /family
  - Reason for consultation/ no consultation
  - ideas, concerns & expectations (I.C.E.)

PERSON-CENTRED CARE (2)

Patient-centred Management

- Self-reliance & control (empowerment)
- Individualized benefit to harm ratio
- Address the R.I.C.E. of patient & family
- Respect patient autonomy with informed choice & joint decision making
- Acceptability & feasibility
- Side effects & impact on patient/family
- Outcomes of health & quality of life

RISK ASSESSMENT & MANAGEMENT (RAMP-DM)



Patient Empowerment Program
- Offer to all patients

Dietitian *(if applicable)*
- New patient
- Special dietary needs (eg vegetarian, ethnic minorities, fluid diet, shift work)
- e.g. BMI ≥ 27.5 kg/m^2 for weight reduction
- Poor dietary control despites nurse's intervention

Podiatrist *(if applicable)*
- Foot ulcer, corn, callosity
- Foot, toe or nail deformities, in-growing toe nail
- Absent peripheral pulse
- Abnormal VPT or Monofilament test.

Physiotherapist *(if applicable)*
- BMI ≥ 27.5 kg/m^2 intend to join weight reduction programme

SCCC
- Smoker intend to quit

Wound Clinic
- Wound need assessment apart from simple dressing

Ophthalmologist
- Referred by doctor according to DMR grading and referral logistics

Source: Manual for RAMP (Diabetes Mellitus) in Primary Care Setting, Working Group of RAMP (GOPC) DM Manual, HA, 2011

MULTI-DISCIPLINARY PC SAVES LIVES

Observed Events in 5 y 2009-2013	ARR (RAMP-DM Vs. Usual Care)	NNT	HR†
Any complications	↓ -13.05%	**8**	0.597*
CVD	↓ -11.64%	9	0.509*
CHD	↓ -7.78%	16	0.448*
Heart Failure	↓ -4.69%	21	0.442*
Stroke	↓ -3.29%	30	0.641*
ESRD	↓ -0.77%	130	0.444*
STDR	↓ -1.41%	71	0.496*
All-cause mortality	↓ -13.39%	**7**	0.438*

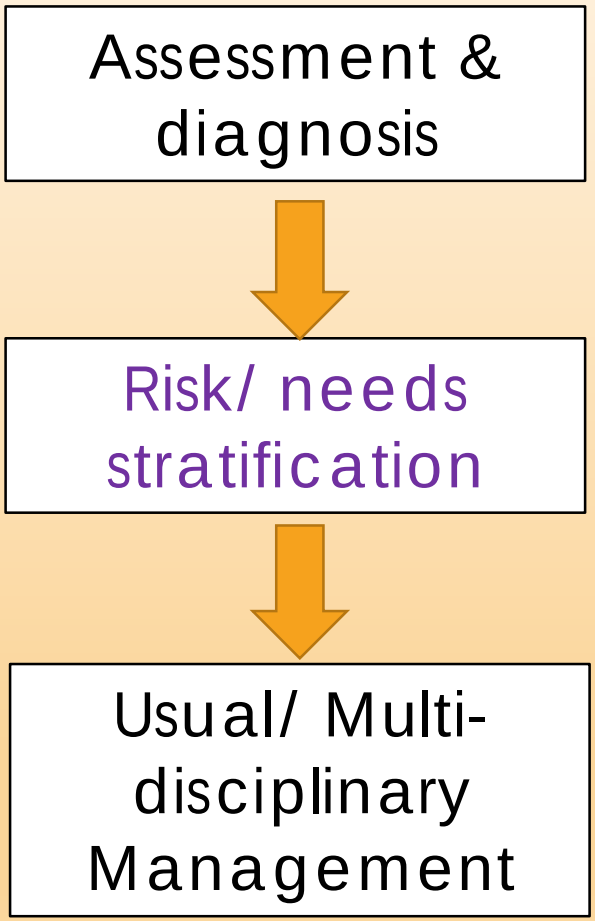
ARR: Absolute risk reduction; NNT: Number Needed to Treat;
8,570 RAMP-DM subjects and 8,570 usual care subjects were matched by propensity score
† HR Hazard ratio < 1 indicates risk reduction for events compared to usual care group, by Cox regression adjusted for socio-demographic and clinical characteristics
** Significant differences $p<0.05$ compared to usual care group*

MULTI-DISCIPLINARY PC SAVES COST

Public Service	Cost per DM subject (HKD) RAMP-DM (N=8570)	Usual care (N=8570)	Difference
RAMP-DM set-up cost (mean)	**41**	N.A.	41
RAMP-DM administrative cost	**5**	N.A.	5
RAMP-DM ongoing cost over 5y	**1,222**	N.A.	1,222
Public health care cost over 5 y	**94,461**	152,573	-58,112
Total costs over 5 years	**95,725**	**152,573**	**-56,848**

