"The past is the future: Community-Oriented Primary Care brings Population Health Management into Practice"

Prof. Jan De Maeseneer, Family Physician

Faculty of Medicine and Health Sciences, Department of Public Health and Primary Care and Community Health Centre Botermarkt-Ghent

DEPARTMENT OF PUBLIC HEALTH AND PRIMARY CARE

WHO Collaborating Centre Family Medicine and Primary Health Care

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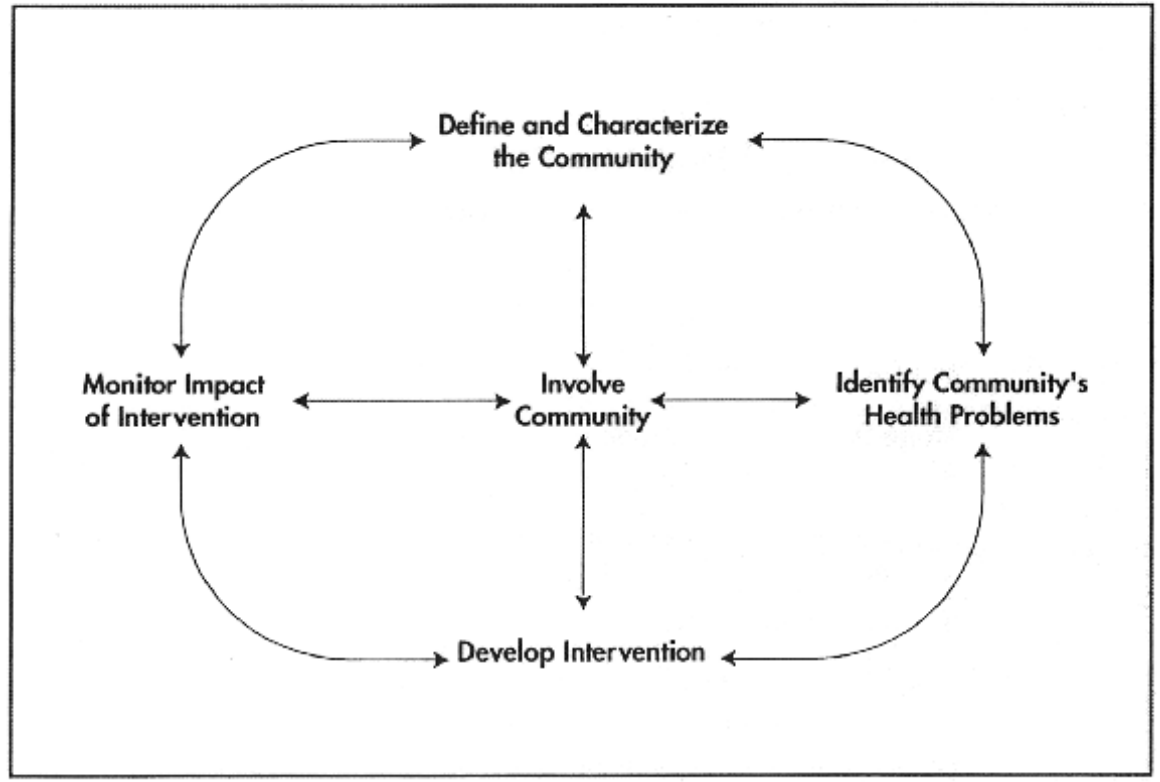
FIGURE 1.2: The COPC Process



History of Community Health Centres:

USA : In November of **1914**, New York City witnessed the establishment of the city's first district health care center at 206 Madison Avenue. Back then it catered to 35,000 people of the lower east side of Manhattan.

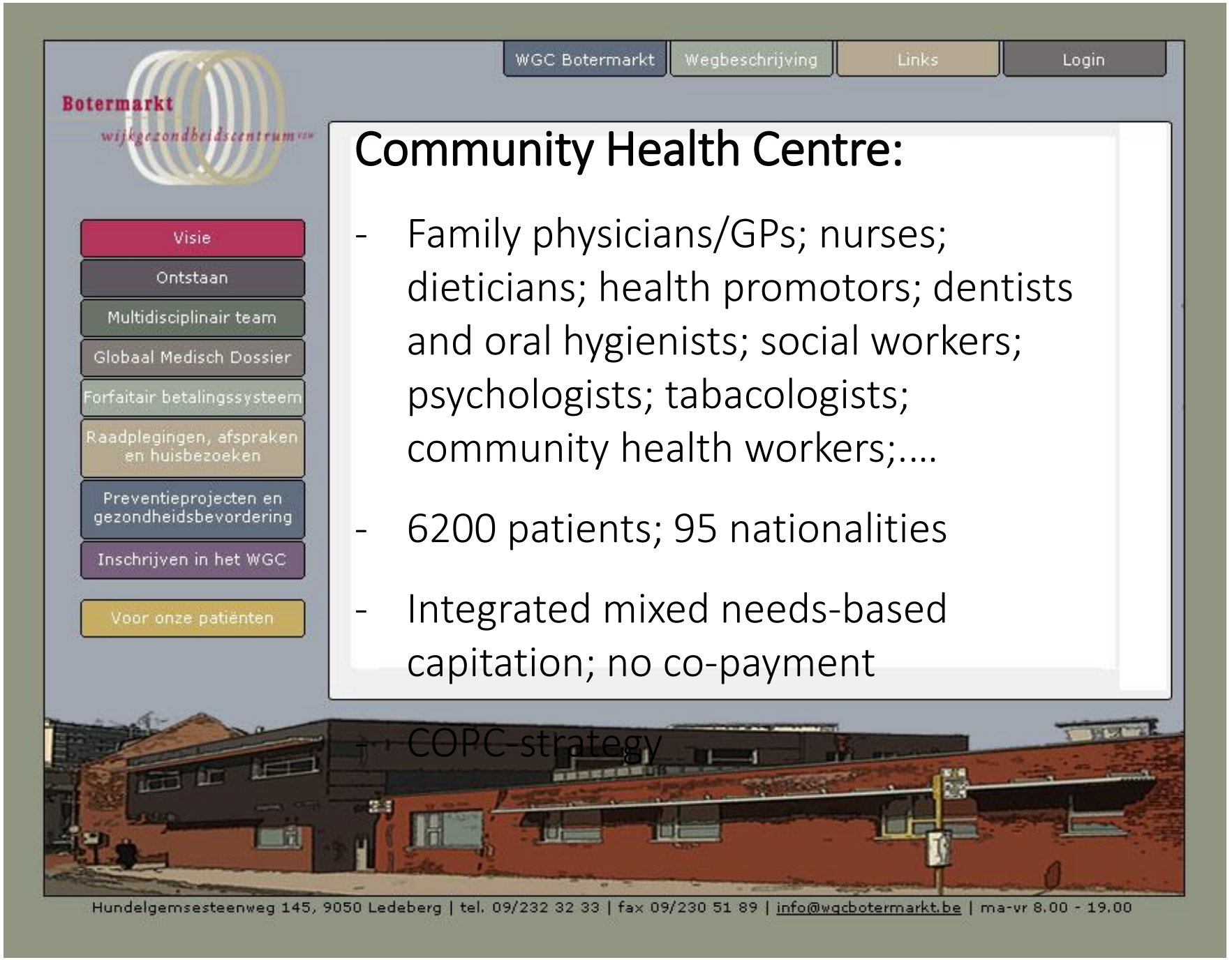
South-Africa : Sidney and Emily Kark were recruited in**1940** by the Secretary of Health of the Governmental Health Department of South Africa to create a Pholela Health Unit in the rural area of what is today Kwazulu-Natal. They developed the ***COPC: Community Oriented Primary care approach.***

USA : In December **1965** the *first modern Community Health Center* was established in Dorchester, Massachusetts – under the name, Columbia Point Health Center – by two faculty members and medical doctors, H. Jack Geiger of Harvard University and Count Gibson of Tufts University. ***H. Jack Geiger was a civil activist who was determined to serve people and change the scenario of health***. Interestingly, he worked as a student in South Africa with Kark and found out the impact of the community health model on the health of Zulus who were devastated because of apartheid.

Canada : the 'Clinique Communautaire Pointe Saint-Charles'(https://ccpsc.qc.ca/en/your-clinic/) was founded in **1968** by medical and nursing and sociology ***students of McGill University*** concerned with lack of adequate medical services in the neighborhood.
Prof. Lode Van Outryve (KULeuven) brought the information about Pointe Saint-Charles ***to Flanders***.

