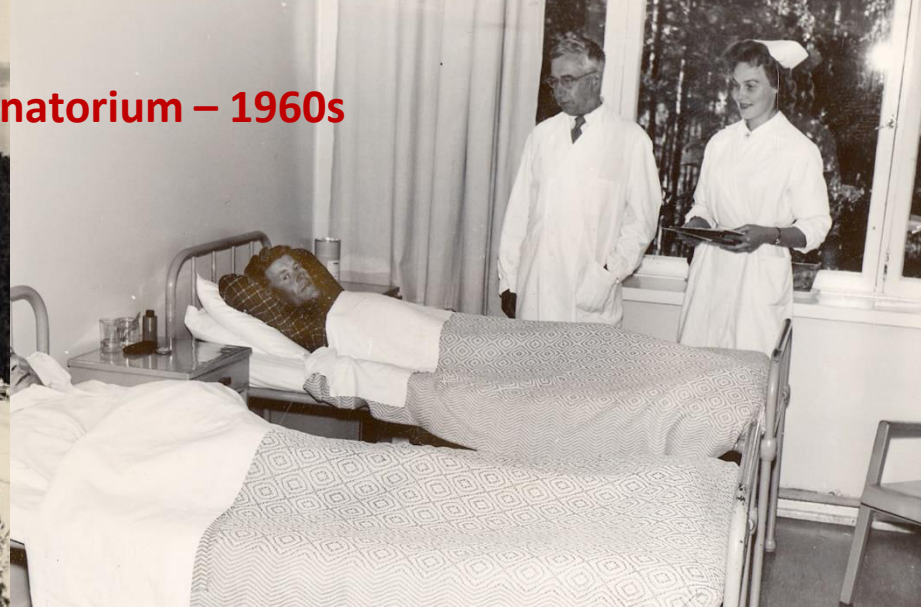


Finland, Southern Karelia, Tiuru Tuberculosis Sanatorium – 1960s



ARIA masterclass – from guidelines to real-life, Brussels 12.9.2018

Patient participation for better control

Tari Haahtela

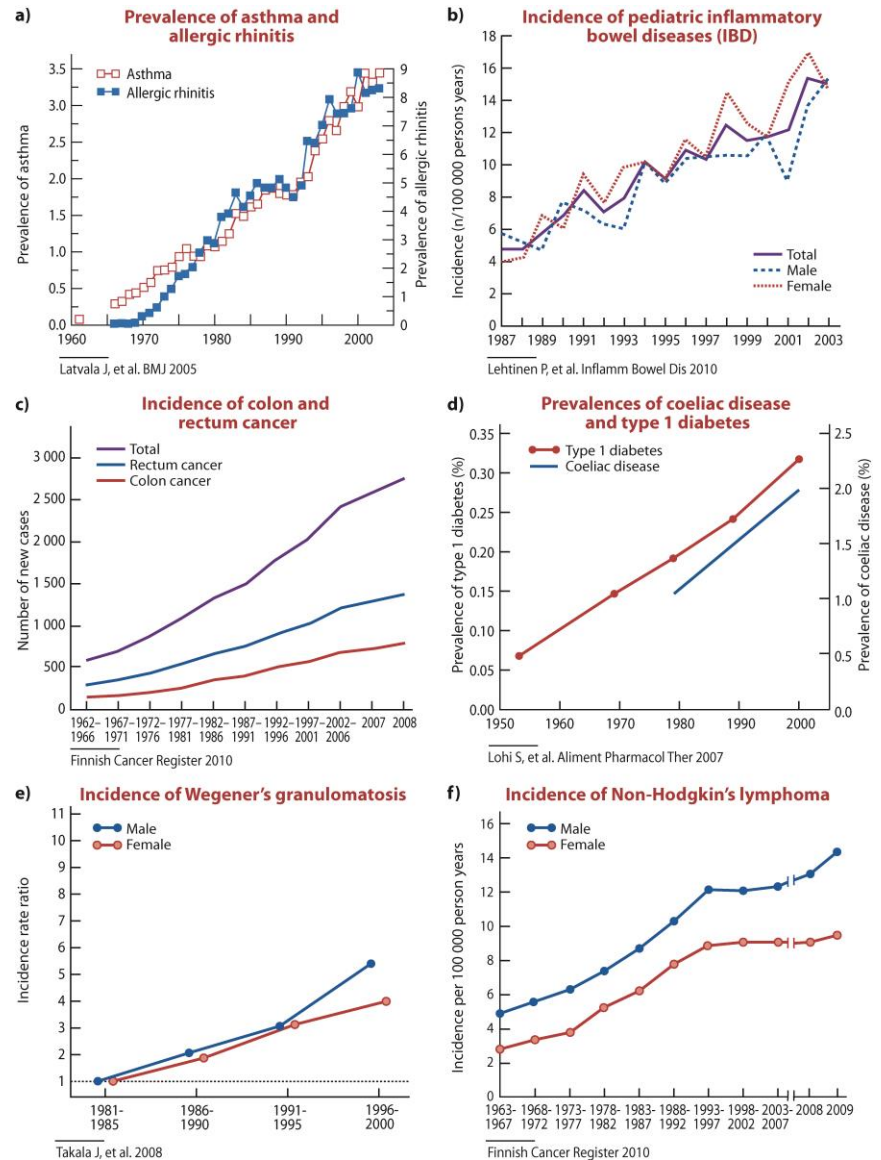


Case Finland

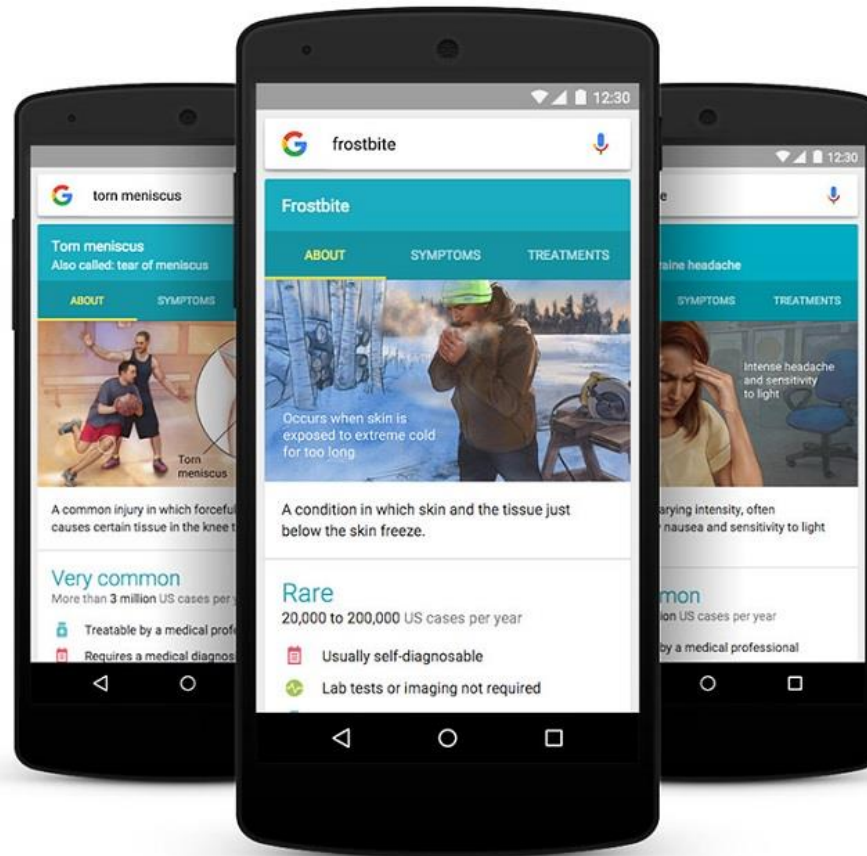
DISEASES DO CHANGE!

“Non-communicable diseases represent a public health emergency in slow motion.”

- UN Secretary Ban Ki-Moon 2011



The readily accessible information has exploded!



Patient participation

Participatory medicine, Health consumerism, Patient-centred care

“The experience of transparency, individualization, recognition, respect, dignity, and choice in all matters in health care”

(Donald Berwick 2009, Institute for Healthcare Improvement)

