



ZINNIGE ZORG

Zinnige Zorg

The Dutch approach to
appropriate care

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of The Netherlands

December 4, GöG-Colloquium Vienna



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- Zinnige Zorg History: How we started
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- Data science
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- Results
 - Example Intermittent Claudication
 - Example Chest pain
- International cooperation (IZZI)
- Further information

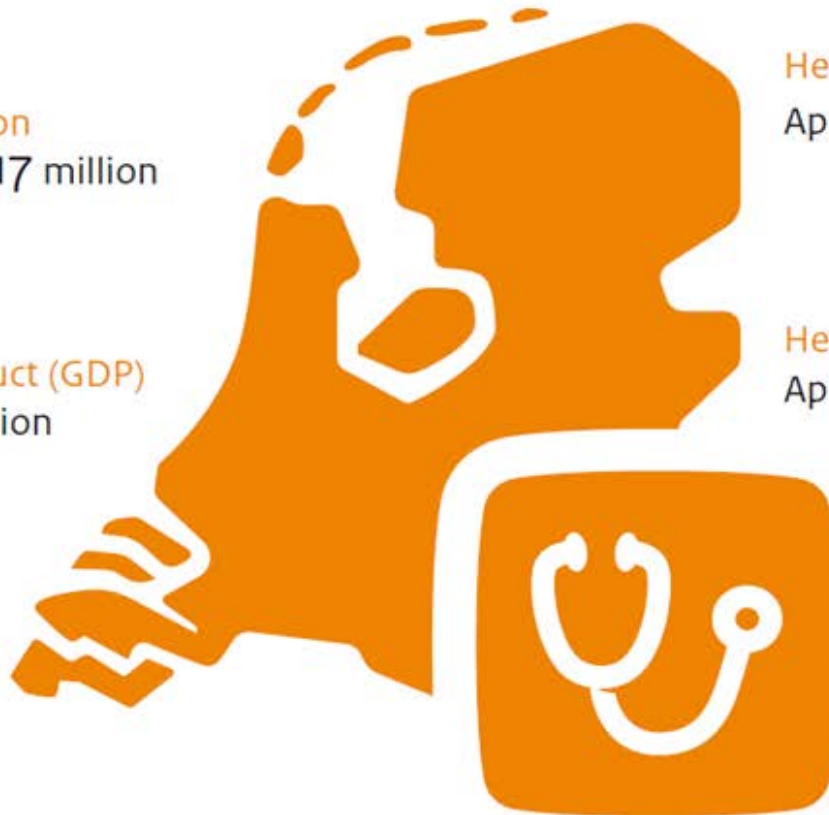
Health Care in The Netherlands



Life expectancy:
Men - 79,1
Women - 82,8

Population
Approx. 17 million

Gross Domestic Product (GDP)
Approx. EUR 700 billion



Healthcare expenditure in EUR
Approx. EUR 70 billion

Healthcare expenditure
Approx. 10% of GDP

5.628 Euro per person / yr

Total number of people employed
in the healthcare field
Roughly 1,1 million



The National Health Care Institute:

- A governmental organization
- It determines reimbursement policies
- It defines and implements Quality policies
- Various other tasks

Taking care of good healthcare

no more than needed and no less than necessary

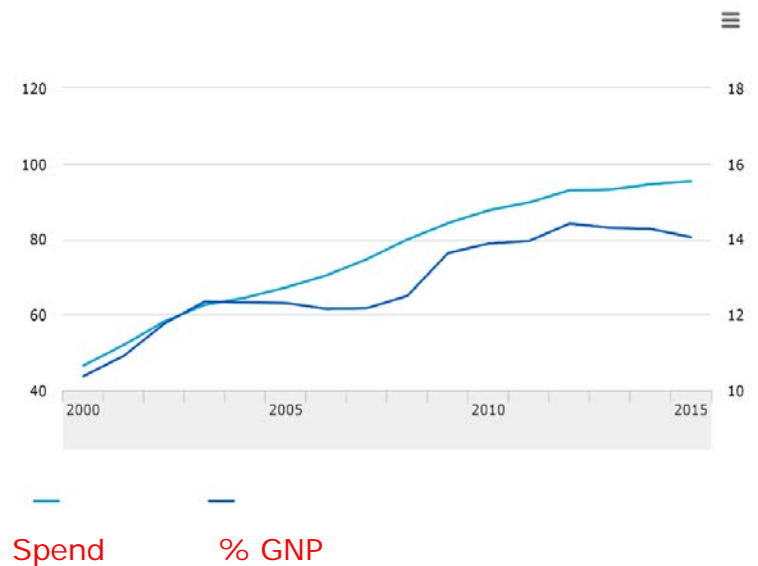


WHY WE STARTED



Reasons to initiate Zinnige Zorg Program

- Rising costs can harm solidarity and therewith accessibility
- There is a limit to traditional “health coverage policies” (acceptance and health impact)
- Appropriate care can reduce costs
- Focus on Quality will lead to better health, improved care and reduction of unnecessary costs





Reasons to initiate Zinnige Zorg Program

- Zinnige Zorg would inspire and connect
- Zinnige Zorg would not conflict with existing (international) programs
- From which there were many....