Belgium : The first Community Health Centres started in Brussels, Liège and Ghent in 1973-1978 : CHC Norman Bethune, Bautista Van Schouwen,CHC De Sleep, CHC Brugse Poort, CHC Botermarkt. In 1982 the CHCs negotiated an innovative Integrated Needs-Adjusted Capitation System with the National Institute for Health and Disability Insurance (NIHDI)

Community Health Centre
Botermarkt Ledeberg 2006
(Founded in 1978)


WGC Botermarkt
Wegbeschrijving
Links
Login
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wijkgezondheidscentrum vzw
Visie
Ontstaan
Multidisciplinair team
Globaal Medisch Dossier
Forfaitair betalingssysteem
Raadplegingen, afspraken en huisbezoeken
Preventieprojecten en gezondheidsbevordering
Inschrijven in het WGC
Voor onze patiënten
Community Health Centre:
- Family physicians/GPs; nurses; dieticians; health promotors; dentists and oral hygienists; social workers; psychologists; tabacologists; community health workers;….
- 6200 patients; 95 nationalities
- Integrated mixed needs-based capitation; no co-payment
- COPC-strategy
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INTERDISCPLINARY TEAM (1984)

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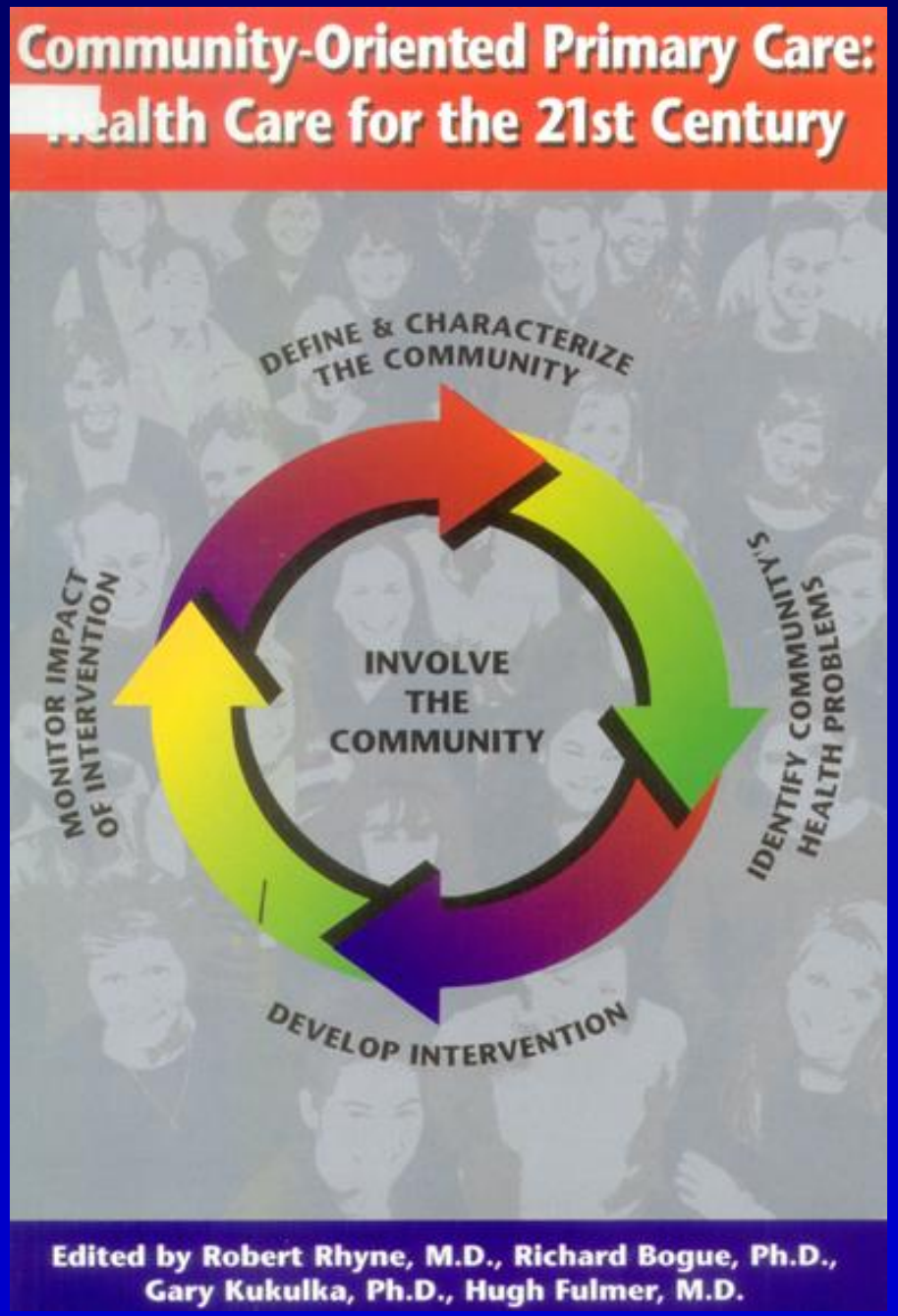
Integrated care

- Taking environment/context at home into account. Integration health and social care.
- Care-Coordination by patient, informal care-givers, professional

Botermark
wijkgez

INTERPROFESSIONAL TEAM DISCUSSIONS

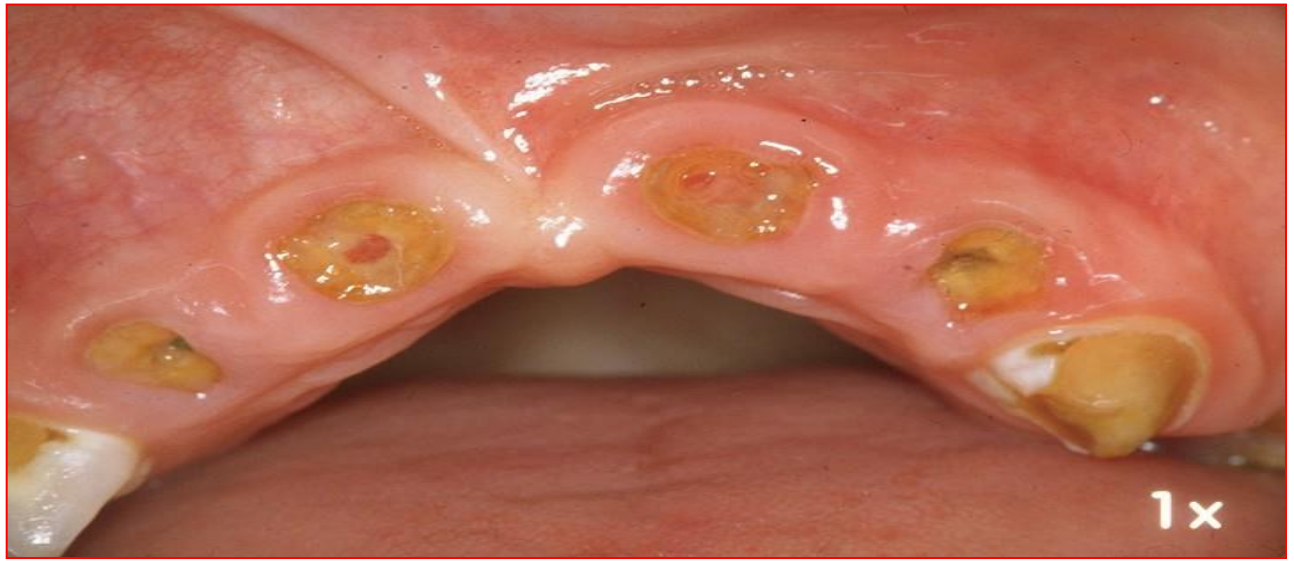
Focus on LIFE GOALS of the patient
Equitable participation of involved care providers
Participation of patient (representative)
Eco-bio-psycho-social frame of reference, including the SOCIAL COHESION perspective



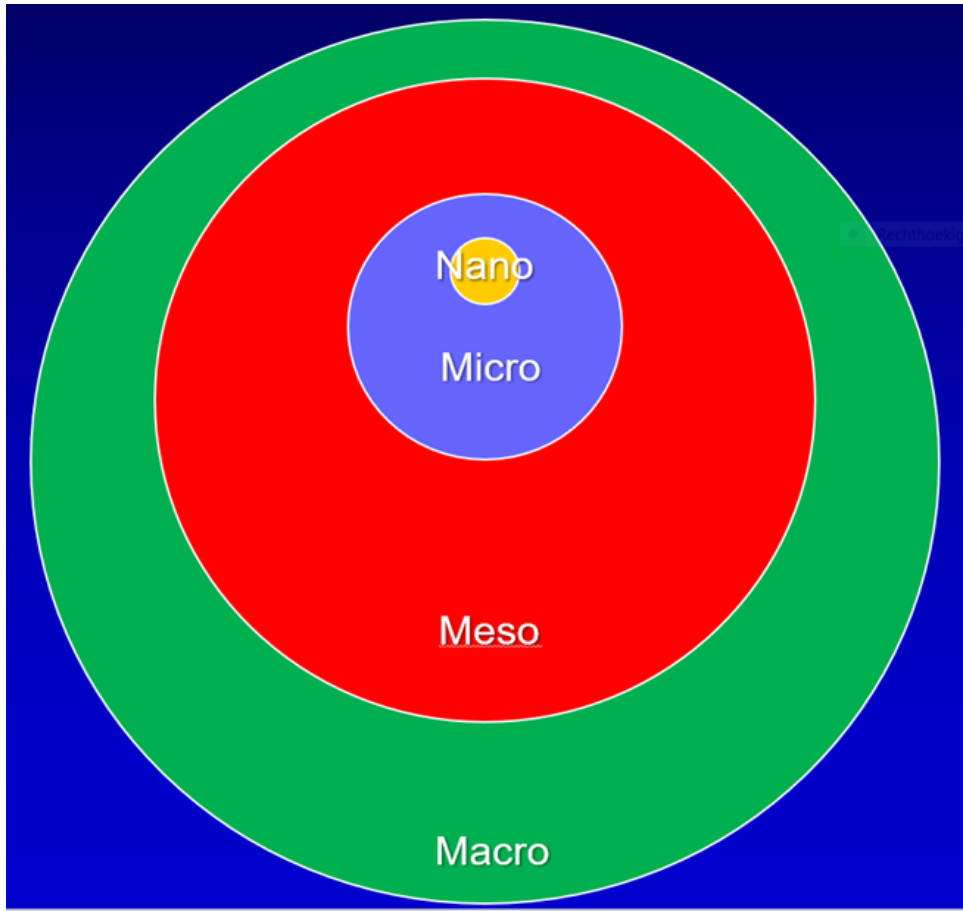
Community-Oriented Primary Care (COPC) is defined as the systematic assessment of health needs in a population, identification of community health and wellbeing problems, implementation of systematic interventions involving target population and monitoring the effect of changes to ensure that health services are improved and congruent with community needs. The interprofessional team, consisting of primary care workers and community members, assesses resources and develops strategic plans to deal with problems that have been identified. COPC integrates individual and population-based care, blending clinical skills of practitioners with epidemiology, preventive medicine, health promotion and empowerment, minimising the separation between public health and individual health care.