mHealth meets the growing demand for care. Mobile applications increase health literacy, bridge patient-physician communication, and increase patient participation.

Examples of participation through the use of web-based and mobile applications.

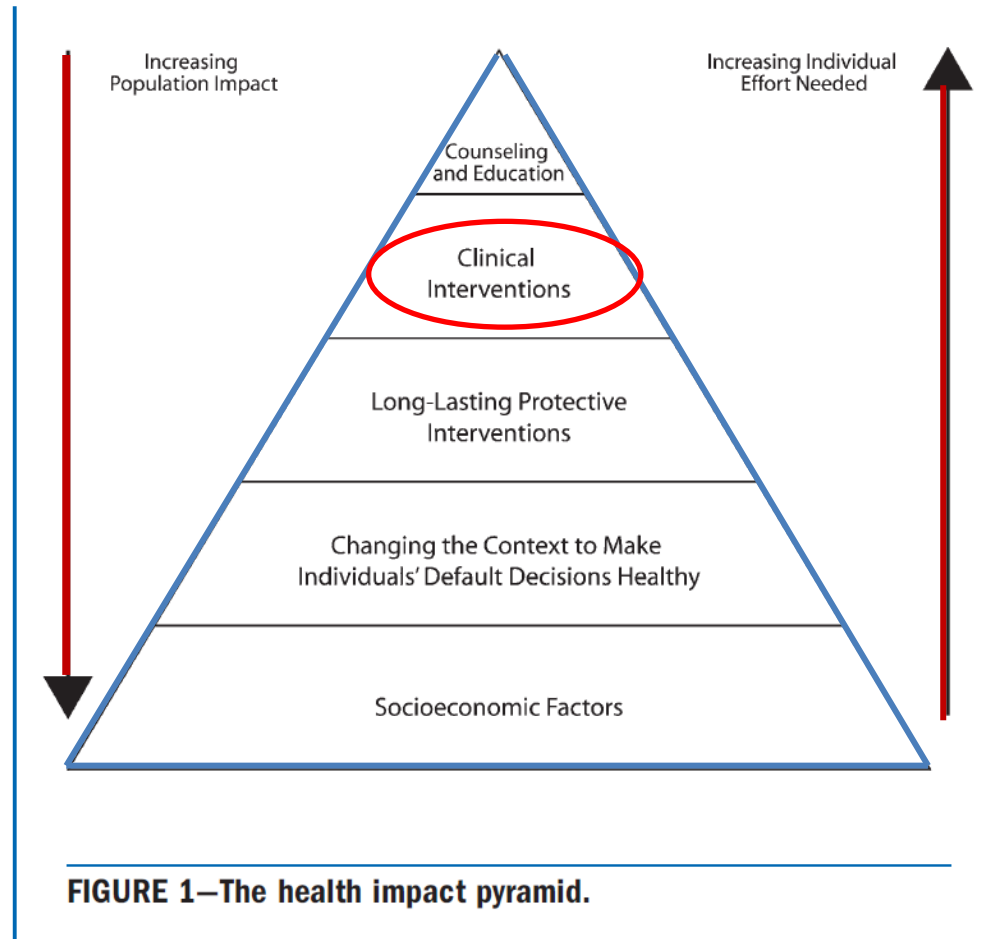
- Live **videoconferencing** appointments have proven effective, especially in the field of mental health.
- Patient **reminders** have increased patient participation in attending preventative screenings.
- Patient-centred **health applications** increase rapidly, over 100,000 mobile applications available for use already!
- **Problem 1**: lack of research and testing the application before going live.
- **Problem 2**: patient willingness to use the treatment apps over time.