Zinnige Zorg History: Why we started



Linnean

K&D Agenda

Richtlijnen KIMS

SEENEZ

Leading the Change

Versnellingsagenda

Veelbelovende zorg

ZonMw GGG

Zorgevaluatie

Verstandig kiezen

Citrienfonds

Uitkomst transparantie

Hii Holland

Do Not Do

Value Based Health Care

ZonMw DO

Samen beslissen

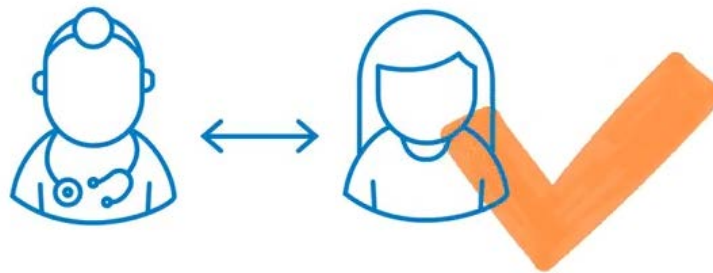
TopZorg

JuMP



Objective Zinnige Zorg: Stimulate appropriate care in the exam room

- Zinnige Zorg (Value) means that the patient gets the right care. Care that actually works, with effective diagnoses and treatments.
- Patients can count on good and affordable care, for now and in the future





HOW WE STARTED

Zinnige Zorg History: How we started

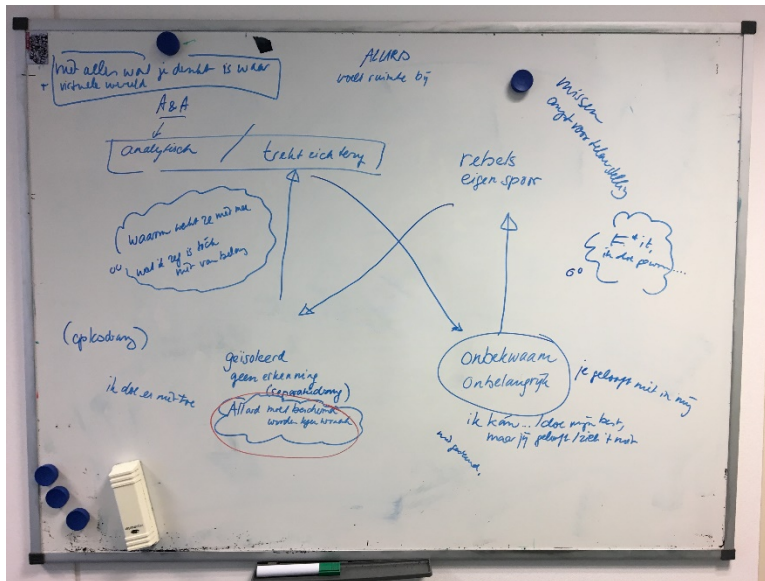


- We started with a small group (kernteam), and kept it small
- We developed while doing



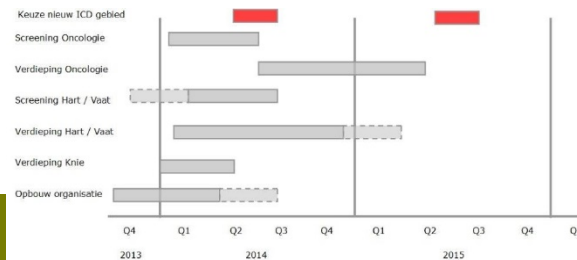


- We build and used various models, methodologies, policies, tooling



Methodology

Phase 1 | Screening



Zinnige Zorg History: How we started



- We had many project and stakeholder meetings



Zinnige Zorg History: How we started



- We trained a lot of people of the “regular organization”



Zinnige Zorg History: How we started



- We initiated the international network - IZZI



Zinnige Zorg History: How we started



- And yes, we had some fun





METHODOLOGY



Methodology

- Systematic analyses per ICD-10 chapter
- On basis of patient journey: what is needed
- In cooperation with all relevant parties
- On basis of Evidence: what is proven / agreed
- Focus on improvement of quality of care
- Avoidance of unnecessary costs as a result

- With International benchmarking (IZZI)

ICD-10 Version:2010

Search

▼ ICD-10 Version:2010

- ▶ I Certain infectious and parasitic diseases
- ▶ II Neoplasms
- ▶ III Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
- ▶ IV Endocrine, nutritional and metabolic diseases
- ▶ V Mental and behavioural disorders
- ▶ VI Diseases of the nervous system
- ▶ VII Diseases of the eye and adnexa
- ▶ VIII Diseases of the ear and mastoid process
- ▶ IX Diseases of the circulatory system
- ▶ X Diseases of the respiratory system
- ▶ XI Diseases of the digestive system
- ▶ XII Diseases of the skin and subcutaneous tissue
- ▶ XIII Diseases of the musculoskeletal system and connective tissue
- ▶ XIV Diseases of the genitourinary system
- ▶ XV Diseases of the reproductive system and the breast