COPC-project : from individual care to community health care (2000)

Mothers present with their toddlers with problems of:
feeding problems, crying, not sleeping,...



Identified health problem by family physicians/nurses/school teachers:
problematic oral condition of todlers



1. Focus group discussion in health center

A dentist?
I cannot afford that.

I don’t know where to find a dentist

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

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

2. Exploratory study: “community diagnosis”

Survey: children 30 months old:

- 18,5 % symptoms of early childhood caries (7,4 % in high SES – 29,6 % in low SES)
- 100% need for treatment!

Correlation with

- deprivation
- nationality (Eastern-Europe)
- no previous dentist consultations

(S. Willems et. al 2005)

3. Bring together stakeholders from different sectors (“intervention”)

Policy & government

Socio-ecomic actors

Welzijn en Gezondheid

Education & Research actors

4. Collaborations & results (“Monitor impact”)

- Accessible dental health care (direct “third-party” payment by social insurance), focus on social cohesion
- Dental health care integrated in interprofessional primary health care center Botermarkt (lowering treshold)
- Developing a new profession at BA-level: “oral hygienists” working in the community and in dental practices
- Involvement of University College (ArteveldeHS) students in screening and follow-up of children
- Involvement of regional governmental services for children’s health (Kind & Gezin): screening of all children in Flanders at 30 months
- Involvement of preventive school health services (CLB)

5. Today…

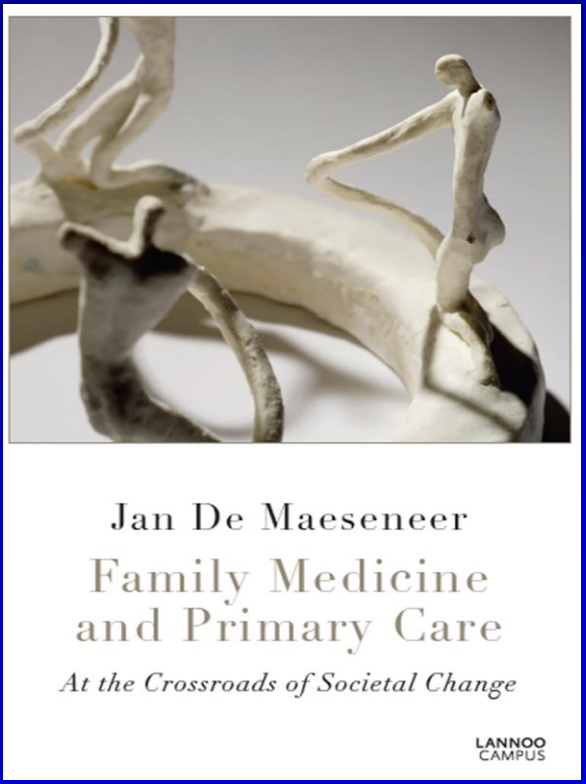
- 11 % early childhood caries in toddlers (from 18% in 2004) at 30 months
- Same at-risk groups
- Ongoing efforts for prevention and sensibilisation
- Increasing involvement of dentists and dental students in the community
  - Increasing social cohesion

Oral health is important for the wellbeing of individuals, for their personal and professional lives and increases their self-esteem

COPC : Looking for upstream causes at micro-meso-,macro-level (1983-2022)

Accident: scholar severely invalidated :1 September 1983

Acute Intervention: FP with Nurse; ambulance; ED



Discussion with a platform involving all stakeholders:

- 40 to 50 people
- Exchange of information
- “Community diagnosis” unsafe traffic situation
- Proposal for safer traffic condition
- Survey with 500 inhabitants from neighbourhood: voting for the best scenario

Meeting:police, family physicians, schools, nurses, elderly-organisations, traffic experts, housing, …

Establishment safer traffic situation

Assessment: no more severe accidents

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Mental Health in the Community (2002-today)

Consolation spot

LEDEBERG

GENT

2022

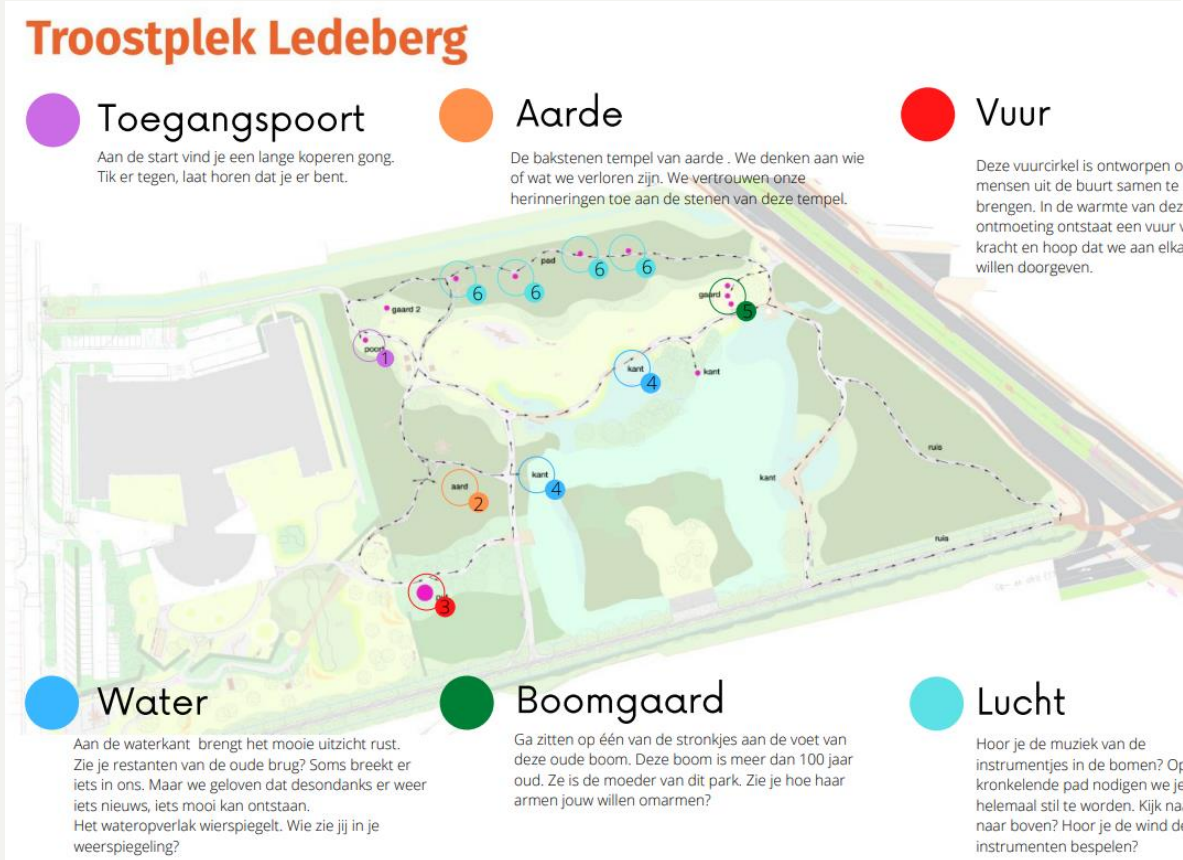
History

- Mourning is universal
- Medicalisation <--> normalisation
- 'How To?'

- We need a public space
- We need a partnership

The structure of the consolation spot

- Build by a local artist
- A walkabout 1.5 km
- 6 'stops'
  1. Fire
  2. Water
  3. Tree
  4. Wind
  5. Sound
  6. Earth



Water

- Beautiful view – gives us peace and rest
- Broken bridge : sometimes we feel broken too
- The water is a mirror. Look in the mirror. Who are you? Who have you become? Who do you want to be?