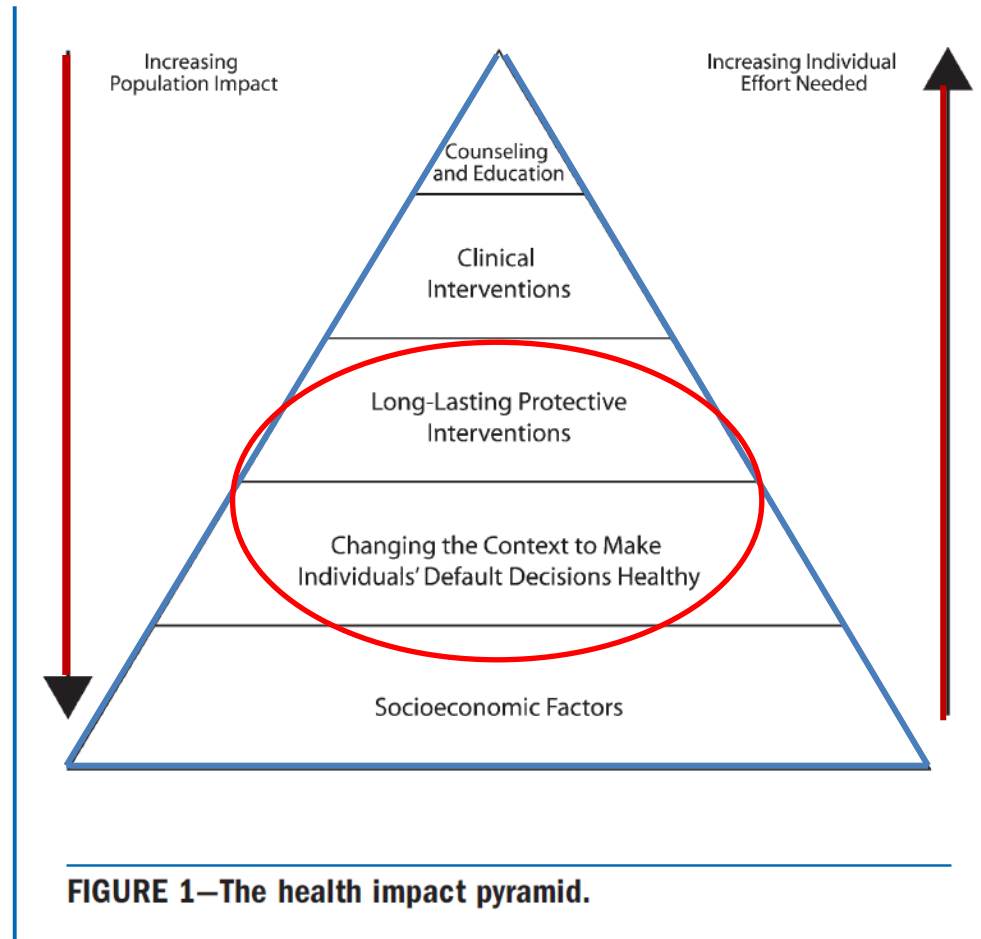
Change Management

- We are moving from the **guideline** era to **partnership** era.
- Less dictating and speaking about lack of **compliance** and **adherence** and more true **collaboration** with the patient.
- To find **individual** management solutions and more effective and safe ways to employ medication and other treatments.
- From dictatorship to democracy, but preserving the healing power of doctor's **personality** and **presence**.

A Framework for Public Health Action: The Health Impact Pyramid



A Framework for Public Health Action: The Health Impact Pyramid





806

Thorax 2001;**56**:806–814

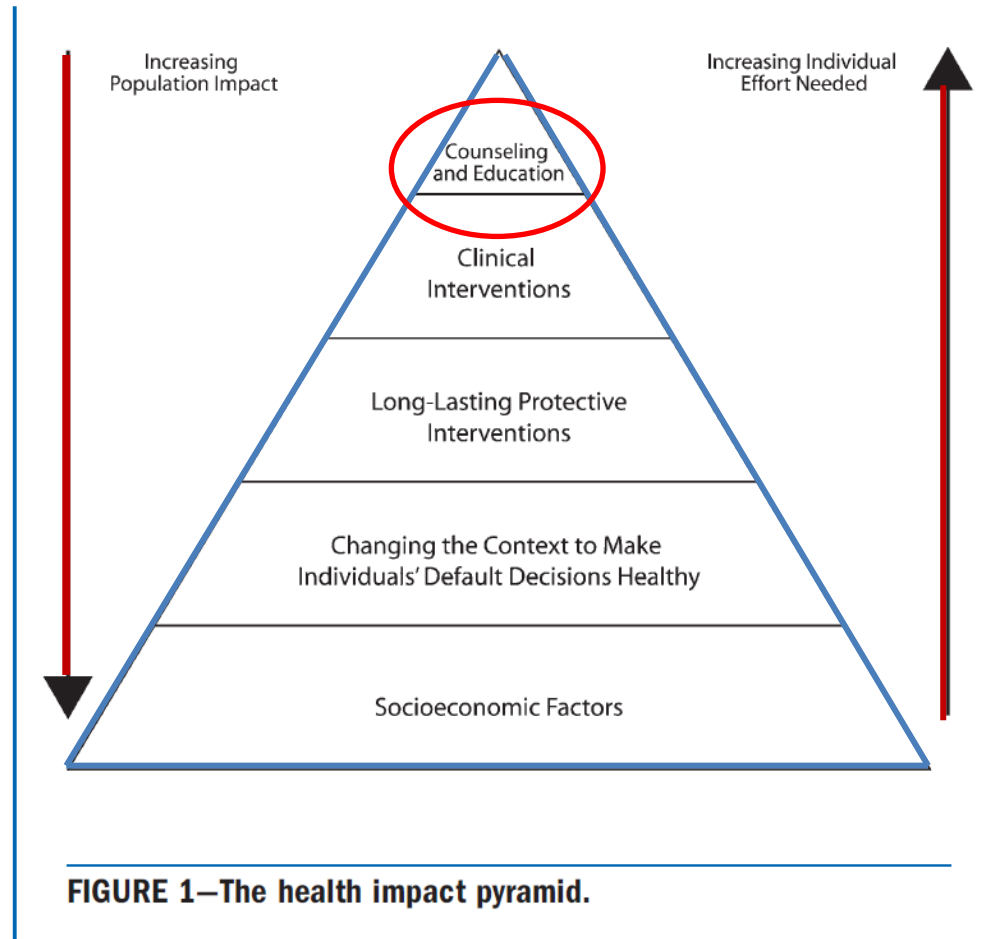
Clinical review

Asthma programme in Finland: a community problem needs community solutions

T Haahtela, T Klaukka, K Koskela, M Erhola, L A Laitinen, on the behalf of the Working Group of the Asthma Programme in Finland 1994–2004

Early and effective diagnostics and management

A Framework for Public Health Action: The Health Impact Pyramid



Guided self-management is the key to stop exacerbations and improve control (we have known this for 22 years!)