Methodology

Purpose: promoting appropriate care in the consultation room

4 Phases

Screening phase

Screening of an ICD-10 chapter

WITH PARTIES IN HEALTH CARE

Screening

In-depth analysis

In-depth analysis phase

Co-creating health care improvement measures with parties in Health Care

WITH PARTIES IN HEALTH CARE

Monitoring phase

Monitoring implementation and results

BY THE NATIONAL HEALTH CARE INSTITUTE

Monitoring

Implementation

Implementation phase

Implementation of health care improvement measures

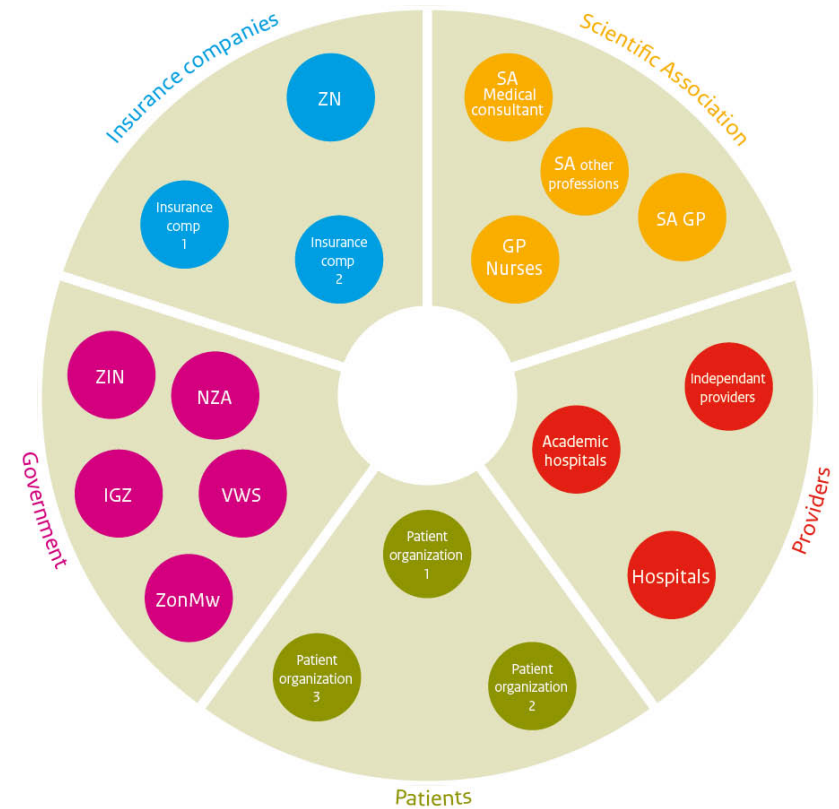
BY PARTIES IN HEALTH CARE

HEALTH CARE PARTIES



Stakeholder engagement

- Intensive co-operation
- Clear responsibilities
- Commitment
- Clear procedures and processes
- Shared successes
- Ownership shifts to stakeholders





Main questions

- Did professionals / patients define good care?

Guidelines (quality and up-to-date), implementation of guidelines, patient information, tools for shared decision making, clinical registers

- Is this care proven to be (cost) effective?

Evidence in guidelines (EBM), systematic reviews

- Is this care applied in practice?

Research of reimbursement data, clinical registers, quality indicators



Main results

With these questions, we expect to identify:

- Under / over diagnostics
- Under / over treatment
- Knowledge gaps
- Unnecessary costs

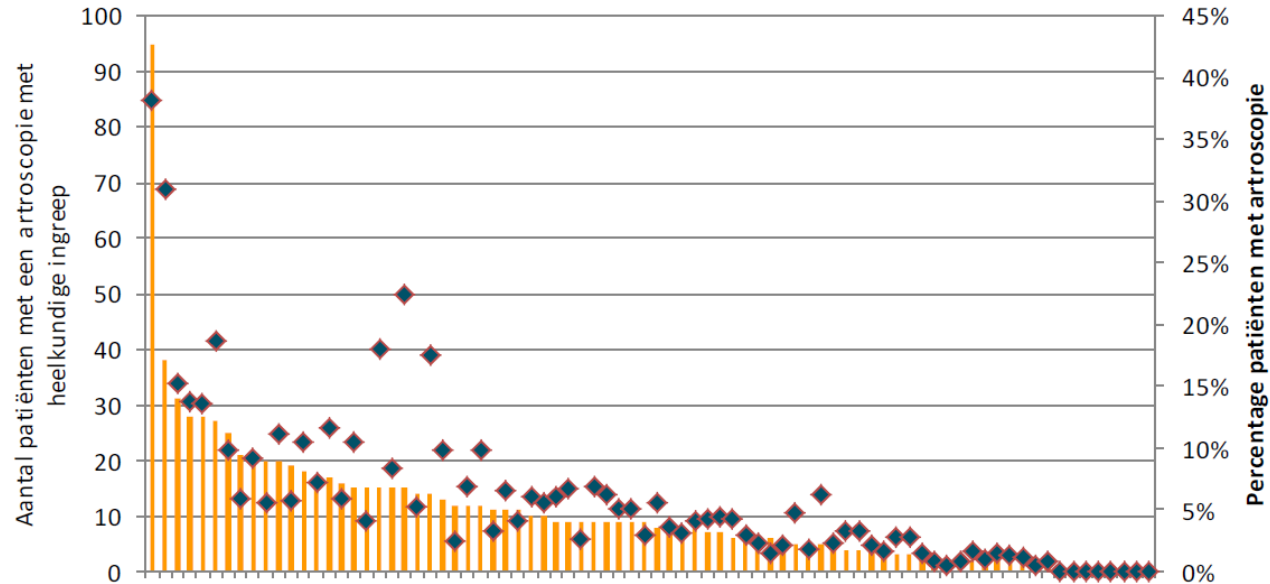
And with those findings, we want parties to commit to improvements



