“The challenge of dealing with multimorbidity in chronic care”

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Chairman European Forum for Primary Care
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&

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Training Coor, Faculty of FM, Ghana College of Physicians & Surgeons
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Accra, 04.05.2015
The challenge of dealing with multimorbidity in chronic care

1. Challenges: demographical and epidemiological transition and inequity in health (care)

2. Multi-morbidity: a paradigm-shift from problem-oriented towards goal-oriented care

3. PHC and Research

4. Conclusion: the way forward
Akye, if you have a better proposal for a title: go ahead!

Jan De Maeseneer; 19/04/2015
The changing society

a. Demographical and epidemiological developments

b. Scientific and technological developments

c. Cultural developments

d. Socio-economical developments

e. Globalisation and “giocalisation”
The ageing society
Akye, please replace by a graph that is representative for Africa

Jan De Maeseneer; 19/04/2015
Akye, do you have a slide with a picture of an old African couple?

Jan De Maeseneer; 19/04/2015
Figure 1. Global Deaths According to Cause and Sex, 2008.
Adapted from the World Health Organization (WHO).
TERMINOLOGY:

"NON-COMMUNICABLE DISEASE" IS INAPPROPRIATE:
LET US TALK ‘CHRONIC CONDITIONS’.
Epidemiology

• The world is ageing!

• The over-65s account for ~15% of the population, and it is anticipated that by 2050 the dependence ratio of older people (i.e. those aged ≥65 as a proportion of those aged 20–64) will have risen from the current figure of 22% to 46%.

• Health service provision for the older adult is an issue of increasing importance, especially in industrialized nations.

• Hospital admissions for emergencies have continued to increase year on year, with the largest increases in the over-65s. Indeed, some epidemiologists have concluded that the future of in-patient emergency medical care is the care of the older adult.

Epid - Estimated Population Growth in Ghana

Actual annual population growth in %
Ghana 2.4
Unites States 0.9
Age dependency ratio
Age dependency ratio last reported at 6.72 in 2011, (World Bank report, 2012). The older than 64--to the working-age population--those ages 15-64 in Ghana.
## Multi-morbidity: WHO SAGE wave 1: Ghana

<table>
<thead>
<tr>
<th>Co-morbidity</th>
<th>Percentage %</th>
<th>Chronic disease</th>
<th>Associated co-morbidities</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>68.0</td>
<td>Arthritis</td>
<td>Hypertension</td>
<td>41.8</td>
</tr>
<tr>
<td>1</td>
<td>22.6</td>
<td></td>
<td>Angina</td>
<td>14.1</td>
</tr>
<tr>
<td>2+</td>
<td>9.4</td>
<td>Stroke</td>
<td>Hypertension</td>
<td>52.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diabetes</td>
<td></td>
<td>21.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Asthma</td>
<td></td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diabetes</td>
<td>Hypertension</td>
<td>80.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Asthma</td>
<td></td>
<td>11.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Depression</td>
<td></td>
<td>5.6</td>
</tr>
</tbody>
</table>
Prevalence of Chronic conditions in the 50+ years (%)

- Arthritis: 13.8%
- Stroke: 2.8%
- Angina: 3.6%
- Diabetes: 3.8%
- Chronic Lung Disease: 0.6%
- Asthma: 3.3%
- Depression: 1.9%
- Hypertension: 14.2%
- Cataracts: 5.3%
- Endentulism: 3%

Study on global AGEing and adult health – [SAGE]
Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study

Karen Barnett, Stewart W Mercer, Michael Norbury, Graham Watt, Sally Wyke, Bruce Guthrie

Summary

Background Long-term disorders are the main challenge facing health-care systems worldwide, but health systems are largely configured for individual diseases rather than multimorbidity. We examined the distribution of multimorbidity, and of comorbidity of physical and mental health disorders, in relation to age and socioeconomic deprivation.

Lancet 2012; 380: 37–43
Published Online
May 10, 2012
DOI:10.1016/S0140-
Akye, are there data on multimorbidity and chronic conditions from Ghana?