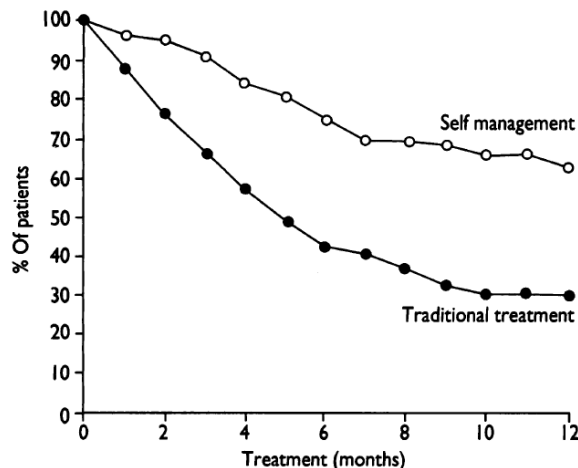


Fig 1—Cumulative percentage of patients not having had any incident caused by asthma in self management and traditional treatment groups

Guided self management reduces incidents caused by asthma and improves quality of life

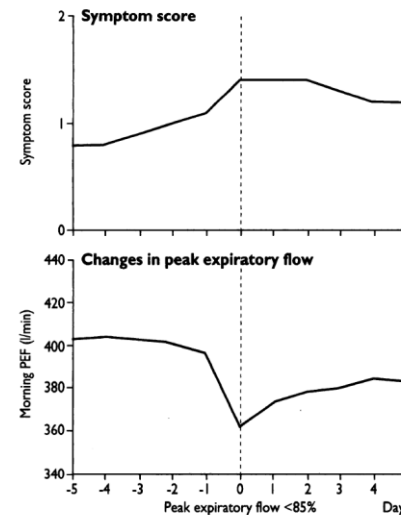
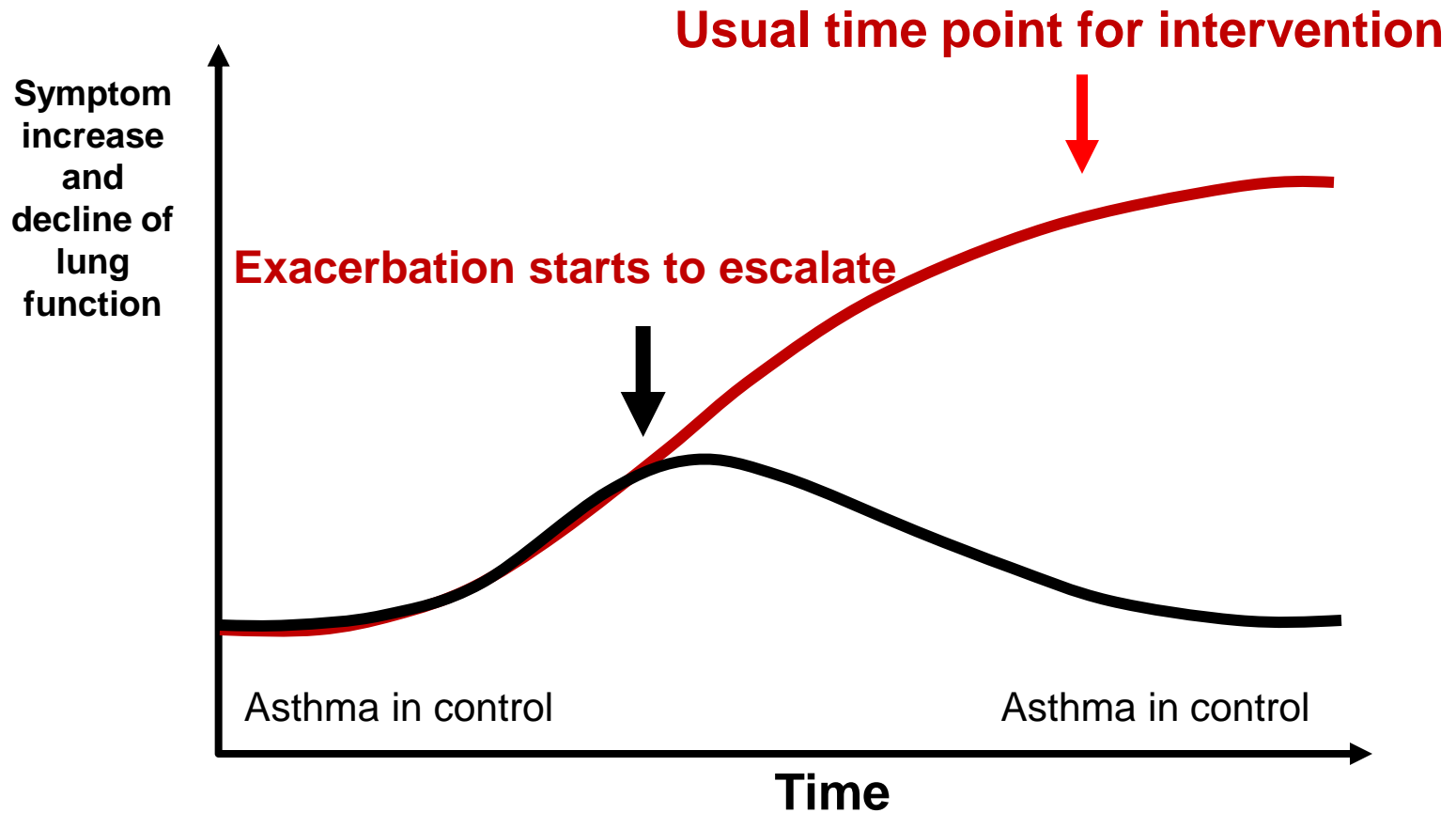


Fig 2—Relation between occurrence of asthma symptoms and peak expiratory flow (PEF) values on 141 occasions five days before and five days after the values dropped more than 15% below optimal levels

There is a time lag of 4-5 days between the start of symptom increase and drop of PEF

Hit increasing symptoms early!