DATA SCIENCE (BI)

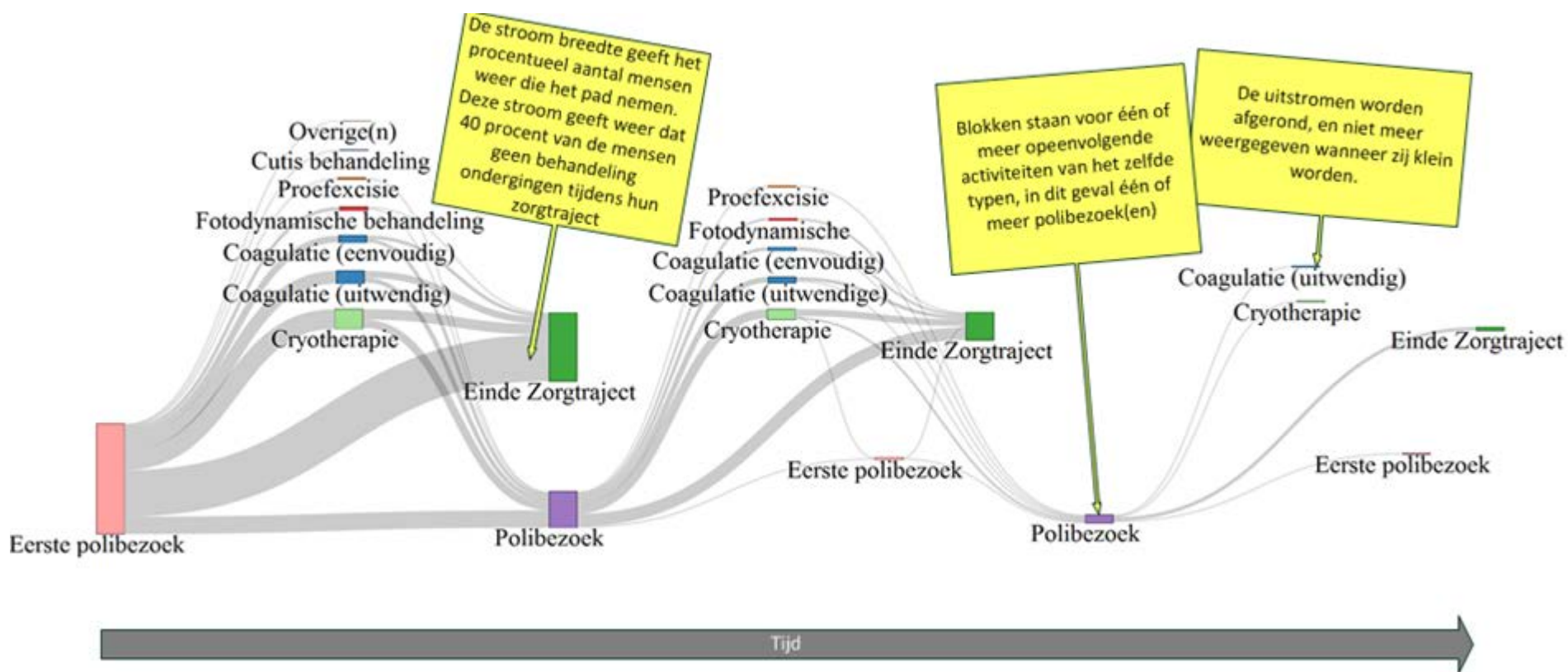


Use of Data: We moved from classical “Practice variation”.....