Jan De Maeseneer; 19/04/2015
Figure 1: Number of chronic disorders by age-group
Figure 2: Prevalence of multimorbidity by age and socioeconomic status
On socioeconomic status scale, 1=most affluent and 10=most deprived.
Multimorbidity becomes the rule, not the exception

- More than half of the patients with COPD have either cardiovascular problems, or diabetes
- Patients with COPD have a 3- to 6-fold risk to have all these problems
- 50% of 65+ have at least 3 chronic conditions
- 20% of 65+ have at least 5 chronic conditions
The changing society

a. Demographical and epidemiological developments

b. Scientific and technological developments

c. Cultural developments

d. Socio-economical developments

e. Globalisation and “giocalisation”
The changing society

a. Demographical and epidemiological developments

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Maatregelen nodig, zowel tegen racisme bij artsen als tegen concentratiepraktijken

‘Niet openstaan voor andere culturen is geen optie als dokter’

Bijna zes op de tien artsen vinden dat er te veel migranten zijn, volgens de Arsentkrant. Maar hoeveel migranten zijn dokters? ‘Bijzonder weinig, enkele tientallen over heel Vlaanderen’, zegt professor Jan De Maeseneer (Universiteit Gent). Maar allochtonen patiënten zijn er genoeg, in de wachtkamer van sommige dokters zelfs te veel. ‘Het ontstaan van concentratiepraktijken is even slecht als concentratiescholen’, zegt De Maeseneer. ‘Sommige patiënten voelen zich dan niet meer thuis. Ik heb zelf een praktijk met meer dan 55 nationaliteiten en er zijn patiënten die daar een punt van maken.’

Brussel
Een Gerichtgeving
Katrin Serneels

In de tijd van Hippocrates bestonden er slaven en bestonden er dokters. Maar de eed van Hippocrates gold ook voor de migranten toen, die vaak als slaaf werden ingezet. ‘In alle huizen waar ik genodigd werd, zal ik binnengaan in het belang van de patiënten – vrouwen en mannen, zowel vrijen als slaven.’ In de tijd van Vandenbroucke, meer dan twee millennia later, bestaat het vermoei dat niet bij alle migranten even welkom zijn. ‘Zes op de tien artsen vinden dat er te veel migranten zijn in België, dat is een maatschappelijk probleem, dat vraagt om maatregelen’, zegt professor Jan De Maeseneer, hoofd van de dienst huisartsengeneeskunde aan de Universiteit Gent. ‘Niet openstaan voor andere culturen is geen optie als dokter. Je moet men bij stellen. Waarom heeft de allochton bevolking een voorkeur voor die paar artsen, en niet voor de andere? Daar zou onderzoek naar moeten gebeuren, waaruit eventueel maatregelen kunnen volgen. Zodat het voor het onderwijs niet goed is dat er concentratiescholen zijn, is het voor de huisartsengeneeskunde niet goed dat er concentratiepraktijken zijn.’

Waar komt die racista golds de houding bij de witte jassen van dan? ‘Er zijn verschillende mogelijke redenen waarom dokters geen voorkeur hebben voor allochtonen patiënten’, zegt De Maeseneer. ‘Misschien omdat het moeilijker is om in contact te komen met migranten. Of als dokter een patiënt afschept om racistische redenen, kan je moeilijk vaststellen. De dokter kan zeggen dat hij geen tijd meer heeft vandaag, of dat zijn spreekuur al vol zit voor de volgende twee weken.”

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Of een dokter een patiënt afschept om racistische redenen, kan je moeilijk vaststellen. De dokter kan zeggen dat hij geen tijd meer heeft vandaag, of dat zijn spreekuur al vol zit voor de volgende twee weken.”

Maar het probleem was gewoon dat te veel mensen dokter werden, niet dat als migranten mensen werden
The changing society

a. Demographical and epidemiological developments

b. Scientific and technological developments

c. Cultural developments

d. Socio-economical developments

e. Globalisation and “giocalisation”
Healthy life expectancy in Belgium

Socio-economic inequalities in health

Healthy life expectancy in Belgium, 25 years, men

Akye, do you have a similar African graph?

Jan De Maeseneer; 19/04/2015
The changing society

a. Demographical and epidemiological developments
b. Scientific and technological developments
c. Cultural developments
d. Socio-economical developments
e. Globalisation and “glocalisation”
An MSF health worker in protective clothing holds a child suspected of having Ebola in the MSF treatment center in Paynesville, Liberia, October 2014.