Connected in mourning
Connected in this project
Contributing to Social Cohesion

Caring Neighbourhoods…

1. **Neighbourhood participation and inclusion**
2. **Connecting informal and formal care**
3. **Intersectoral collaboration between wellbeing and care partners and partners from other domains in a network that focuses on prevention, health promotion and the provision of integrated care and support with a focus on quality of life and social cohesion**

(https://www.zorgenvoormorgen.be/zorgzamebuurten/caring-neighborhoods)

132 projects in Flanders and Brussels

Start : 1st of March 2022

Investment of 14 Million Euro by Flemish Government

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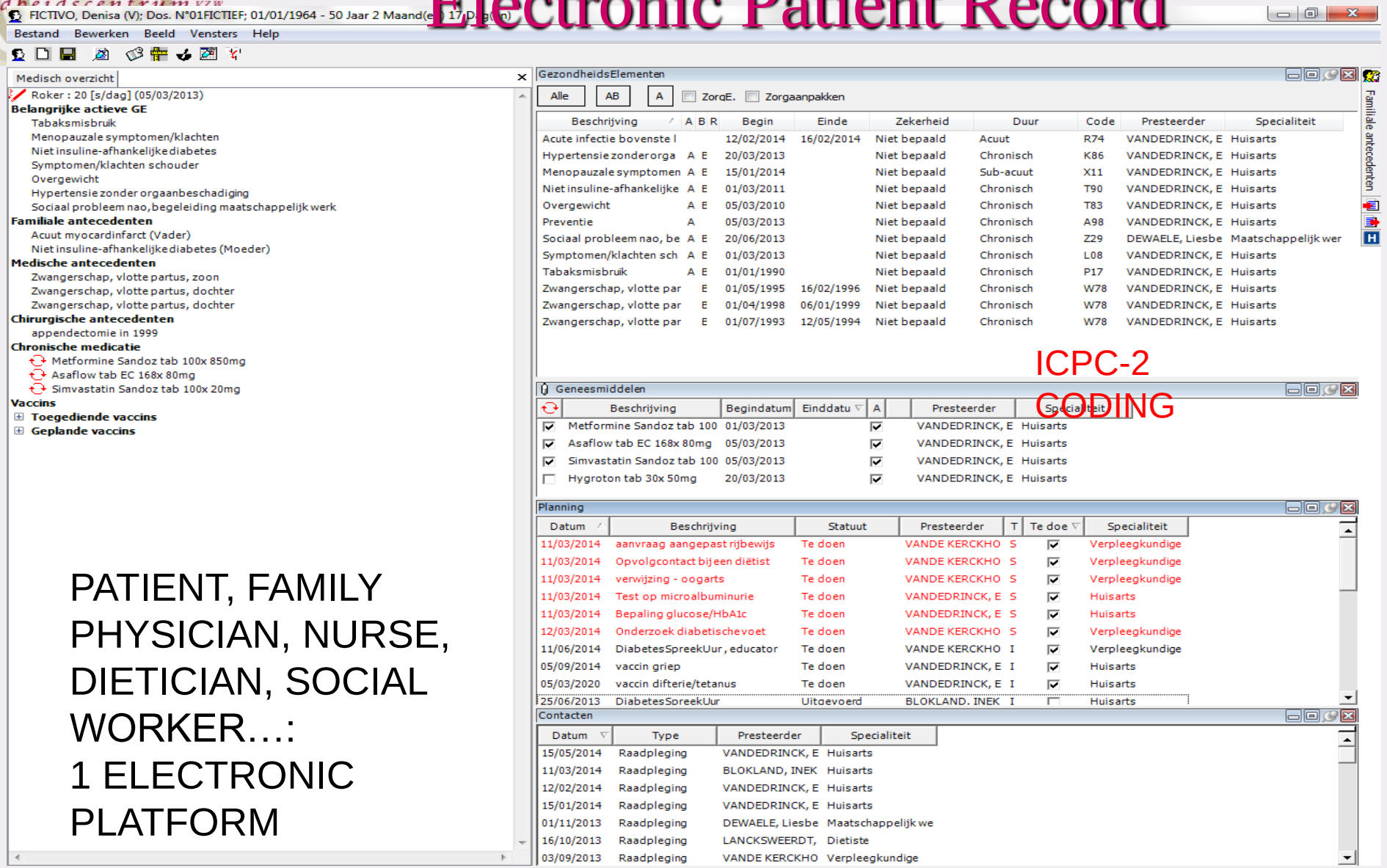
Patient Empowerment : Shared Electronic Patient Record



ICPC-2 CODING

PATIENT, FAMILY PHYSICIAN, NURSE, DIETICIAN, SOCIAL WORKER…:
1 ELECTRONIC PLATFORM

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• Diabetes clinic (1990-today): empowerment

- Programme:
  - Contact with family physician: 1 x /year; biomedical and behavioural follow-up by the nurse: 4 x /year, following specific guidelines
  - Eventually contact with dietician/diabetes educator (2 x / year)
  - enabling patients to exchange experiences via group activities : diabetes breakfast
  - “diabetes-cooking” (3 x / year)

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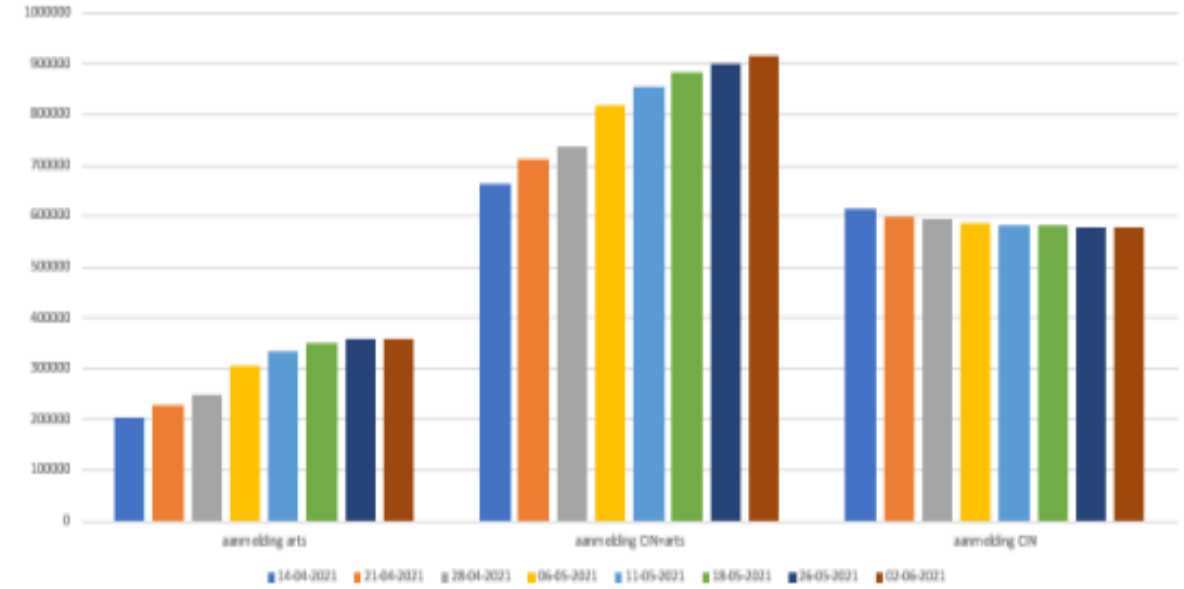
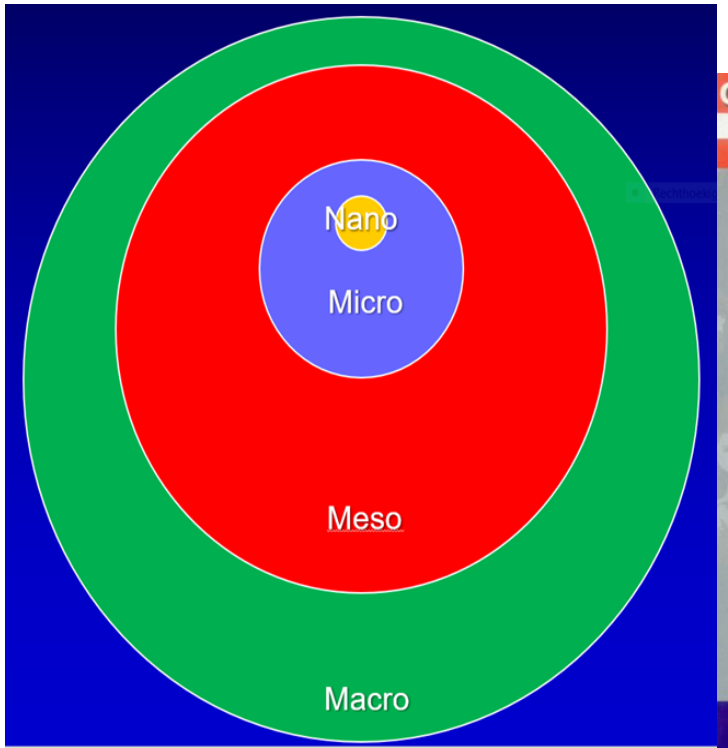
Diabetes Fair in the Community