Guided self-management — adult asthma

ASTMAN JA NUHAN OHJATTU OMAHOITO



Take asthma into control

Notice symptom increase

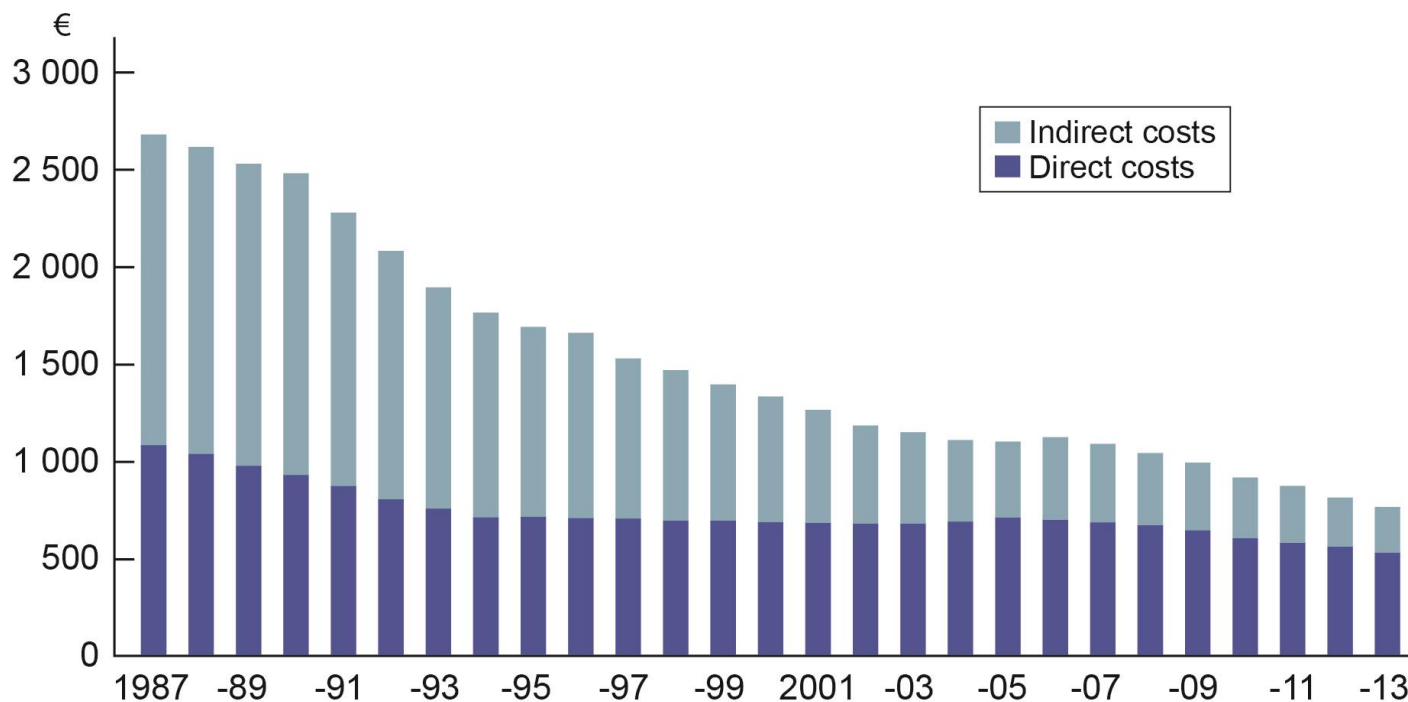
Pvm _____

1. Avaavan lääkkeen tarve lisääntyy muutaman päivän kuluessa ☐
2. Flunssainen, tukkoinen olo ☐
3. Yskää ja hengitysvaikeuksia, erityisesti yöllä ☐
4. Rasituksensieto huononee ☐
5. Aamu-PEF-arvo laskee ☐
6. PEF on laskenut arvosta _____ arvoon _____ ☐

Stop exacerbation

1. Kaksin- tai nelinkertaista hoitavan inhaloitavan kortisonin annos tai aloita sen käyttö 2 viikon ajaksi ☐
2. Ota avaava lääke ennen hoitavaa lääkettä 2 viikon ajan. Sen jälkeen tarpeen mukaan ☐
3. Jos käytät kortisonin ja avaavan yhdistelmä-lääkettä, kaksinkertaista annos 2 viikon ajaksi ☐
4. Aloita lisäksi tarvittaessa kortisonitablettikuuri, prednisoloni 20 mg tai metyyliprednisoloni 16 mg kerran päivässä 1-2 viikon ajan ☐
5. Mene päivystykseen, jos hoito ei auta. Tarkista myöhemmin hoitavan lääkityksen riittävyys. ☐

Finland 1987-2013
**Overall annual costs of asthma care per patient decreased by 72%,
from € 2656 to € 749**

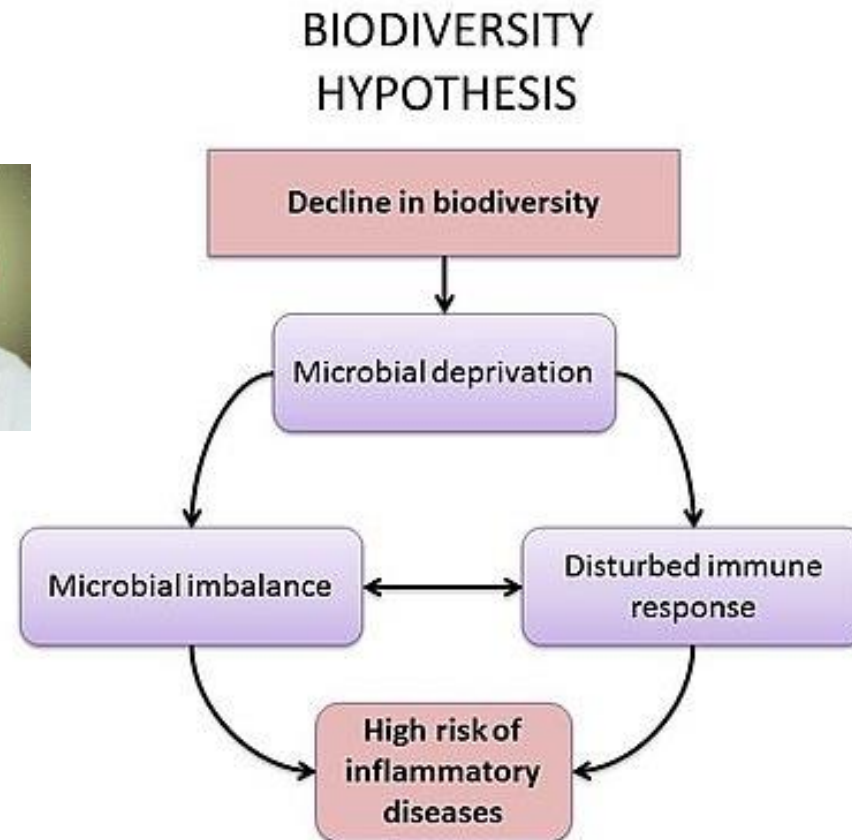




Biodiversity hypothesis of health = contact with natural environments enriches human microbiome, promotes immune balance, and protects from non-communicable diseases (https://fi.wikipedia.org/wiki/Biodiversity_hypothesis_of_health 2017).



