A Family Doctor for Everyone
每人一個家庭醫生

Cindy L K Lam, clklam@hku.hk
Family Medicine Unit,
The University of Hong Kong
Hong Kong SAR, China
A Family Doctor for Everyone

- Primary care & the family doctor
- Primary care for a family in HK
- Health benefits of having a family doctor
- Primary-care based health care system
“Primary health care is the key to attaining the target of health for all by the year 2000.”

Declaration of Alma-Ata, WHO 1978

“Primary health care: Now more than ever….. Evidence is now overwhelming: countries with a strong service for primary care have better health outcomes at low cost”

WHO World Health Report 2008
Key Concepts

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

• Primary care is the first point of contact of the professional health care system. (AAFP 2009)
The Family Doctor

- **A family doctor** is a qualified medical practitioner who provides *primary*, continuing, comprehensive and whole-person care to the individual and the family in their natural environment. (WONCA 1991 & Leeuwenhorst 1974)

- **A private practitioner** is one whose service is funded by out-of-pocket or private insurance payment
  - Care can be primary, secondary or tertiary
  - Not all family doctors are in private practice
Primary Care Providers

- Specialists in family medicine
- Family doctors with training in FM
- General practitioners
- Non FM specialists
- Chinese medicine practitioners
- Nurse practitioners/ other health professionals
- Accident & Emergency Department
Primary care for the Ip Family
Taxi driver
Frequent headache

45

Student, Frequent asthma attacks

14

Housewife

40

Down’s, IQ ~50, Frequent illnesses

10
Effective Primary Care
(Starfield Milbank Q 2005)

• Accessible and affordable
• Comprehensive: all people & problems; full service from prevention to rehabilitation
• Early diagnosis & treatment of illnesses
• Continuing: the person & disease esp chronic
• Whole-person (bio-psycho-social)
• Co-ordinate & gate-keep medical & social services
What are the health benefits of having a family doctor?
## Illness & Utilization Rates

<table>
<thead>
<tr>
<th>Last 4 weeks (N=3053)</th>
<th>FD (n=1150)</th>
<th>ORD (n=746)</th>
<th>NRD (n=1157)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen health good</td>
<td>53.2% #</td>
<td>41.3% ^ #</td>
<td>50% ^</td>
</tr>
<tr>
<td>Illness episodes</td>
<td>0.51*#</td>
<td>0.68 # ^</td>
<td>0.57 * ^</td>
</tr>
<tr>
<td>Consultations</td>
<td>0.85 *</td>
<td>0.85 ^</td>
<td>0.49 * ^</td>
</tr>
<tr>
<td>A&amp;E use</td>
<td>2.3 %</td>
<td>5.2%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Hospital Ad</td>
<td>1%</td>
<td>1.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Self medication</td>
<td>28.3%</td>
<td>31.6%</td>
<td>31.8%</td>
</tr>
</tbody>
</table>

* # ^ Significant difference by univariate Poisson regressions
## Utilization Pattern in Last Illness

<table>
<thead>
<tr>
<th>% Subjects</th>
<th>FD (n=1150)</th>
<th>ORD (n=746)</th>
<th>NRD (n=1157)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any med service</td>
<td>80.2**#</td>
<td>74.7#^</td>
<td>60.8*^</td>
</tr>
<tr>
<td>Any WM doctor</td>
<td>77.6 **#</td>
<td>68.1#^</td>
<td>51.3*^</td>
</tr>
<tr>
<td>FD</td>
<td>67 (86%)</td>
<td>10.6</td>
<td>7</td>
</tr>
<tr>
<td>ORD</td>
<td>16.8</td>
<td>54.7 (80%)</td>
<td>19.4</td>
</tr>
<tr>
<td>Other doctors</td>
<td>14.3</td>
<td>13.1</td>
<td>29</td>
</tr>
<tr>
<td>Chinese med</td>
<td>13.1</td>
<td>13.1</td>
<td>10.6</td>
</tr>
<tr>
<td>Attended A&amp;E</td>
<td>4.3*#</td>
<td>7.8#</td>
<td>9.6*</td>
</tr>
<tr>
<td>Hospitalization</td>
<td>1.7*#</td>
<td>3.6#</td>
<td>4.0*</td>
</tr>
</tbody>
</table>

* # ^Significant difference by univariate logistic regressions
### Preventive & Comprehensive Care

<table>
<thead>
<tr>
<th>% Subjects</th>
<th>FD (n=1150)</th>
<th>ORD (n=746)</th>
<th>NRD (n=1157)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td>17.6*</td>
<td>19.2^</td>
<td>24.1*^</td>
</tr>
<tr>
<td>Drinking</td>
<td>37*</td>
<td>40.1</td>
<td>41.1*</td>
</tr>
<tr>
<td>Reg exercise</td>
<td>68.4*#</td>
<td>62.6#</td>
<td>63.3*</td>
</tr>
<tr>
<td>BP (&gt;30-yr-old)</td>
<td>85.3*</td>
<td>81.5 ^</td>
<td>69.6*^</td>
</tr>
<tr>
<td>Cer smear (MF)</td>
<td>88.2*</td>
<td>88.0 ^</td>
<td>82.9*^</td>
</tr>
<tr>
<td>Preventive care</td>
<td>52.5*#</td>
<td>41.6#</td>
<td>37.3*</td>
</tr>
<tr>
<td>Chronic Dx</td>
<td>49.8*</td>
<td>46.0</td>
<td>44.5 *</td>
</tr>
</tbody>
</table>