- Presentation of 7 Self-care Behaviors, including cooking workshops & fitness classes

°Implementing “**Community-Oriented Primary Care**” to achieve an equitable Covid-19 vaccination strategy: integrating decentral and central data to perform a “Community Diagnosis” with involvement of the Community in developing actions to address the upstream causes of ill health, including mental health

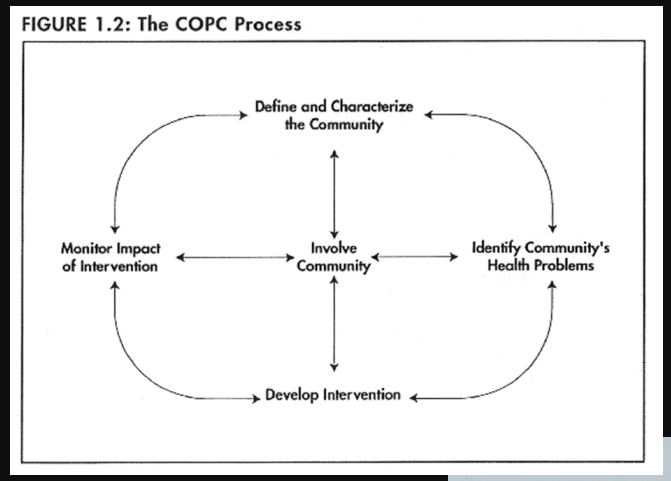
Figure 4: Dynamic overview of the number of patients selected by CIN (health insurance fund-IMA), by general practitioners, and by both

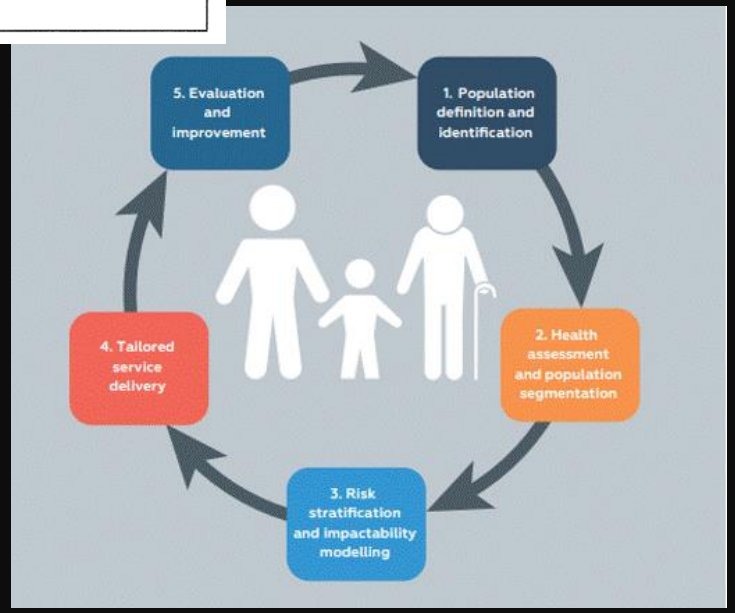




COPC

Population Health Management (WHO-2023)





COPC

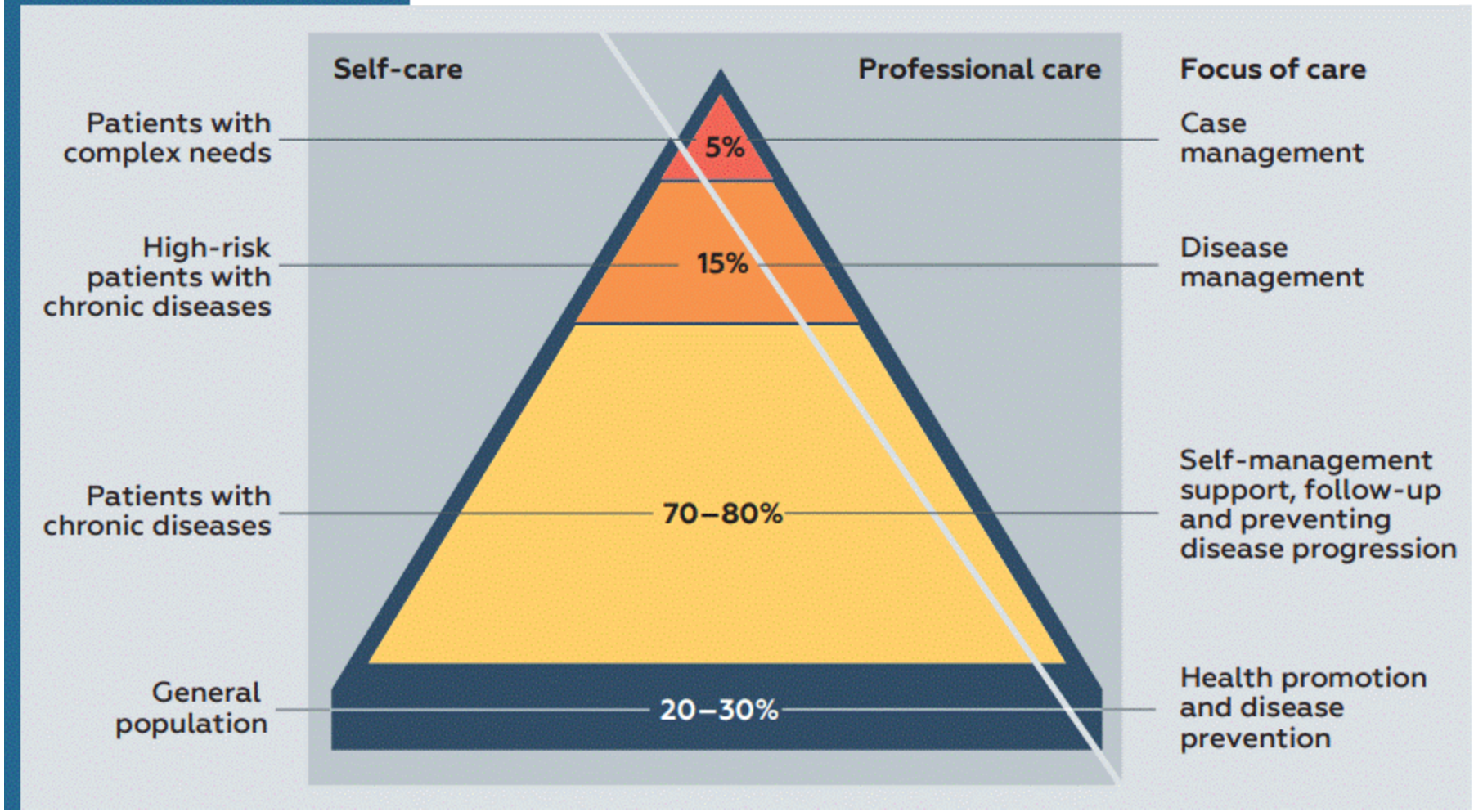
- Focus on “epidemiology”, social and commercial determinants, diversity,resilience,…
- Community “diagnosis” with participation of the population, attention for those most in need
- A variety of interventions, addressing intersectoral upstream causes and person-centered focus on empowering of patients
- Advocacy and systemic change

Population Health Management

- Focus on morbidity / “risks” and on economic and organisational dimensions
- “Risk” stratification and segmentation with a view to optimize use of resources (M. Porter, Triple Aim)
- Tailored service delivery, implementing evidence-based guidelines

Fig. 4. Type of services and balance between self-care and professional care according to risk strata, adapted from Kaiser Pyramid *(51)*

What is the evidence for this approach ? The line between 'Self-Care' and 'Professional Care' is highly dependent on capabilities of individuaks and on Social Determinants of Health ? Can "segmentation" work in the community and what are possible side-effects ?



COPC

- Integration of relevant quantitative and qualitative data ? Use of different data-sources?
- How to include a variety of determinants in a “community diagnosis” ?
- How to address upstream causes that are linked to vested interests of companies, industries, political systems ?
- How to foster ongoing participation and commitment for change strategies that take time (months, years, generations…) and energy?