MSF’s West Africa Ebola response started in March 2014 and counts activities in Guinea, Liberia, and Sierra Leone. In response to a confirmed case in Mali, an MSF team arrived in the country this week to reinforce MSF’s regular mission and provide technical support to the Ministry of Health.
The challenge of dealing with multimorbidity in chronic care

1. Challenges: demographical and epidemiological transition and inequity in health (care)

2. Multi-morbidity: a paradigm-shift from problem-oriented towards goal-oriented care

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The Chronic Care Model

Community
- Resources and Policies
- Self-Management Support

Health Systems
- Organization of Health Care
- Delivery System Design
- Decision Support
- Clinical Information Systems

Improved Outcomes

Informed, Activated Patient
- Productive Interactions
- Prepared, Proactive Practice Team

Developed by The MacColl Institute
© ACP-ASIM Journals and Books

Wagner EH. Effective Clinical Practice 1998;1:2-4
EMPOWERMENT

Community
Resources and Policies

Health Systems
Organisation of Health Care

- Self-management Support
- Delivery System Design
- Decision Support
- Clinical Information Systems

Informed, Activated Patient

Productive Interactions

Prepared, Proactive Practice Team

Patient
Improved Outcomes

EMPOWERMENT
But…
Margaret is 75 years old. Fifteen years ago she lost her husband. She is a patient in the practice for 15 years now. During these last 15 years she has been through a laborious medical history: operation for coxarthrosis with a hip prothesis, hypertension, diabetes type 2, COPD and osteoarthritis. Moreover there is osteoporosis. She lives independently at her home, with some help from her youngest daughter Elisabeth. I visit her regularly and each time she starts saying: “Doctor, you must help me”. Then follows a succession of complaints and unwell feeling: sometimes it has to do with the heart, another time with the lungs, then the hip, ...
Akye, can you make this story more African: I am sure you are faced with similar problems (3 slides). If possible add a picture of an old African women. Is the combination of this example of multimorbidity possible in Africa? If so, do not change the multimorbidity, as the following slides are based on this set of chronic conditions

Jan De Maeseneer; 19/04/2015
Each time I suggest – according to the guidelines - all sorts of examinations that did not improve her condition. Her requests become more and more explicit, my feelings of powerlessness, insufficiency and spite, increase. Moreover, I have to cope with guidelines that are contradictory: for COPD she sometimes needs corticosteroids, which worsens her glycemic control.

The adaptation of the medication for the blood pressure (at one time too high, at another time too low), cannot meet with her approval, as does my interest in her HbA1C and lung function test-results.
After so many contacts Margaret says: “Doctor, I want to tell you what really matters for me. On Tuesday and Thursday, I want to visit my friends in the neighbourhood and play cards with them. On Saturday, I want to go to the Supermarket with my daughter. And for the rest, I want to be left in peace, I don’t want to change continually the therapy anymore, … especially not having to do this and to do that”.

In the conversation that followed it became clear to me how Margaret had formulated the goals for her life. And at the same time I felt challenged how the guidelines could contribute to the achievement of Margaret’s goals. I visit Margaret again with pleasure ever since: I know what she wants, and how much I can (merely) contribute to her life.
**Sum of the guidelines**

### Patient tasks
- Joint protection
- Energy conservation
- Self monitoring of blood glucose
- Exercise
- Non weight-bearing if severe foot disease is present and weight bearing for osteoporosis
- Aerobic exercise for 30 min on most days
  - Muscle strengthening
  - Range of motion
- Avoid environmental exposures that might exacerbate COPD
- Wear appropriate footwear
- Limit intake of alcohol
- Maintain normal body weight

### Clinical tasks
- Administer vaccine
  - Pneumonia
  - Influenza annually
- Check blood pressure at all clinical visits and sometimes at home
- Evaluate self monitoring of blood glucose
  - Foot examination
  - Laboratory tests
    - Microalbuminuria annually if not present
    - Creatinine and electrolytes at least 1-2 times a year
    - Cholesterol levels annually
    - Liver function biannually
    - HbA1C biannually to quarterly
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    - Cholesterol levels annually
    - Liver function biannually
    - HbA1C biannually to quarterly