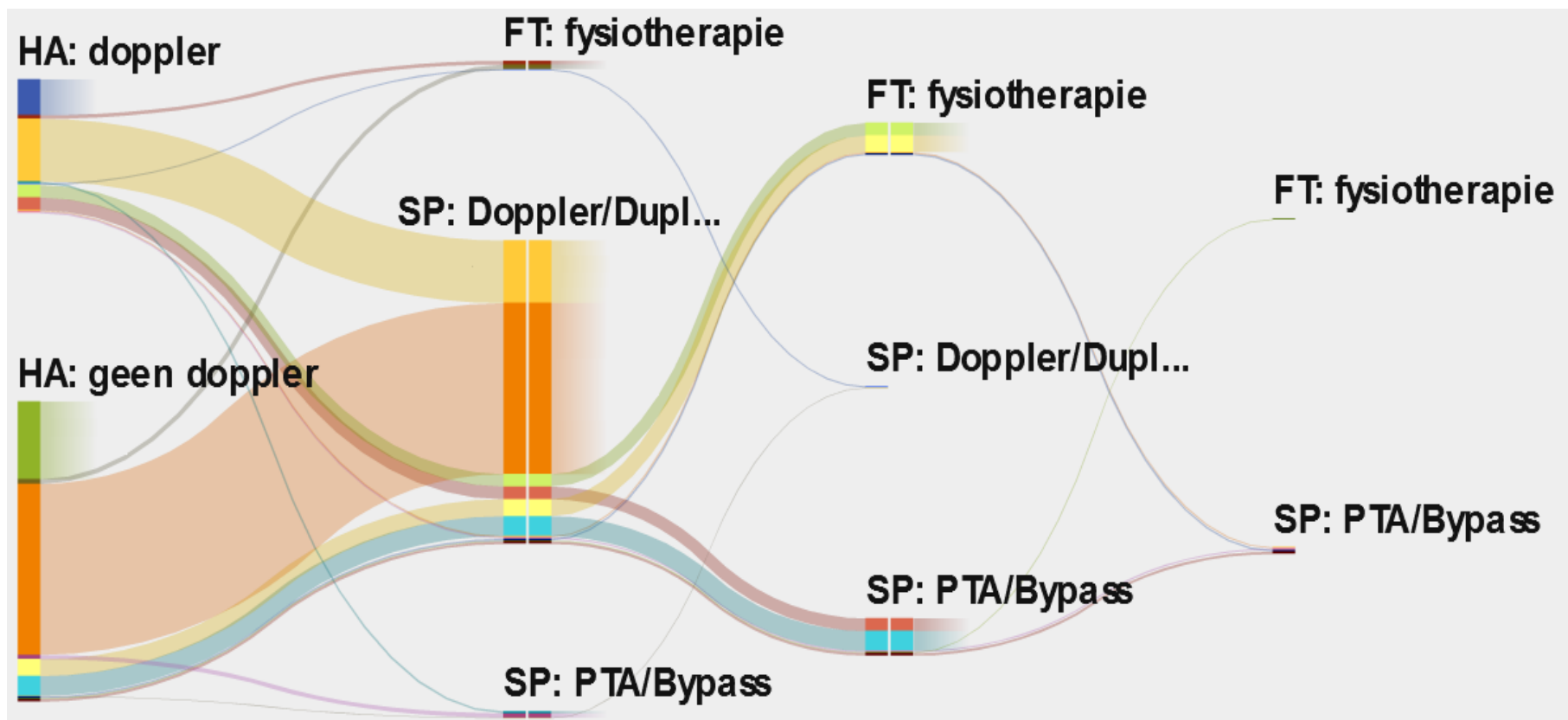
....to patient pathways graphics (Sankey)





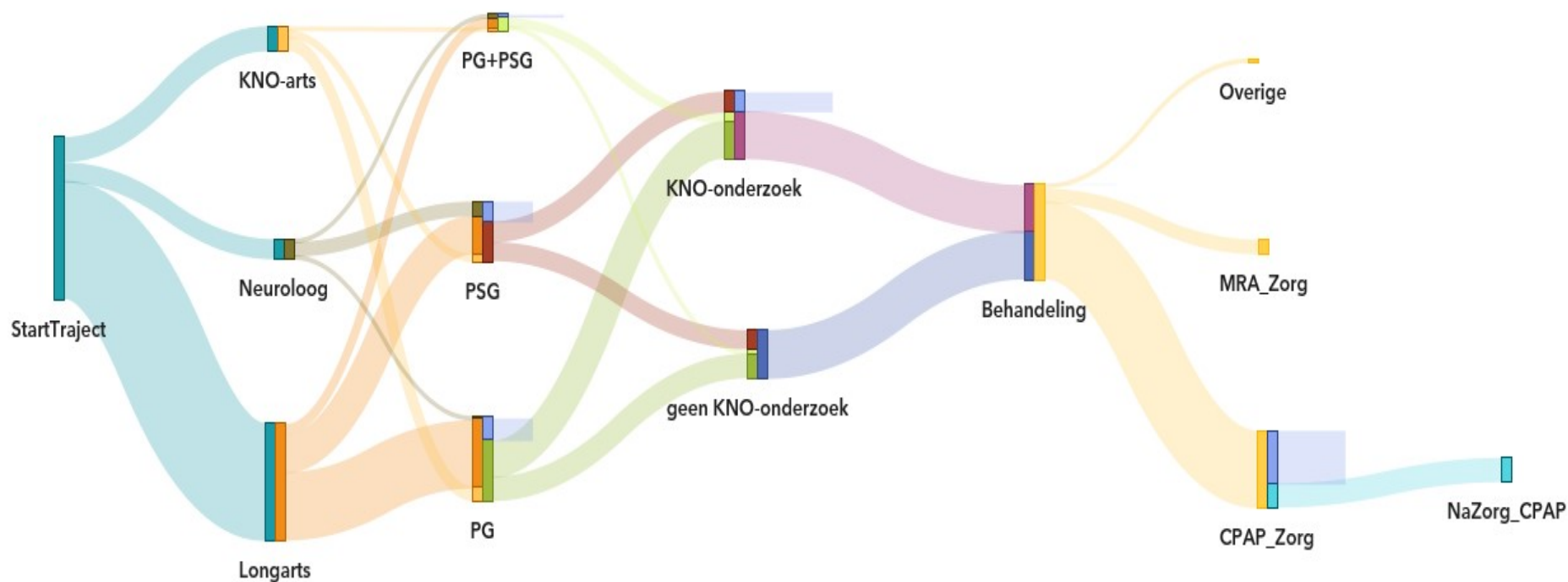
PAOD – Patient pathway (Sankey)