Population Health Management

- Integration of relevant quantitative and qualitative data ? Use of different data-sources?
- How to integrate goal-oriented care in an approach, using survey-data and (evidence-based ?) screening strategies?
- How to avoid “inequity by disease”?
- How to reconcile segmentation-strategies, with **the need for more social cohesion in communities and society?**

"Social Cohesion/Connectedness" is a structural determinant of health

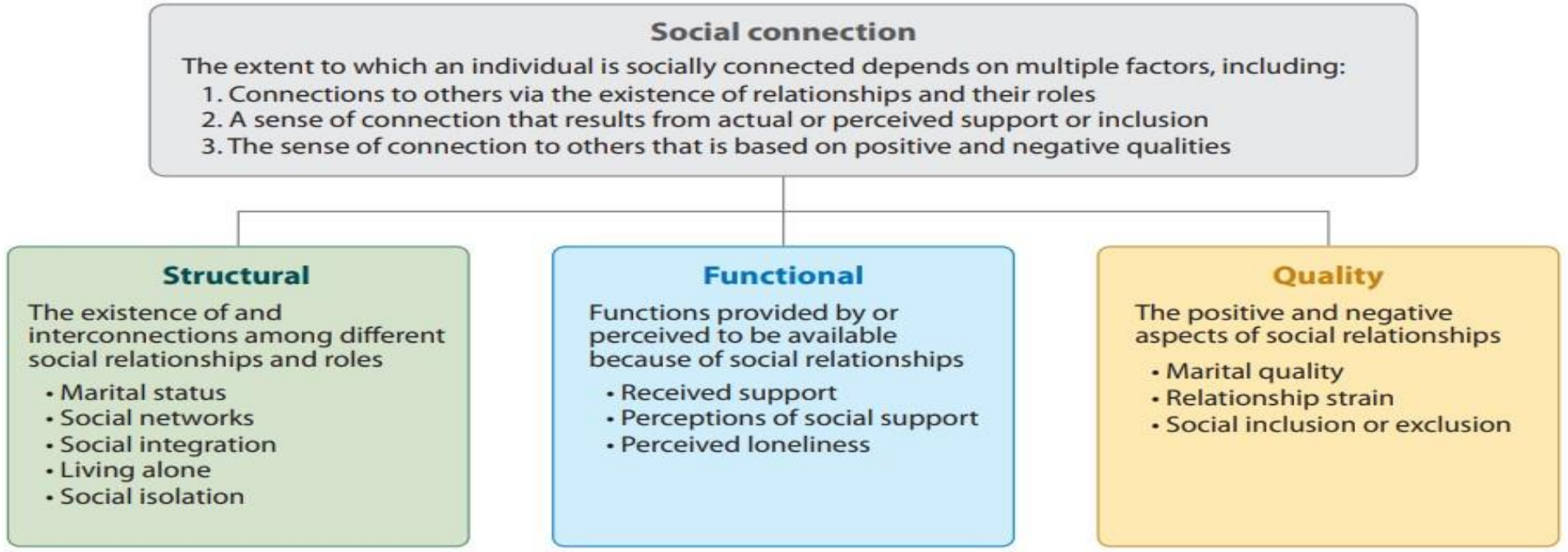


Figure 1

Social connection as a multifactorial construct including structural, functional, and quality components.

{Holt-Lunstad J. Social Connection as a Public Health Issue: The Evidence and a Systemic Framework for Prioritizing the "Social" in Social Determinants of Health. Annu. Rev. Public Health 2022.43:193-213. https://doi.org/10.1146/annurcv-publhealth-052020-110732 }

Social Connection/Cohesion : supporting evidence for its impact

Table 1 Bradford Hill guidelines and summary of supporting evidence for social connection

Bradford Hill criteria		Summary of supporting evidence
Strength	How large is the association?	Effect size is comparable to or exceeds that of other clinical and mortality risk factors
Consistency	Is there consistency or replicability across varying types of studies and populations?	Ten meta-analyses, 276-plus studies using a variety of locations, populations, and methods
Specificity	Does exposure give rise to only a single outcome?	Exposure gives rise to multiple health-related outcomes Some evidence of mechanistic specificity
Temporality	Does exposure precede the outcome?	Prospective epidemiological studies
Biological gradient	Is there evidence of a dose–response curve?	Demonstrated in nationally representative samples across development stages
Plausibility	Are there plausible biological mechanisms?	Several plausible biological mechanisms have been documented
Coherence	Is there parallel evidence? Does it fit within what is known?	Fits within the framework of social determinants of health
Experiment	Is there experimental evidence?	Nonhuman animal studies of isolation Human social RCT interventions Laboratory manipulations of social situations
Analogy	Is the evidence consistent across measurement types?	Consistency across multiple conceptualizations and measurement approaches

Abbreviation: RCT, randomized controlled trial.

Table adapted from Reference 39 (copyright 2021 Sage Publications).

{Holt-Lunstad J. o.c. }

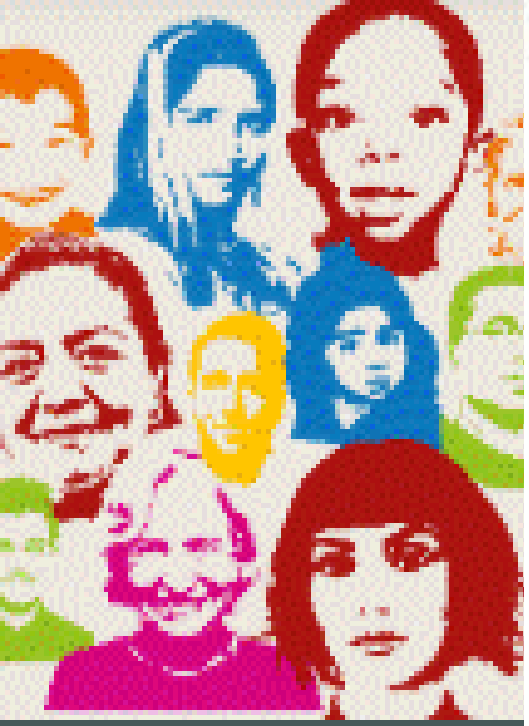
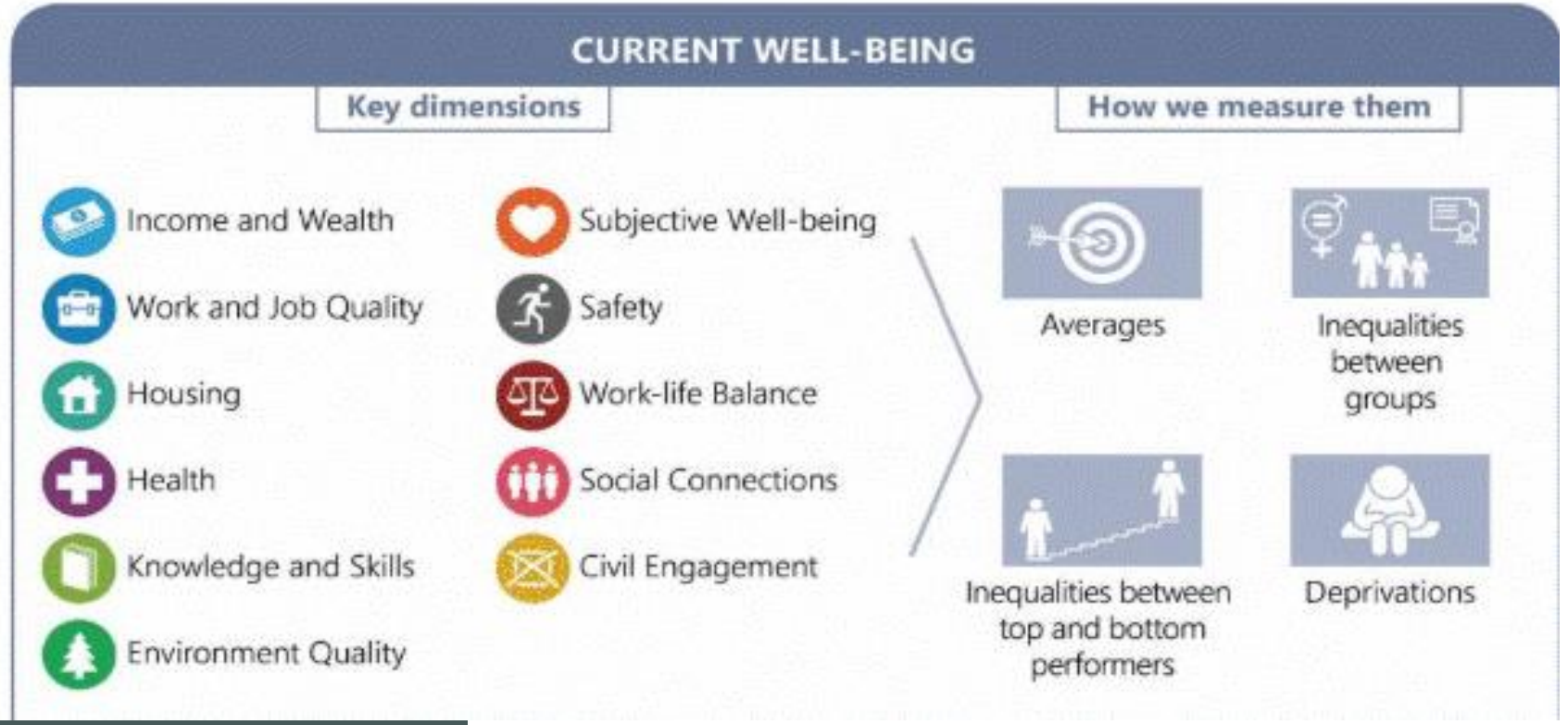