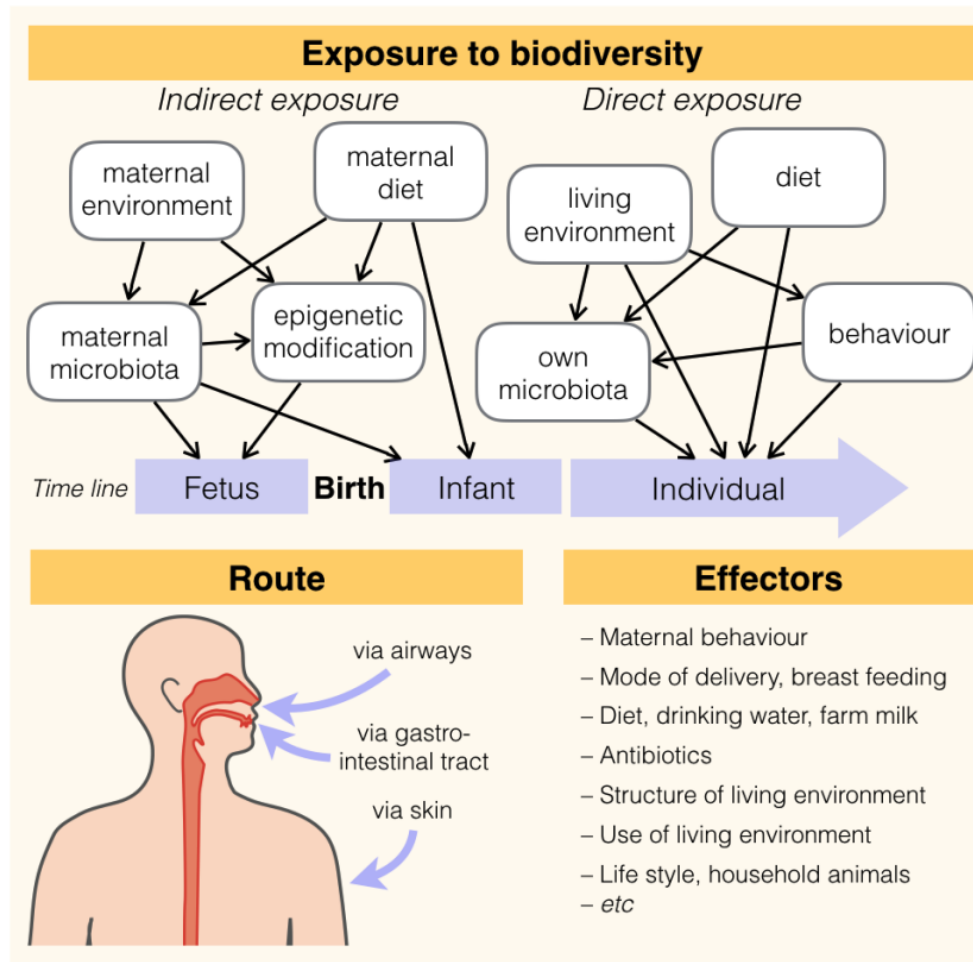
Karelia Allergy Study



von Hertzen L, Hanski I, Haahtela T. Natural immunity. Biodiversity loss and inflammatory diseases are two global megatrends that might be related. EMBO Report 2011.

The Finnish Allergy Programme 2008-2018

The good news: Allergic rhinitis & asthma (and other NCDs) are preventable!



Nationwide educational programme for **patients, families and lay-public**, not only for professionals!

The Finnish Allergy Programme 2008-2018 in action



Advising the allergic people and other citizens



Target on lay-public – not only 'high risk' groups

Focusing on mass media: internet, radio, tv

Educational material: posters, leaflets, web

Personnel education in patient organizations

'Tolerance steps' on children daycare units

2.3 million Finns reached



oikea asenne allergiaan
– vinkkejä lapsiperheen arkeen

"Babies want a smoke-free Mom!", a poster for child health care units



"Allergy and asthma and smoking", a leaflet for health centres



Campaigns on the web, including the biggest social media service and the largest health and welfare online service in Finland



Public attitude – more tolerance!