Example





Sleep Apnea – Patient Pathway (Sankey)





CURRENT STATUS



- Many more people working on Zinnige Zorg Projects
- Zinnige Zorg integrated into regular organization (Program closed)
- Zinnige Zorg is basis of all Health Domain teams
- Zinnige Zorg is basis of more “Result and impact approach” of ZIN

Current status



- Implantable Cardioverter Defibrillator (ICD)
- COPD
- Asthma
- Sleep Apnea
- Cervical abnormalities
- Pelvic floor complaints
- Psychosis
- PTSD
- Usage & accessibility of (expensive) oncolytics
- Lower back pain
- Mild mental disorders
- Osteoporosis
- Problematic behavior
- Thrombosis of veins
- Pneumonia

- Blood and Immunity
- Bone and Muscle
- Infection diseases
- Digestive system

Eye and Adnexa
Ear
Skin

Methodology

Purpose: promoting appropriate care in the consultation room

Screening phase

Screening of an ICD-10 chapter

WITH PARTIES IN HEALTH CARE

Screening

In-depth analysis

In-depth analysis phase

Co-creating health care improvement measures with parties in Health Care

WITH PARTIES IN HEALTH CARE

Monitoring phase

Monitoring implementation and results

BY THE NATIONAL HEALTH CARE INSTITUTE

Monitoring

Implementation

Implementation phase

Implementation of health care improvement measures

BY PARTIES IN HEALTH CARE

HEALTH CARE PARTIES

- Monitoring care for hip and knee osteoarthritis

- PAOD
- Chest Pain
- Follow up Breast cancer
- End of life (lung / colon cancer)
- Expensive oncolytics mCRPC



Current projects:

- Blood and Immunity system
 - Skin and subcutaneous tissue
 - Musculoskeletal system and connective tissue (Bone and Muscle)
 - Infectious and parasitic diseases
 - Eye and Adnexa
 - Ear and mastoid process
 - digestive system
- **By December 12, Screening phases will be completed for all ICD-10 domains**

Screening phase
Screening of an ICD-10 chapter

WITH PARTIES IN HEALTH CARE

Screening



Current projects:

- Cervical abnormalities
- Pelvic floor complaints
- **Asthma**
- **COPD**
- **Sleep Apnea**
- Osteoporosis
- Venous thrombosis and pulmonary embolism
- Lower respiratory tract infection and pneumonia
- Urinary tract infection
- Implantable cardioverter defibrillator (ICD)
- Lower back
- LVB
- Problem behavior
- Psychosis
- Post traumatic Stress disorder (PTSD)
- Digestive system
- Mild mental disorders





Current projects:

- **Chest Pain (instable AP)**
- Follow up Breast cancer
- Pre-malign skin cancer
- End of life (lung / colon cancer)
- **PAOD (Peripheral Artery Conclusive Disease)**
- Expensive oncolytic mCRPC
- End of Life (Bowel, Lung cancer)





Question:



CONVINCE OR ENFORCE ?



Current projects:

- Hip and knee replacements
- Prostate Cancer

Monitoring phase
Monitoring implementation and results

Monitoring

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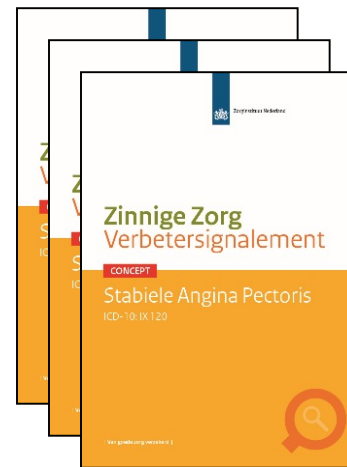
Various reports have been published

- Reports (Dutch) are available on:

<https://www.zorginstituutnederland.nl/zoeken?trefwoord=zinnige+zorg>

- Summaries (English) are available on:

<https://english.zorginstituutnederland.nl/zinnige-zorg>





RESULTS (EXAMPLES)



What is it?

Intermittent claudication, also known as: PAOD (Peripheral Arterial Occlusive Disease), is a cramping leg pain that develops when walking and is relieved with rest.

It is caused by inadequate blood flow to the leg muscles caused by atherosclerosis.





Zinnige Zorg
(appropriate care) programme

How do matters stand with regard to Zinnige Zorg for people with intermittent claudication?



Patients
Harteraad



Care professionals
KNGF, NHG, NVvR,
NWH, NVvV, V&VN



Health care
insurers
ZN



Care institutions
NFU, NVZ, ZKN



National network
Claudicationet



Results

Diagnostics

**Guideline**

Ankle brachial pressure (ABP) indexes can be performed under the responsibility of the general practitioner (GP). Options: by GP or in vascular laboratory.

Data

Still too many referrals to vascular surgeon for diagnostics.

**Guideline**

Duplex ultrasound should only be used if endovascular revascularisation (ER) or operation is being considered.

Data

11.000 unnecessary duplex ultrasounds a year.

Treatment

**Guideline**

Supervised exercise therapy (SET) should be delivered as first treatment to all new patients with intermittent claudication.

Data

- 75% of patients received no SET as first-line treatment.
- 20% of patients may undergo ER unnecessarily.