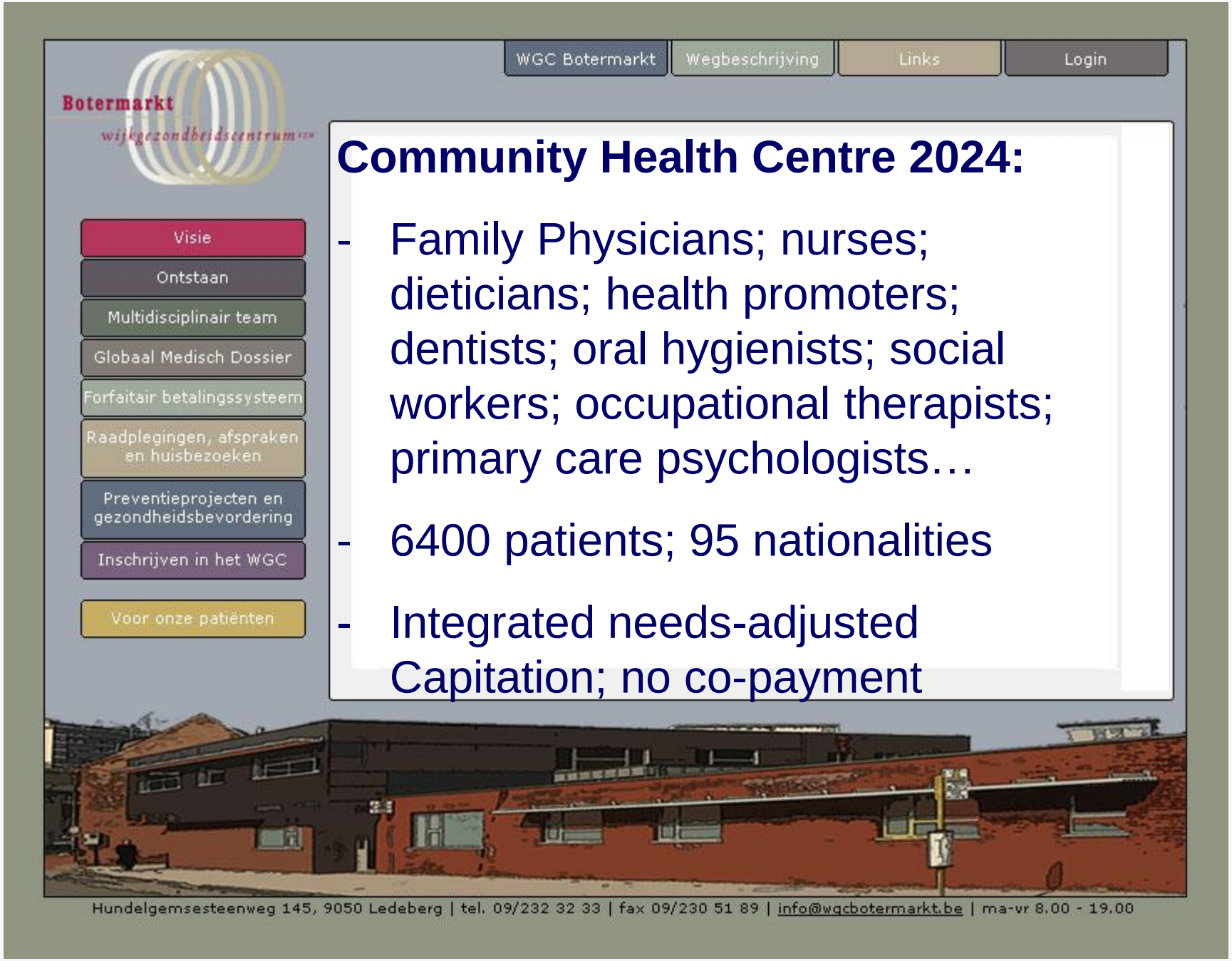
Figure 1. The OECD Well-being Framework



The need for operationalisation of Social Cohesion/Connectedness

Social Connections

- **Social Support**
- **Social interactions**
- **Satisfaction with personal relationships**
- **Loneliness**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Conclusions (1)

- COPC may be an appropriate way to implement Population Health Management at primary care level.
- Collecting information on social, commercial, environmental, digital determinants of health is of utmost importance in order to enhance appropriate contextual interpretation.
- Adressing the upstream causes of ill health through intersectoral action and advocacy, is key.
- The system of empanelment and Integrated Needs-adjusted Capitation facilitates population-centered, preventive and coordinated approaches.

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INTEGRATED NEEDS-ADJUSTED CAPITATION

Contract between health care workers, citizens and social insurance companies in the framework of the federal National Institute for Health and Disability Insurance (NIHDI), negotiated in **1982**.

Implementation 1995.

Today > 600000 citizens involved in Belgium (in > 250 practices).

INTEGRATED INTERPROFESSIONAL NEEDS-BASED CAPITATION

EVIDENCE : 2008 and 2018

ASPIRATIONS :

- accessibility
- better continuity and comprehensiveness
- a more horizontal relationship between provider and patient, and between different health care providers
- opportunities for better compliance
- focus on prevention
- subsidiarity and competency sharing
- quality improvement : antibiotic prescription, use of lab-testing, **better integrated care…**
- **Lower cost** in secondary care

Danhieux *et al. BMC Health Services Research* (2023) 23:141
https://doi.org/10.1186/s12913-023-09115-1

BMC Health Services Research

RESEARCH Open Access

Scale-up of a chronic care model-based programme for type 2 diabetes in Belgium: a mixed-methods study

Katrien Danhieux[1,2*], Veerle Buffel[3], Roy Remmen[1], Edwin Wouters[3] and Josefien van Olmen[1,2]

Evidence (2023):

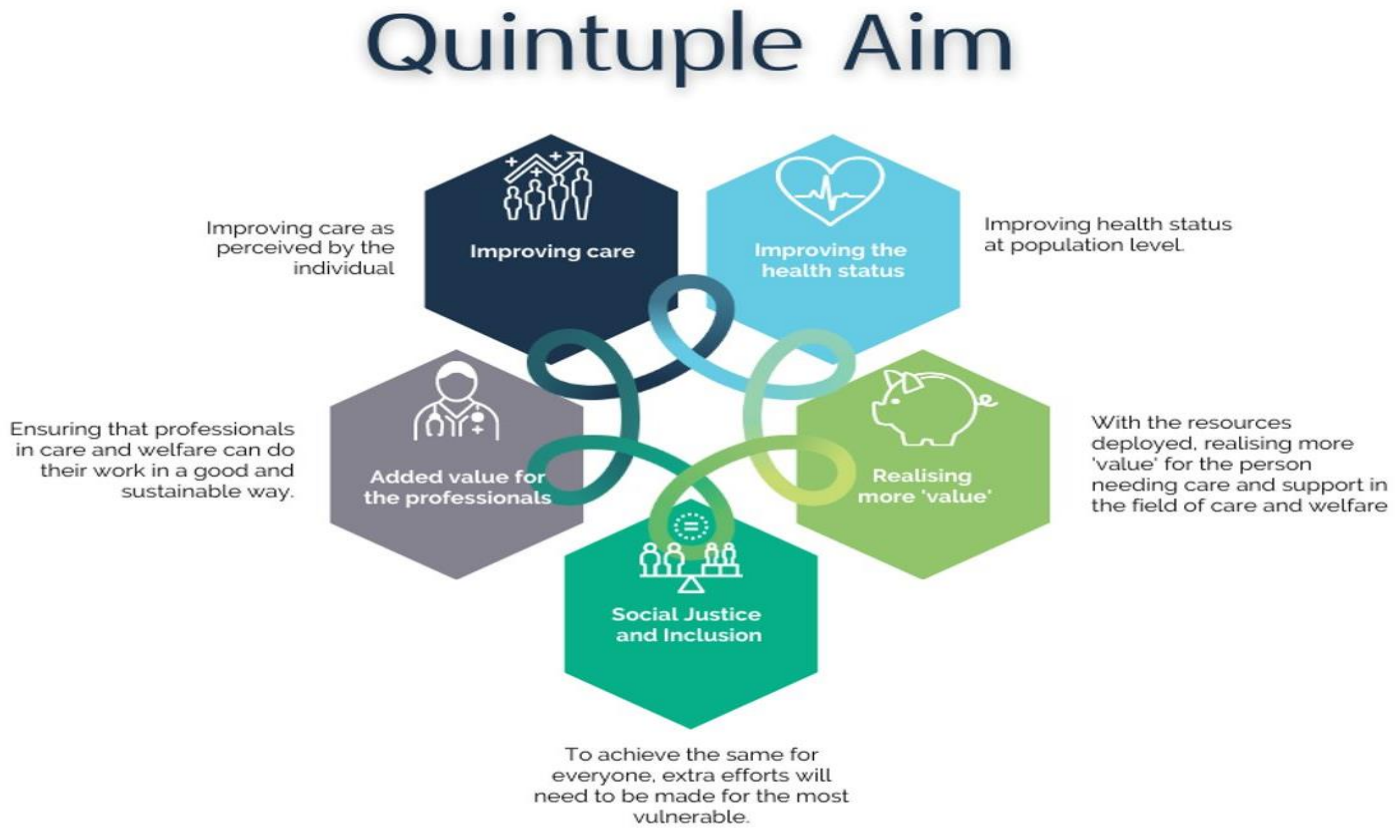
1. Multidisciplinary and capitation-based practices scored considerably higher on the ACIC-score (Assessment of Chronic Illness Care) than traditional monodisciplinary fee-for-service practices

2. Besides the presence of a nurse or secretary, also working multidisciplinary under one roof and a capitation-based financing system are important features of a system wherein Integrated Care for Type2-Diabetes, can be scaled-up successfully.