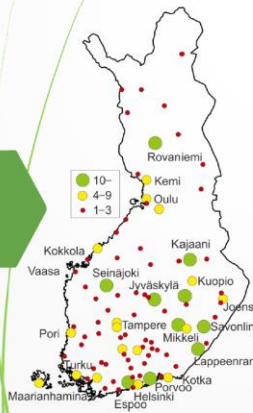


The Finnish Allergy Programme 2008-2018 in action



Education of opinion leaders, specialists, health care and other professionals

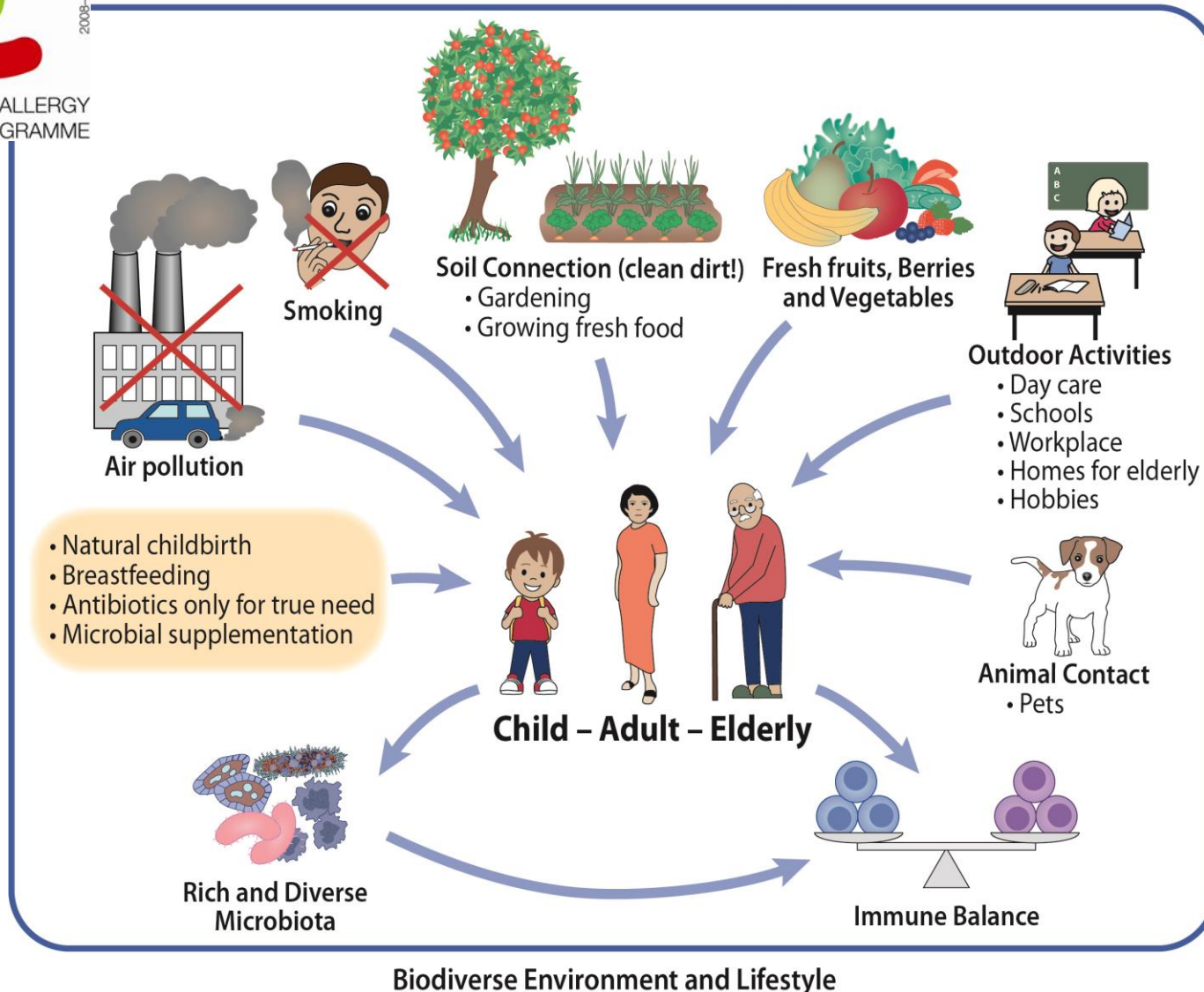
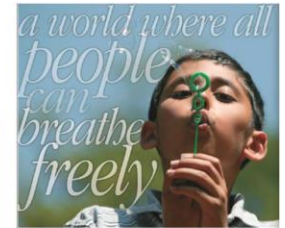
Launch for 21 Central Hospital Districts, 2 hrs
Health Centres, half a day
Central Hospital Districts, Allergy day



Educational sessions completed 2008-2017

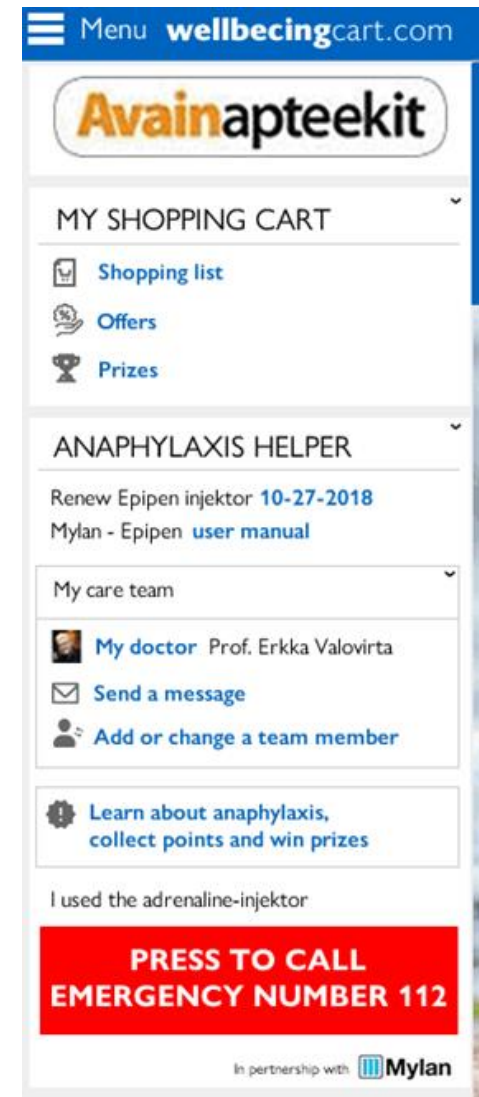
- 338 educational sessions so far, more than 20,000 participants
- Regional education with varying themes for primary care
 - Multiprofessional – doctors, nurses, pharmacists
 - Free of charge
 - At their own hospital / health centre at working hours
 - Practical topics tailored to meet the local needs
- A medical advisor and nurse by Filha always on the spot
 - Local experts involved in the education
- Allergy management – patient guidance material for health care
- Other tools for health care professionals
- Establishment of *Regional Allergy Working Groups* (14)
 - To continue the regular multidisciplinary education after the programme

Natural Step to Respiratory Health



Guided self-management — 10 conditions covered

1. Asthma – adults
2. Asthma – children
3. Allergic rhinitis – adults
4. Allergic conjunctivitis – adults
5. Atopic eczema – adults
6. Atopic eczema – children
7. Hand eczema – adults
8. Urticaria – adults
9. Angioedema – adults
10. Anaphylaxis



Menu wellbecingcart.com

Avainapteekit




MY SHOPPING CART


- Shopping list
- Offers
- Prizes

ANAPHYLAXIS HELPER

Renew Epipen injektor **10-27-2018**
Mylan - Epipen [user manual](#)


My care team

-  **My doctor** Prof. Erkkä Valovirta
-  [Send a message](#)
-  [Add or change a team member](#)

 [Learn about anaphylaxis, collect points and win prizes](#)