Projected to 62,940 uncomplicated DM patients enrolled to RAMP 2009 – 2011: HA saved 3.5 billion & reduced 8,991 deaths & 7,867 DM complications from 2011-2015

MULTI-DISCIPLINARY RAMP



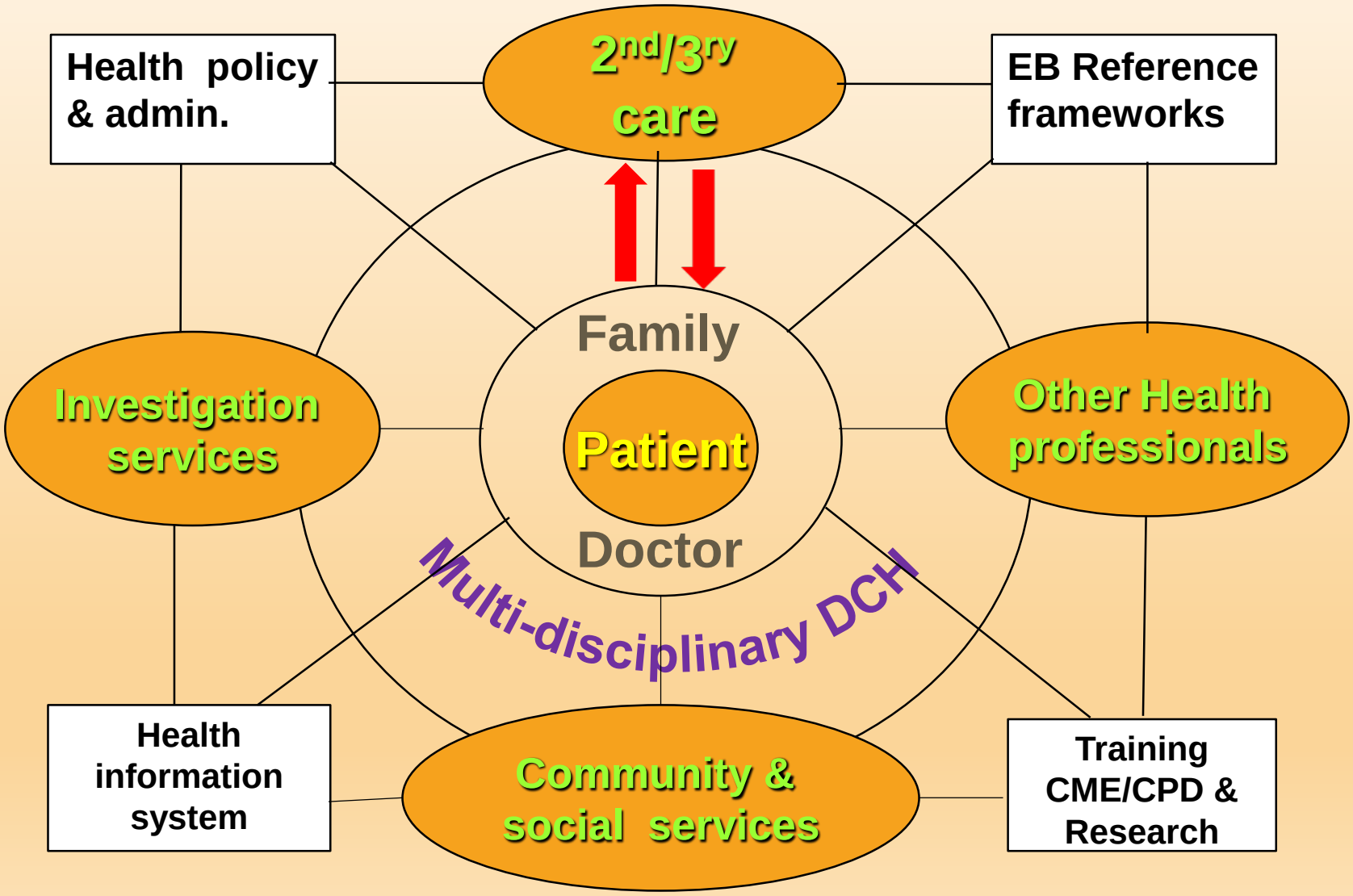
- Risk, disease or complication diagnosis
- Individualized counselling & interventions based on need
- Enhanced health / disease control