Improvement activities



Improved agreements between care professionals



Provision of reliable patient information



Insight into quality is being developed



Inform general practitioners that diagnostics can be outsourced to a vascular laboratory without referral to specialist.



- Newly diagnosed patients receive SET as first-line treatment.
- Reimbursement of SET.
- From 35% to 11% ER.



Impact for patients

- Improvement of accessibility and quality of diagnostics and treatment
- They will receive better information about good care
- More exercise, positive effects for whole body
- No unnecessary operations
- More insight into quality of care (development outcome indicators)



Avoidable costs (a year)



€ 30.000.000



Implementation

The improvement actions are defined in the **“Verbetersignalement”**

The parties in health care are responsible for the implementation of the improvement activities

ZIN “facilitates” implementation



Implementation

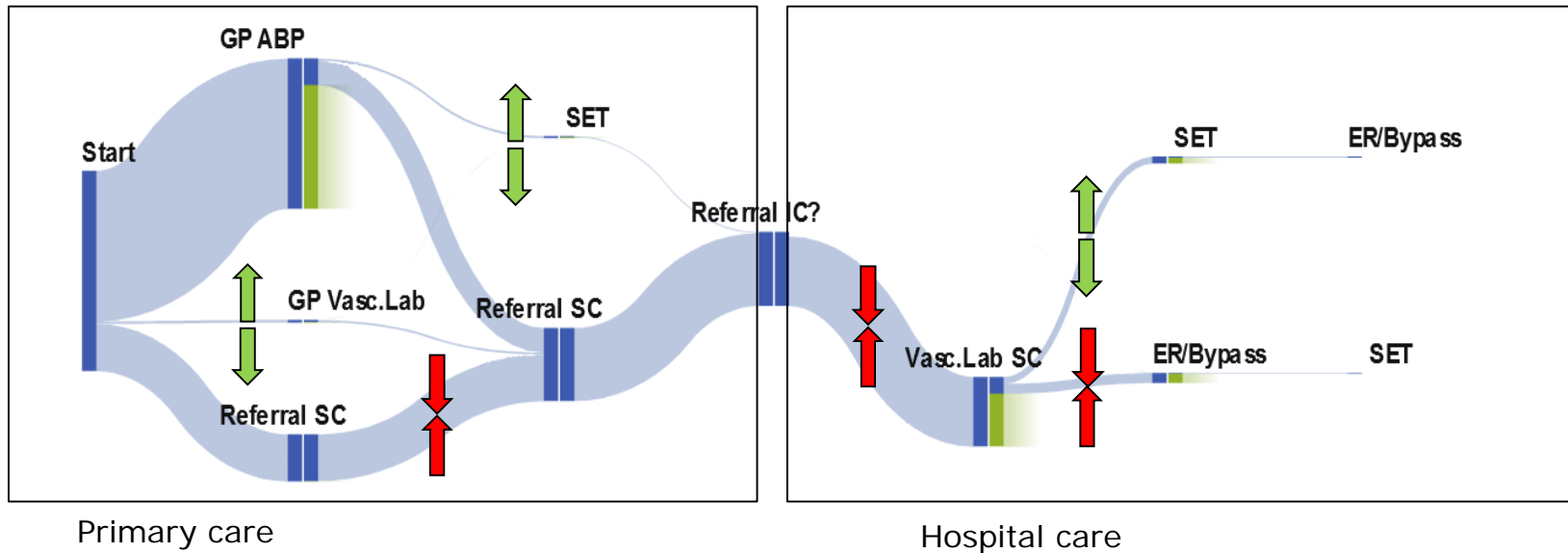
What has been done since publication:

- 2016: Professionals adjusted multidisciplinary guideline: GLT first-line treatment
- 2017: Reimbursement of GLT (advice ZIN)
- 2017: Development of appropriate patient information
- 2017: Development shared-decision tool
- 2018: National organisation of GPs is working on knowledge dissemination about outsource possibilities for diagnostics and importance of GLT as first treatment
 - publication in journal and incorporation in training
- 2018: Progress meeting
- 2019: Progress meeting. Intensified effort on diagnostics. Additional help from ZIN.



Monitoring

ZIN will monitor progress annually and report
 After three years → evaluation report

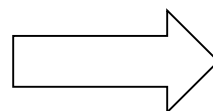




Results (examples)



PAOD



Results (example)

Chest pain (Stable Angina Pectoris)



Project lead:
Joke Derksen

Research question



Zinnige Zorg
(appropriate care) programme

How do matters stand with regard to Zinnige Zorg for people with chest pain?



Patients
Harteraad



Care professionals
NVvR, KNFG, VHVL, NVT,
NVHVV, NVD, NHG, NVVC



Care institutions
NFU, NVZ



Health care insurers
ZN

Results (example)

Chest pain (Stable Angina Pectoris)



Research

What perceptions exist regarding good care?



How is care provided in actual practice?