I used the adrenaline-injektor

**PRESS TO CALL
EMERGENCY NUMBER 112**

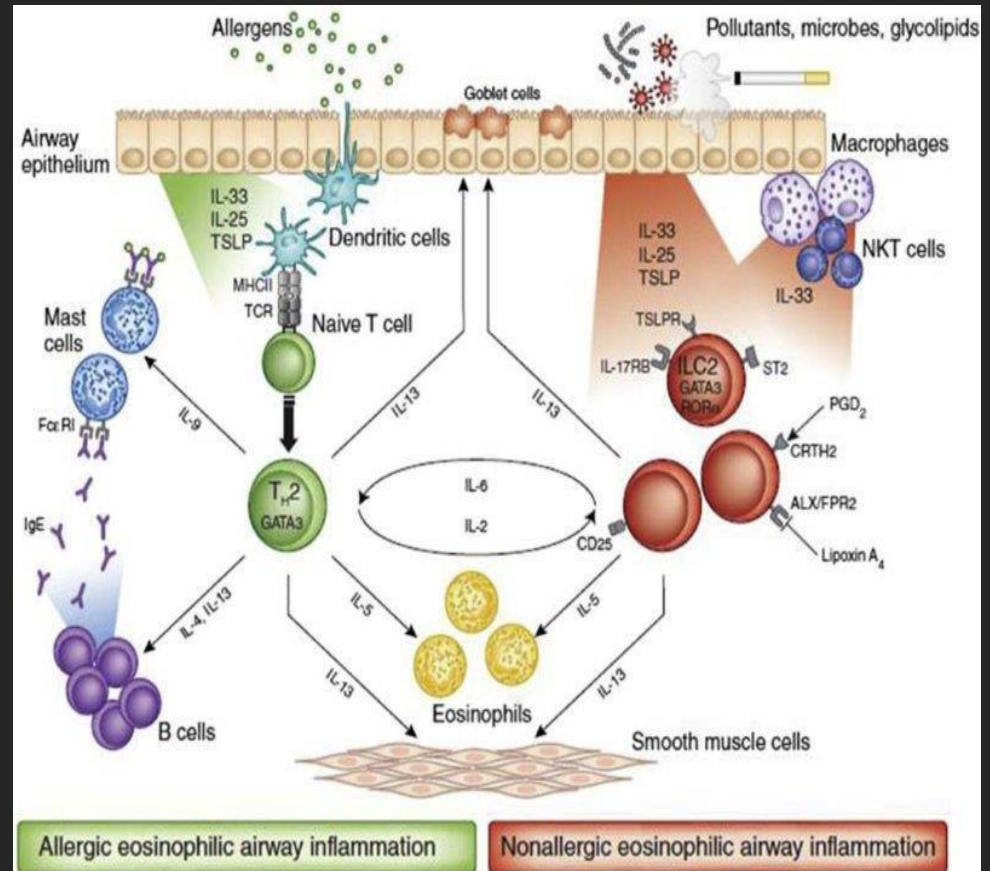
In partnership with  **Mylan**

Precision Medicine – Personalized Medicine

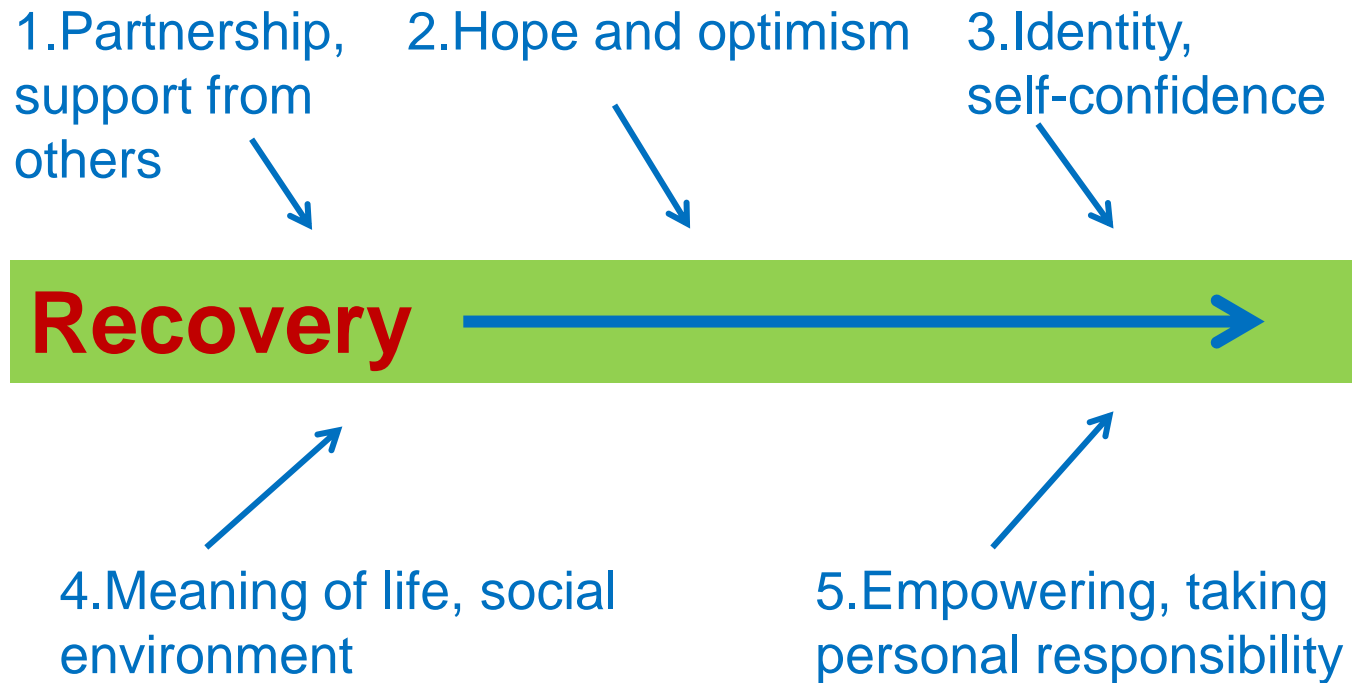
The spectacular 1000 Genomes Project called for a new era of Precision Medicine (PM). Patient participation is the essential driver of PM.

Biologicals

e.g. Omalizumabi (Xolair®) 2005
Mepolitsumabi (Nucala®) 2015
Reslizumabi (Cinqaero®) 2016
Benralizumabi (Fasenra®) 2018



The five elements endorsing recovery



In the modern health-care patients have more rights but also more responsibility of their own health and actions.

mHealth: Challenges

Financial

- Business model
- Funding
- Sustainability

Cultural

- Language
- Attitude
- Gender roles

Capacity

- Technical capacity(support and development)
- Human capacity (training)
- Infrastructure

Other

- Regulations
- Privacy



My final hint: re-furnish your office!