### Patient education
- Foot care
- Osteoarthritis
- COPD medication and delivery system training
- Diabetes

### Time Medications

<table>
<thead>
<tr>
<th>Time</th>
<th>Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td>Ipratropium dose inhaler Alendronate 70 mg/wk</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Calcium 500 mg Vit D 200 IU Lisinopril 40mg Glyburide 10mg Aspirin 81mg Metformin 850 mg Naproxen 250 mg Omeprazol 20mg</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Ipratropium dose inhaler Calcium 500 mg Vit D 200 IU</td>
</tr>
<tr>
<td>7:00 PM</td>
<td>Ipratropium dose inhaler Metformin 850 mg Calcium 500 mg Vit D 200 IU Lovastatin 40 mg Naproxen 250 mg</td>
</tr>
<tr>
<td>11:00 PM</td>
<td>Ipratropium dose inhaler As needed</td>
</tr>
<tr>
<td>As needed</td>
<td>Albuterol dose inhaler Paracetamol 1g</td>
</tr>
</tbody>
</table>

Boyd et al. JAMA, 2005
ABSTRACT

The problem-oriented model upon which much of modern medical care is based has resulted in tremendous advancements in the diagnosis and treatment of many illnesses. Unfortunately, it is less well suited to the management of a number of modern health care problems, including chronic incurable illnesses, health promotion and disease prevention, and normal life events such as pregnancy, well-child care, and death and dying. It is not particularly conducive to an interdisciplinary team approach and tends to shift control of health away from the patient and toward the physician. Since when using this approach the enemies are disease and death, defeat is inevitable.

Proposed here is a goal-oriented approach that is well suited to a greater variety of health care issues, is more compatible with a team approach, and places a greater emphasis on physician-patient collaboration. Each individual is encouraged to achieve the highest possible level of health as defined by that individual. Characterized by a greater emphasis on individual strengths and resources, this approach represents a more positive approach to health care. The enemy, not disease or death but inhumanity, can almost always be averted.

1. There exists an ideal “health” state which each person should strive to achieve and maintain. Any significant deviation from this state represents a problem (disease, disorder, syndrome, etc.).
2. Each problem can be shown to have one or more potentially identifiable causes, the correction or removal of which will result in resolution of the problem and restoration of health.
3. Physicians, by virtue of their scientific understanding of the human organism and its afflictions, are generally the best judges of their patients’ fit with or deviation from the healthy state and are in the best position to determine the causes and appropriate treatment of identified problems.
4. Patients are generally expected to concur with their physicians’ assessments and comply with their advice.
5. A physician’s success is measured primarily by the degree to which the patients’ problems have been accurately and efficiently identified and labeled and appropriate medical techniques and technologies have been expertly applied in an effort to eradicate those problems.

This conceptual model is ideally suited to the understanding and management of acute and curable illnesses. It has also been extremely important for clinical approach.
### “Problem-oriented versus goal-oriented care”

<table>
<thead>
<tr>
<th></th>
<th>Problem-oriented</th>
<th>Goal-oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition of Health</strong></td>
<td>Absence of disease as defined by the health care system</td>
<td>Maximum desirable and achievable quality and/or quantity of life as defined by each individual</td>
</tr>
</tbody>
</table>
“Problem-oriented versus goal-oriented care”

<table>
<thead>
<tr>
<th>Measures of success</th>
<th>Problem-oriented</th>
<th>Goal-oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accuracy of diagnosis, appropriateness of treatment, eradication of disease, prevention of death</td>
<td>Achievement of individual goals</td>
</tr>
</tbody>
</table>
“Problem-oriented versus goal-oriented care”

<table>
<thead>
<tr>
<th></th>
<th>Problem-oriented</th>
<th>Goal-oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluator of success</td>
<td>Physician</td>
<td>Patient</td>
</tr>
</tbody>
</table>
What really matters for patients is

- Functional status
- Social participation
Akye, are people in Africa familiar with ICF: International Classification of Functioning? If not, I will add some explanatory slides.