Conclusions (2)

- Stratification of the population in PHM requires inclusion of determinants of health, apart from morbidity-related data.
- “Inequity by disease”, i.e. the fact that people with e.g. the same functional status (‘hemiplegia’), due to different diagnostic labels (‘cancer versus stroke’) have access to different care packages (at different prices), should be carefully avoided (see: www.30by2030.net)
- Implementation of PHM should be guided by the Quintuple Aim, integrating “social justice and inclusion”.

The Quintuple Aim: the touchstone for all our strategies and decisions

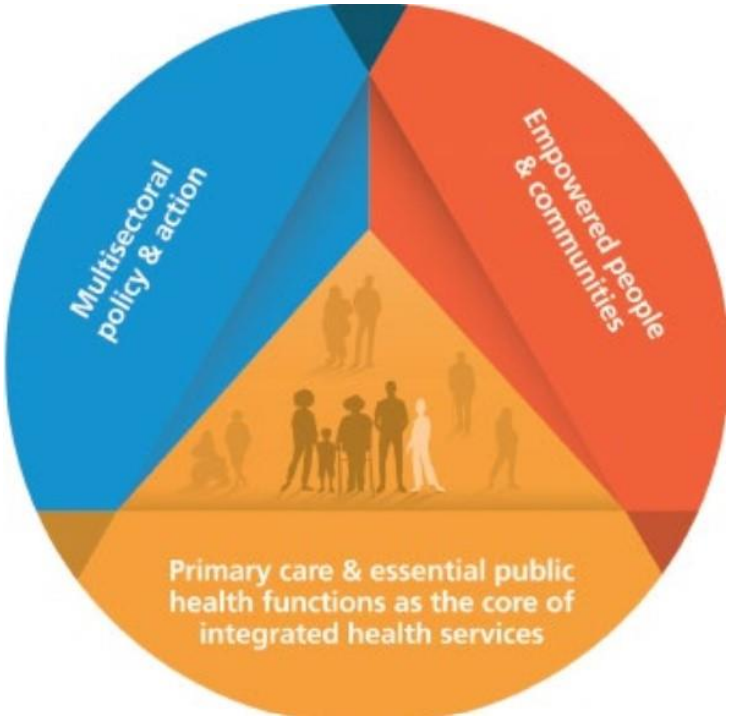


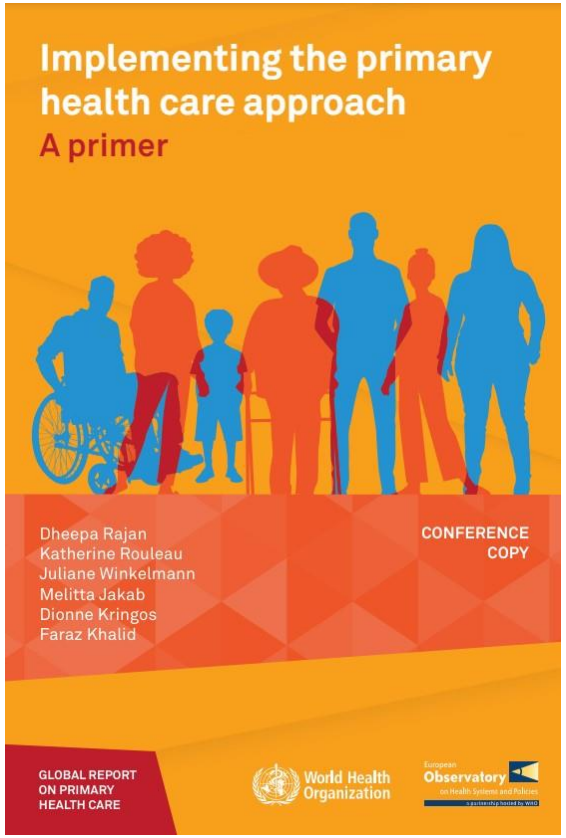
Michael Matheny, Sonoo Thadaney Israni, Mahnoor Ahmed, and Danielle Whicher, Editors. 2019. Artificial Intelligence in Health Care: The Hope, the Hype, the Promise, the Peril. NAM Special Publication. Washington, DC: National Academy of Medicine. Translated, adapted, and reproduced with permission from the National Academy of Sciences, Courtesy of the National Academies Press, Washington, D.C.

VIVEL

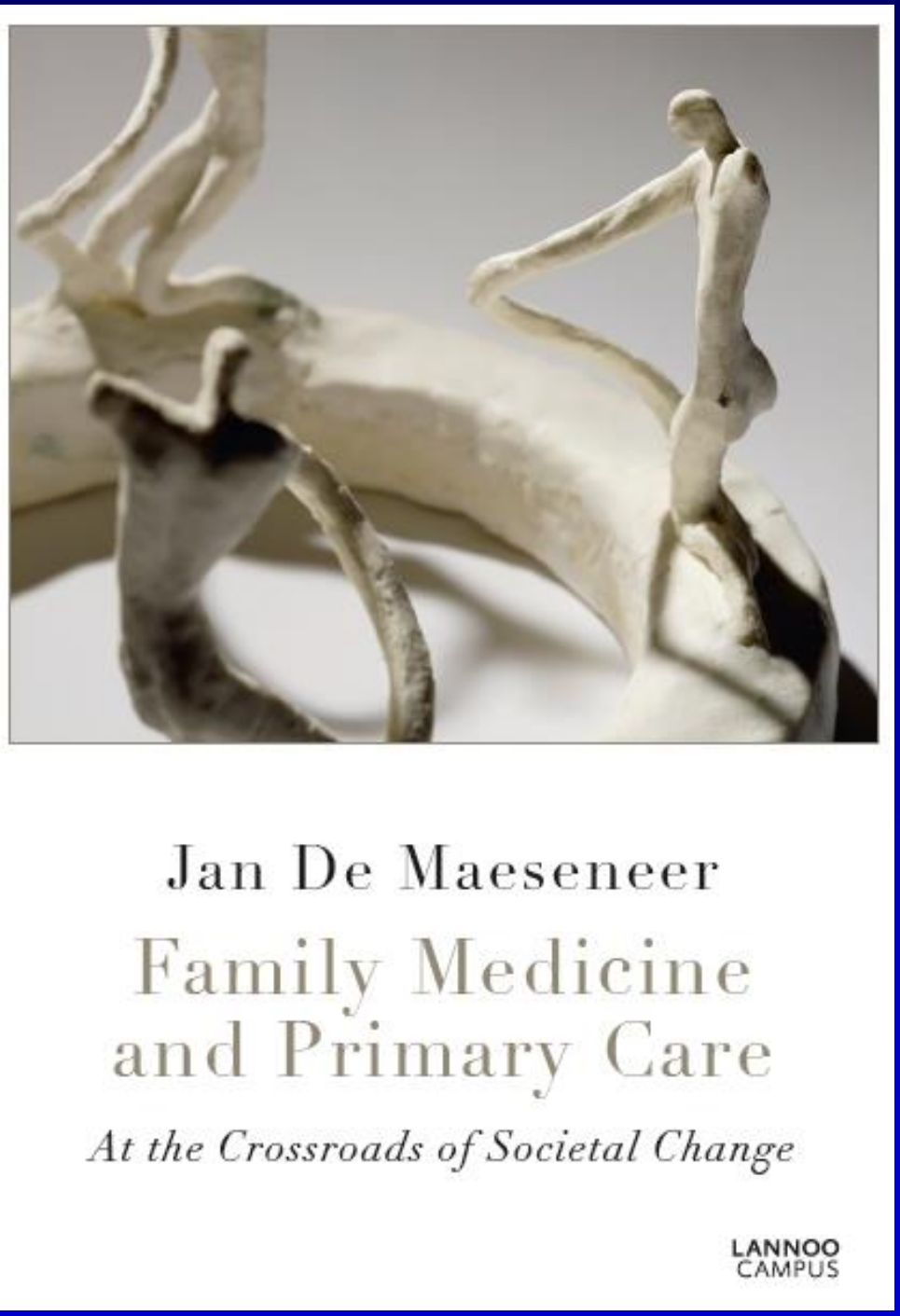
Vlaanderen

- Global evidence: strategies to enhance PHC
  - strengthen **care integration**
  - **incorporate public health** tasks into PHC
  - **re-skill health workforce** for PHC
  - **re-design financing** mechanisms





https://www.who.int/publications/i/item/9789240090583



https://www.perlego.com/book/3052938/family-medicine-and-primary-care-at-the-crossroads-of-societal-change-pdf

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I thank prof. dr. Koen Hermans LUCAS KU Leuven for sharing his inspiring views on social cohesion and social work.

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Jan.DeMaeseneer@ugent.be