Results (example)

Chest pain (Stable Angina Pectoris)



Improvement activities

General



Improved agreements
between care professionals



Shared
decision-making



Insight into quality
is being developed

Results (example)

Chest pain (Stable Angina Pectoris)



Diagnostics



48%

of people with chest pain may be offered a **cardiac ultrasound unnecessarily**



61%

of people with chest pain may be offered a **exercise stress test unnecessarily**



38%

of people with chest pain may be offered a **chest X-ray unnecessarily**



31%

of people with chest pain may be offered a **coronary artery unnecessarily**

Results (example)

Chest pain (Stable Angina Pectoris)



Treatment



first medicines, then an operation



36-63%

of patients may undergo surgery
unnecessarily

Cardiovascular risk management (CVRM) for everyone



28%

of patients may be subject
to **under-treatment** because
they have not received CVRM

Results (example)

Chest pain (Stable Angina Pectoris)



Follow up

22%

of patients who have **undergone surgery on the coronary arteries** may still attend check-ups with the cardiologist for this disorder **unnecessarily**



Cardiac rehabilitation



61%

of patients who have undergone **surgery on the coronary arteries** may be subject to **under-treatment** because they have not received cardiac rehabilitation

Results (example)

Chest pain (Stable Angina Pectoris)



Avoidable costs (per year)



€ 177.000.000



I Z Z I - International Zinnige Zorg Initiatives
The international appropriate care network

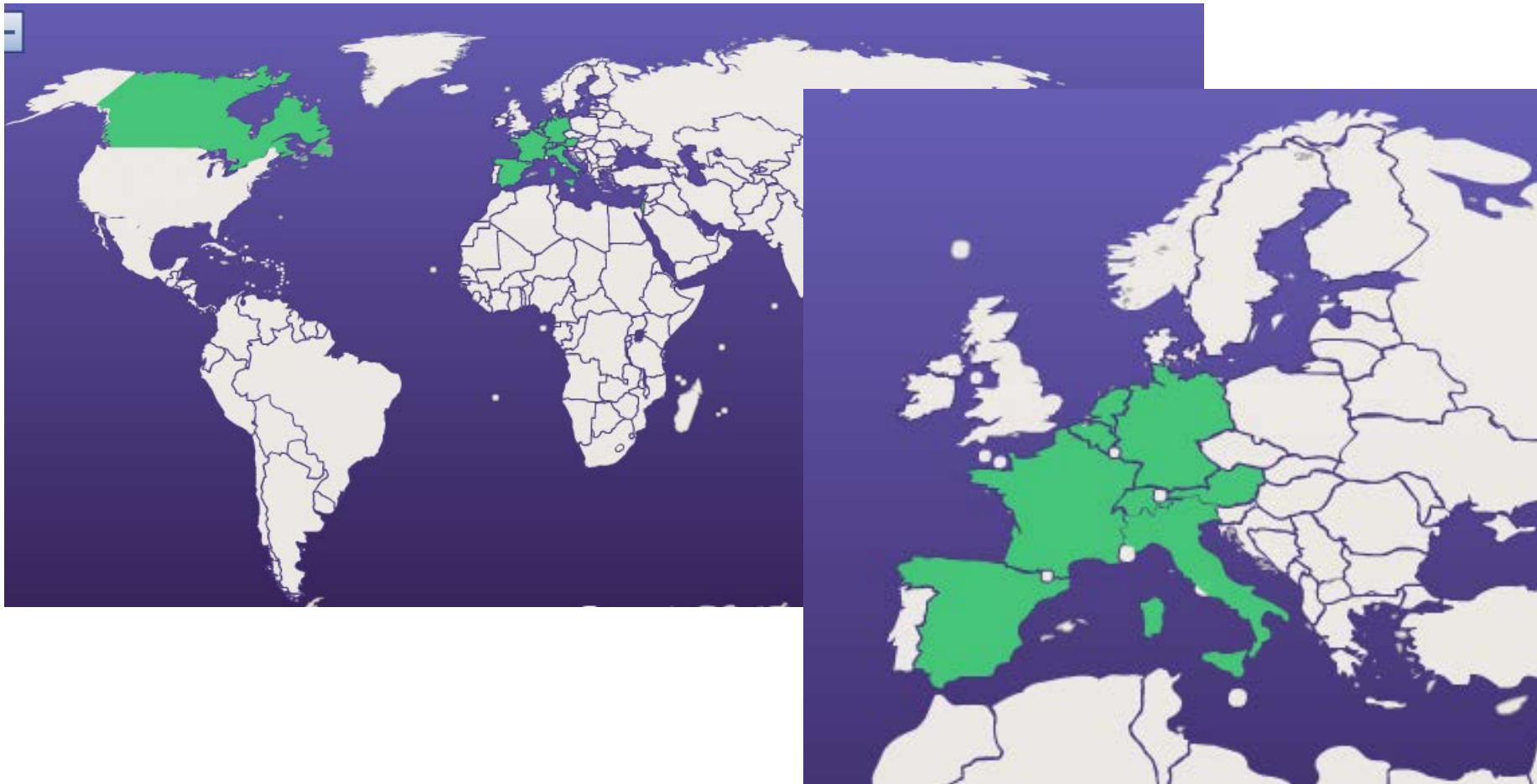




IZZI – International Zinnige Zorg Initiatives

- Founded in 2014
- Joint initiative from various public institutes
- Informal international network
- Benchmarking, learning
- Sharing experiences, methodologies, successes, failures
- Discuss and help develop the various initiatives that stimulate appropriate care in our countries
- Independent of health care system

Participating countries at this moment





THANK YOU



Thank you !

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www.zorginstituutnederland.nl
<https://english.zorginstituutnederland.nl/zinnige-zorg>