Jan De Maeseneer; 19/04/2015
Evolution from
‘Chronic Disease Management’
towards
‘Participatory Patient Management’

Puts the patient centrally in the process.
Changes the perspective from ‘problem-oriented care’.
towards ‘goal-oriented’ care.
Diabetes clinic: horizontal approach to chronic conditions

Objectives:

- Improving the care for diabetes type 2 patients through a structured multidisciplinary follow-up and health education
- Improve self-efficacy of patients
- To tackle social inequalities in relation to chronic diseases
Akye, do you have this kind of approach through e.g. a comprehensive diabetes-clinic in Africa? If not, we skip this.
Diabetes clinic: horizontal approach to chronic conditions

• Programme:
  – biomedical and behavioural follow-up by nurse, diabetes educator, dietician and family physician, implementing guidelines in the context of the patient
  – exchange of experiences by the patients (groups)
  – “diabetes-cooking” (3 x / year)
Diabetes breakfast
Chronic care clinics in FM programmes; Ghana

• Korle-Bu Teaching Hospital, Accra
  – Palliative care, Diabetes, Hypertension, Asthma

• Komfo Anokye Teaching Hospital, Kumasi
  – Diabetes, Hypertension

• Tetteh-Quarshie Memorial Hospital, Eastern Regn
  – Palliative care
COPC ‘lab’* - Bompieso Community clinic

- Western Region, Ghana; 6hrs drive from Accra
- Built by Aboso Goldfields Ltd. for community (designed by FP)
- Started April 2014
- Manned by MOH/GHS staff
- Medical students’ rotation

* Terminology by Shabir Moosa – Jozi FM & Wits University, SA.
Bompieso copc project

- 1 – 2 monthly visit by FP
- Patient-centered consultation
- Chronic disease register – HPTN, DM, Arthritis etc.
- Health staff consult FP off-site by phone
Bompieso copc project

- Home visit: Woman with hypertension & diabetes;
- FP visits to community purely voluntary
PHC addresses the demographical and epidemiological challenges:

- Accessibility
- Generalism
- Person-centered / Goal-oriented
- Integration of medical and contextual evidence
- Inter-professional approach
- Social cohesion
Closing the gap in a generation

Health equity through action on the social determinants of health
Akye, slides 39-46 may be skipped as it is much more a theoretical background, we could jump immediately to COPC, slide 47
Primary health care as a strategy for achieving equitable care:

a literature review commissioned by the Health Systems Knowledge Network

Prof. J. De Maeseneer, M.D.¹, Ph.D; S. Willems, M.A., Ph.D.¹; A. De Sutter, M.D.,
Ph.D.¹; I. Van de Geuchte, M.L.¹; M. Billings, M.Sc².

¹Department of Family Medicine and Primary Health Care, Ghent University. Belgium.
²Global Health through Education, Training and Service, Attleboro, USA.

Primary health care as a strategy for promoting health equity and intersectoral action

- SOCIAL STRATIFICATION
- DIFFERENTIAL VULNERABILITY AND EXPOSURE
- HEALTH INEQUALITY

- STRUCTURAL DETERMINANTS
Primary health care as a strategy for promoting health equity and intersectoral action

- Social Stratification
- Differential Vulnerability and Exposure
- Health Inequality

Structural Determinants

People

PHC-Team
The strength of primary care systems
Stronger systems improve population health but require higher levels of spending

Jeannie L Haggerty associate professor¹, Jean-Frédéric Lévesque chief operating officer², William Hogg professor³, Sabrina Wong associate professor⁴

¹Department of Family Medicine, McGill University, Montreal, QC, Canada H3T 1M5; ²Bureau of Health Information, Sydney, NSW, Australia; ³CT Lamond Primary Health Care Research Centre, Bruyere Research Institute, Ottawa, ON, Canada; ⁴School of Nursing, University of British Columbia, Vancouver, BC, Canada
A mountain of evidence shows that low socioeconomic status is one of the highest risk factors in those presenting to primary care. It is therefore possible that health systems that support and value high quality clinician-patient relationships might give patients—most of whom are in a lower social class than their clinicians—an experience of respect, validation, and empowerment that translates into lower health inequality.
Primary health care as a strategy for promoting health equity and intersectoral action
Drs Sidney and Emily Kark
Community Health Centre:

- Family Physicians; nurses; dieticians; health promotors; social workers; …
- 5800 patients; 65 nationalities
- Integrated needs based mixed capitation; no co-payment
- COPC-strategy
COPC-example: dental problems: periodontal disease in childhood

Risk factor for:

- Diabetes
- Coronary Heart Disease
- Preterm birth and low birth weight
- Osteoporosis
COPC-project: from individual care to community health care

Identifying health problem:
Family physicians/nurses: problematic oral condition of toddlers, leading to feeding problems, crying, not sleeping,...
A dentist? I cannot afford that.

I don’t know where to find a dentist.