Significant difference by Univariate logistic regressions
* FD & NRD, ^ ORD & NRD, # FD & ORD
# Process of Care in Last Consultation

<table>
<thead>
<tr>
<th></th>
<th>FD (n=1150)</th>
<th>ORD (n=746)</th>
<th>NRD (n=1157)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prescription (%)</td>
<td>93.2*</td>
<td>94.4^</td>
<td>87.8*^</td>
</tr>
<tr>
<td>Investigation (%)</td>
<td>7.7*</td>
<td>10.3</td>
<td>11*</td>
</tr>
<tr>
<td>Referral (%)</td>
<td>2.8</td>
<td>3.5</td>
<td>4</td>
</tr>
<tr>
<td>Explanation (%)</td>
<td>80.1*#</td>
<td>73.1 #^</td>
<td>63.4 *^</td>
</tr>
<tr>
<td>Address concerns (%)</td>
<td>69.5*#</td>
<td>63.4 #^</td>
<td>54.5 *^</td>
</tr>
<tr>
<td>Lifestyle advice (%)</td>
<td>45*</td>
<td>42.2 ^</td>
<td>35.4 *^</td>
</tr>
<tr>
<td>Screening (%)</td>
<td>15.8 *</td>
<td>13.3</td>
<td>11.8 *</td>
</tr>
</tbody>
</table>

*# ^ Significant difference by multivariate logistic regressions, controlling for sociodemographics, health status, chronic morbidity & lifestyle.
# Outcomes of Last Consultation

<table>
<thead>
<tr>
<th></th>
<th>RFD (n=1150)</th>
<th>RnFD (n=746)</th>
<th>NRD (n=1157)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient enablement score (PEI)</strong></td>
<td>3.33+@</td>
<td>2.63+</td>
<td>2.58@</td>
</tr>
<tr>
<td><strong>Health got better</strong></td>
<td>53.5%*</td>
<td>50%^</td>
<td>44.8%*^</td>
</tr>
<tr>
<td><strong>Satisfied</strong></td>
<td>96.1%*</td>
<td>93.9%^</td>
<td>92%**</td>
</tr>
<tr>
<td><strong>Recommend doctor</strong></td>
<td>76.1%*#</td>
<td>61.1%#^</td>
<td>44.2%*^</td>
</tr>
</tbody>
</table>

+@ Significant difference by multivariate linear regressions
* # ^ Significant difference by multivariate logistic regressions
Health Benefits of Having a FD

- Better general health & less illness
- More accessible & continuing care
- Less use of A&E or hospital service
- Healthier life style
- More preventive care & screening
- More explanation & reassurance
- More health improvement & enablement from the consultation
Primary care based health care system
Illnesses & Consultations Reported by the HK Population in Four Weeks

1000 persons in the general population

- 353 had illnesses
- 336 consulted
- 80% consulted PC, 8.4 times/person in 1 yr

- 12 (3.5%) hospitalized
- 39 (11.4%) saw specialists
- 247 (73.5%) saw GP/GOPD
- 96 (28.6%) consulted CM

*Lam et al, SHS-P-10 Report, HHSRF, Food & Health Bureau 2009.*
The Butterfly Effect

• Mean referral rate in primary care in HK is 2.5% of all consultations\(^1\)

• ↑ referral by 1/100 consultations (2.5% to 3.5%) will increase secondary care new case load by 40%

• Each PC doctor shares care of one patient with chronic disease will reduce specialist clinic patient load by >4000

1 Lo et al. SHS-P-11 Report, Food & Health Bureau, 2009, HK.
Empower Primary Care

- To serve its purpose
  - Trust from the public, stake-holders & colleagues
  - Every person has a family doctor
  - Financing system encourages PC
  - PC being the continuing link of care
  - Bi-directional referral
Enable Primary Care

• To prevent & manage complex / chronic diseases
  − Training in FM & CME for PC doctors
  − Research & guidelines to inform practice
  − Direct access to drugs & investigations
  − Resources, facilities & remuneration
  − A multi-disciplinary primary care team
Horizontal & Vertical Integration

Tertiary care
Secondary care

Laboratories
Optometrists
Dentists, TCM

The PC doctor

Nurses, PT, OT, dieticians, etc.

Pharmacists

Community & social services

Patient
To deliver effective primary care

A family doctor for everyone & a multidisciplinary primary care team
Acknowledgement

• Co-investigators
  • Dr. Yvonne Y.Y. Lo, Professor Stewart Mercer, Dr. Daniel Fong, Dr. Gabriel Leung, Dr. T.P. Lam and Dr. Albert Lee

• Study on Health Services Grant, Food & Health Bureau, Government of the HKSAR