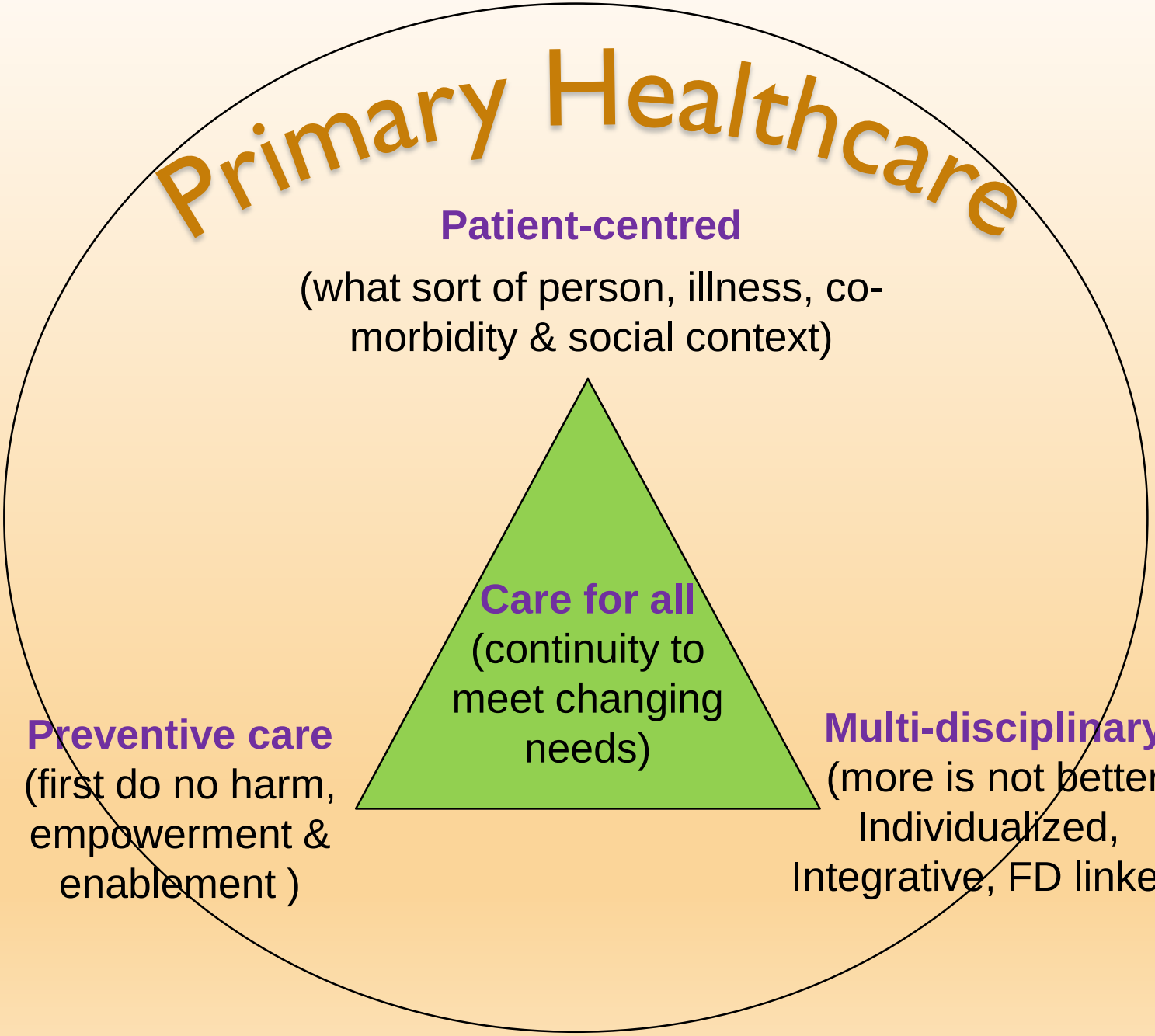
MULTI-DISCIPLINARY PHC

- Not every person needs multi-disciplinary care
- A person may need multi-disciplinary care only some of the times
- The key to success is individualized, prioritized & integrated care
- Beware of the burden of care on the patient
- Beware of fragmentation/ compartmentalization of care

MORE IS NOT ALWAYS BETTER

INTEGRATIVE PRIMARY HEALTHCARE




Primary Healthcare
Patient-centred
(what sort of person, illness, co-morbidity & social context)
Care for all
(continuity to meet changing needs)
Preventive care
(first do no harm, empowerment & enablement)
Multi-disciplinary
(more is not better Individualized, Integrative, FD linked)

"The flapping of the wings of a distant butterfly can influence the occurrence of a tornado…."

Edward Lorenz (1917-2008)