I’m doing Fristi in his bottle to stop him cry.

My child is too afraid of the dentist and to be honest, me too.

Focus Group sessions – involving the community.

COPC-project: DENTAL FITNESS.
COPC-project: DENTAL FITNESS
Results research children 30 months old:

- 18.5% early symptoms of childhood caries (7.4% HSC – 29.6% LSC)
- 100% need for treatment!

Correlation with

- deprivation
- nationality (Eastern-Europe)
- no previous dentist consultations
Childhood caries:

- Information and Sensibilisation
- Involving providers, social workers, parents, schools...

Strategies:

Community oriented, intersectoral, participation.

Educational platform for students in dentistry
Accessible primary dental care

Centre for Primary Oral Health Care
Botermarkt Ledeberg (CEMOB)

Started 01/09/2006

Towards accessible oral health care!

Ghent University
Integration of personal and community health care

The promotion of primary health care since 1978 has had a profound political impact: it forced medical educators around the world to address the health needs of all people and it spurred the global recognition of family doctors as the primary medical providers of health care in the community. Yet, on the 30th anniversary of the Alma-Ata Declaration, disillusionment with and failure to appreciate primary care’s contribution to health persist. The missing link in the translation of the principles of Alma-Ata from idealism to practical, at the expense of population health. The challenge of this balancing act is illustrated in the interchanged use of the terms “primary care”, which usually means care directed at individuals in the community, and “primary health care”, which usually means a population-directed approach to health. To simplify this discussion and to reduce confusion, we will use the term “personal care” instead of “primary care” and “community-oriented primary care” (panel) instead of “primary health care”.

*Chris van Weel, Jan De Maeseneer, Richard Roberts
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c.vanweel@hag.umcn.nl

The Lancet 2008;372:871-2
Akye, are there examples of intersectoral action for health at the community level in Ghana, bringing all primary care stakeholders together? If so, please put them in and replace 57-61. If not, we could skip 57-61

Jan De Maeseneer; 19/04/2015
Intersectoral action for health: the community

Ledeberg (8,700 inh.)

- Platform of stakeholders
- Implementing COPC-strategy, taking different sectors on board
Platform of stakeholders:

- 40 to 50 people
- 3 monthly
- Exchange of information
- “Community diagnosis”

Intra-family violence
Access to health care for undocumented migrants
Local platforms for health and welfare:
Bottom-up information of policy development
Intersectoral action for health: city

- City of Ghent (225,000 inh.)
  - Implementation Local Social Policy:
  - 11 clusters:
    - Work
    - Interculturality
    - Youth
    - Elderly
    - ...
    - Health

- Top-priorities:
  - Living conditions (housing)
  - Access to health promotion and care
Health council of the City of Ghent

Goals 2020:

• Partnership with all stakeholders
• Evidence-based health policy
• Intersectoral action to address health equity
• Ghent: a healthy city with healthy communities
• To strengthen impact of health promotion
• To improve mental health of citizens
• To give every child a fair start in life
• To improve access to health care
Box 2.6 Social policy in the city of Ghent, Belgium: how local authorities can support intersectoral collaboration between health and welfare organizations

In 2004 a regional government decree in Flanders, Belgium, institutionalized the direct participation of local stakeholders and citizens in intersectoral collaboration on social rights. This now applies at the level of cities and villages in the region. In one of these cities, Ghent, some 450 local actors of the health and welfare sector have been clustered in 11 thematic forums: legal help; support and security of minors; services for young people and adolescents; child care; ethnic cultural minorities; people with a handicap; the elderly; housing; work and employment; people living on a “critical income”; and health.

The local authorities facilitate and support the collaboration of the various organizations and sectors, for example, through the collection and monitoring of data, information and communication, access to services, and efforts to make services more pro-active. They are also responsible for networking between all the sectors with a view to improving coordination. They pick up the signals, bottlenecks, proposals and plans, and are responsible for channeling them, if appropriate, to the province, region, federal state or the European Union for translation into relevant political decisions and legislation.

A steering committee reports directly to the city council and integrates the work of the 11 forums. The support of the administration and a permanent working party is critical for the sustainability and quality of the work in the different groups. Participation of all stakeholders is particularly prominent in the health forum: it includes local hospitals, family physicians, primary-care services, pharmacists, mental health facilities, self-help groups, home care, health promotion agencies, academia sector, psychiatric home care, and community health centres.
The challenge of dealing with multimorbidity in chronic care

1. Challenges: demographical and epidemiological transition and inequity in health (care)

2. Multi-morbidity: a paradigm-shift from problem-oriented towards goal-oriented care

3. PHC and Research

4. Conclusion: the way forward
Akye, if you have a better proposal for a title: go ahead!

Jan De Maeseneer; 19/04/2015
Figure 1: Academic health science systems as integrators

(A) The discovery-care continuum, including discovery science, preclinical and clinical research, adoption in practice, and global uptake; (B) current fragmented organisational structure of the clinical research enterprise; (C) Duke Medicine model: a continuous, intercommunicated discovery-care model. FDA=US Food and Drug Administration. AHSS=Academic health science systems. NGOs=non-governmental organisations.
Akye, please add other relevant elements in relation to research

Jan De Maeseneer; 19/04/2015
Problems with guidelines in multimorbidity

- “Evidence” is produced in patients with 1 disease
- Guidelines may lead to contradictions (e.g. in therapy)
Challenges for research in Primary Health Care

1. Approach to multi-morbidity: from problem-oriented to goal-oriented care in the framework of interprofessional chronic care research
2. Research on “Community Oriented Primary Care” and intersectoral accent for health
3. Integration of care for welfare and health
4. Empowerment, promotion, prevention and participation
5. Access and diversity
6. Integration of new technology in PHC
7. PHC in a global context
8. Education for PHC
9. “Inequity by disease”: concept, prevalence, approach?
Vertical Disease Oriented Approach

- Mono-disease-programs? Or…
- Integration in comprehensive PHC
The challenge: vertical disease-oriented programs and multimorbidity

- Create duplication
- Lead to inefficient facility utilization
- May lead to gaps in patients with multiple co-morbidities
- Lead to inequity between patients
“Inequity by disease” becomes an increasing problem both in developed and developing countries

See www.15by2015.org
• In many countries, specific access to services is conditioned by the diagnosis of the patient. This may lead to a new kind of "inequity", the "inequity by disease".

• It is worthwhile studying what is the actual presentation of this phenomenon, and what could be done to handle it appropriately. How will market forces and commercialisation play a role in this development?
Tackling NCDs: a different approach is needed

The NCD Alliance aims to put non-communicable diseases (NCDs) on the global agenda to address the NCD crisis. Improving outcomes in morbidity and mortality by 2015 will clearly depend to a large extent on tackling the burden of NCDs, especially in developing countries.²
devolved, integrated and implemented in the context of integrated primary health care."³ Horizontal primary health care provides the opportunity for integration and addresses the problem of inequity by allowing focus on NCDs while providing access to the care of other health problems, thereby avoiding inequity by disease.³⁰
Tackling NCDs: a different approach is needed

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*Jan De Maeseneer, Richard G Roberts, Marcelo Demarzo, Iona Heath, Nelson Sewankambo, Michael R Kidd, Chris van Weel, David Egilman, Charles Boelen, Sara Willems
Faculty of Medicine and Health Sciences, Secretariat of The Network: Towards Unity For Health (JDM) and Department of Family Medicine and Primary Health Care (SW), Ghent University, Ghent, Belgium; Department of Family Medicine, University of Wisconsin School of Medicine and Public Health, Madison, WI, USA (RGR); Department of Preventive Medicine, Federal University of Sao Paolo, Sao Paulo, Brazil (MD); Royal College of General Practitioners, London, UK (IH); Makerere University College of Health Sciences, Kampala, Uganda (NS); Faculty of Health Sciences, Flinders University, Adelaide, Australia (MRK); Department of Primary and Community-Care, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands (CvW); Department of Family Medicine, Brown University, Providence, RI, USA (DE); and Secretariat of Global Consensus for Social Accountability of Medical Schools, Sciez-sur-Léman, France (CB)

context of integrated primary health care”.⁹ Horizontal primary health care provides the opportunity for integration and addresses the problem of inequity by allowing focus on NCDs while providing access to the care of other health problems, thereby avoiding “inequity by disease”."¹⁰
Resolution WHA62.12 “Primary Health Care, including health systems strengthening”

The World Health Assembly, urges member states: … (6) to encourage that vertical programmes, including disease-specific programmes, are developed, integrated and implemented in the context of integrated primary health care.
The challenge of dealing with multimorbidty in chronic care

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Jan De Maeseneer; 19/04/2015
Report of the

EXPERT PANEL ON EFFECTIVE WAYS
OF INVESTING IN HEALTH (EXPH)

on

Definition of a Frame of Reference in relation to Primary Care with a special emphasis on Financing Systems and Referral Systems
Opinion on definition of primary care – Definition

Core-definition

'The Expert Panel considers that primary care is the provision of universally accessible, integrated person-centered, comprehensive health and community services provided by a team of professionals accountable for addressing a large majority of personal health needs. These services are delivered in a sustained partnership with patients and informal caregivers, in the context of family and community, and play a central role in the overall coordination and continuity of people’s care.

The professionals active in primary care teams include, among others, dentists, dieticians, general practitioners/family physicians, nurses, occupational therapists, optometrists, pharmacists, physiotherapists, psychologists and social workers.’
Akye, this is the new European definition on primary care. Please give your feedback. Is this relevant for Africa?

Jan De Maeseneer; 19/04/2015
The future: WHO-six star provider

THE SIX STAR PROVIDER

- assess and improve the quality of care
- make optimal use of new technologies
  - promote healthy lifestyles
- reconcile individual and community health requirements
  - work efficiently in teams
- leadership attributes and acts as change agent
The patient is the starting point of the process

- Active
- Informed
- Service delivery
- Diversity

Accessibility
Equity
Akye, are these dimensions relevant for Africa? Please adapt.

Jan De Maeseneer; 19/04/2015
Characteristics of PHC/patient encounters

- C
- C
- C
- C
- C
- C
- C
- C
Characteristics of PHC/patient encounters

- Commitment - Connectedness
- C
- C
- C
- C
- C
- C
- C
- C
Characteristics of PHC/patient encounters

- Commitment - Connectedness
- Clinical Competence
- C
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- Coordination
- C
Characteristics of PHC / patient encounters

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- Context
- Comprehensiveness
- Complexity
- Coordination
- Continuity

Compassion ↔ Computer
GUIDING PATIENTS THROUGH COMPLEXITY:
MODERN MEDICAL GENERALISM

REPORT OF AN INDEPENDENT COMMISSION
FOR
THE ROYAL COLLEGE OF GENERAL PRACTITIONERS
AND
THE HEALTH FOUNDATION

October 2011
Figure 11: Vision for a new era of professional education

- Interdependence in education
- Transformative learning
- Equity in health
  - Population based
  - Individuals
    - Patient-centred
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<td>Transformative</td>
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**Table 3: Levels of learning**
B Burden of disease

DALYs (all causes) per 100,000
- <15,000
- 15,000–30,000
- >30,000

The beginning of the 20th century presented medical schools with unprecedented challenges to become more scientific and effective in the training of physicians. This was captured in the Flexner report of 1910. The 21st century presents medical schools with a different set of challenges: improving quality, equity, relevance and effectiveness in health care delivery; reducing the mismatch with societal priorities; redefining roles of health professionals; and providing evidence of the impact on people's health status.

To address those challenges, 130 organizations and individuals from around the world with responsibility for health education, professional regulation and policy-making participated for eight months in a three-round Delphi process leading to a three-day facilitated consensus development conference.

The consensus consists of 10 strategic directions for medical schools to become socially accountable, highlighting required improvements to:
- Respond to current and future health needs and challenges in society
- Reorient their education, research and service priorities accordingly
- Strengthen governance and partnerships with other stakeholders
- Use evaluation and accreditation to assess performance and impact

It recommends synergy among existing networks and organizations in order to move the consensus into action at the global level, with a number of tasks:
- Advocacy to recognize the value of the global consensus
- Consultancy to adapt and implement it in different contexts
- Research to design standards reflecting social accountability
- Global coordination to share experiences and support

A century after Flexner's report, the global consensus on social accountability of medical schools is a charted landmark for future medical education worldwide.
THEnet’s Evaluation Framework for Socially Accountable Health Professional Education
Figure 20. The partnership pentagon
Conference Gauteng
2015, September 12 - 16
THANK YOU
Thank you!

Jan.demaeseneer@ugent.be; aessuman@chs.ug.edu.gh
Akye, please add your e-mail address
Jan De Maeseneer; 19/04/2015