2014 Italian Presidency of the Council of the European Union

Ministry of Health

CONFERENCE ON EHEALTH

MINISTERIAL CONFERENCE

Italian Presidency of the Council of the European Union

Claus Duedal Pedersen

Renewing Health

7th- 8th October, 2014, Rome

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Conclusions

- Large-scale evaluation is the way forward and we need more of this
- Despite patients and staff love telemedicine, then the economic and clinical benefits are not evident
- And

NT + OO = COO

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Thank you to…

- EU for co-finansing
- The many health professionals and patients that have participated
- The many participants in Renewing Health for there understanding and hard work

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Need for knowledge

- **In 2008 the EU commission found:**
  - There was a lack of high quality evidence on the effectiveness of telemedicine:
  - This was a main barrier for wider use

  →MAST was created in 2008

- **This needed to be validated**
  - 2009: Call for proposals for a (large scale) pilot A, PSP-ICT project
  - 2010: Renewing Health

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The aim…

Produce evidence and decision support for EU health policies regarding the future deployment of innovative telemedicine services in those fields where they can lead to improved care and reduced cost.

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The Method

Unblinded randomised controlled trial (RCT)

MAST *(**M**odel for **AS**sessment of **T**elemedicine)*

1. *Health problem and characteristics of the application*
2. *Safety (adverse effects)*
3. *Clinical effectiveness*
4. *Patient perspectives*
5. *Economic aspects*
6. *Organisational aspects*
7. *Socio-cultural, ethical and legal aspects*

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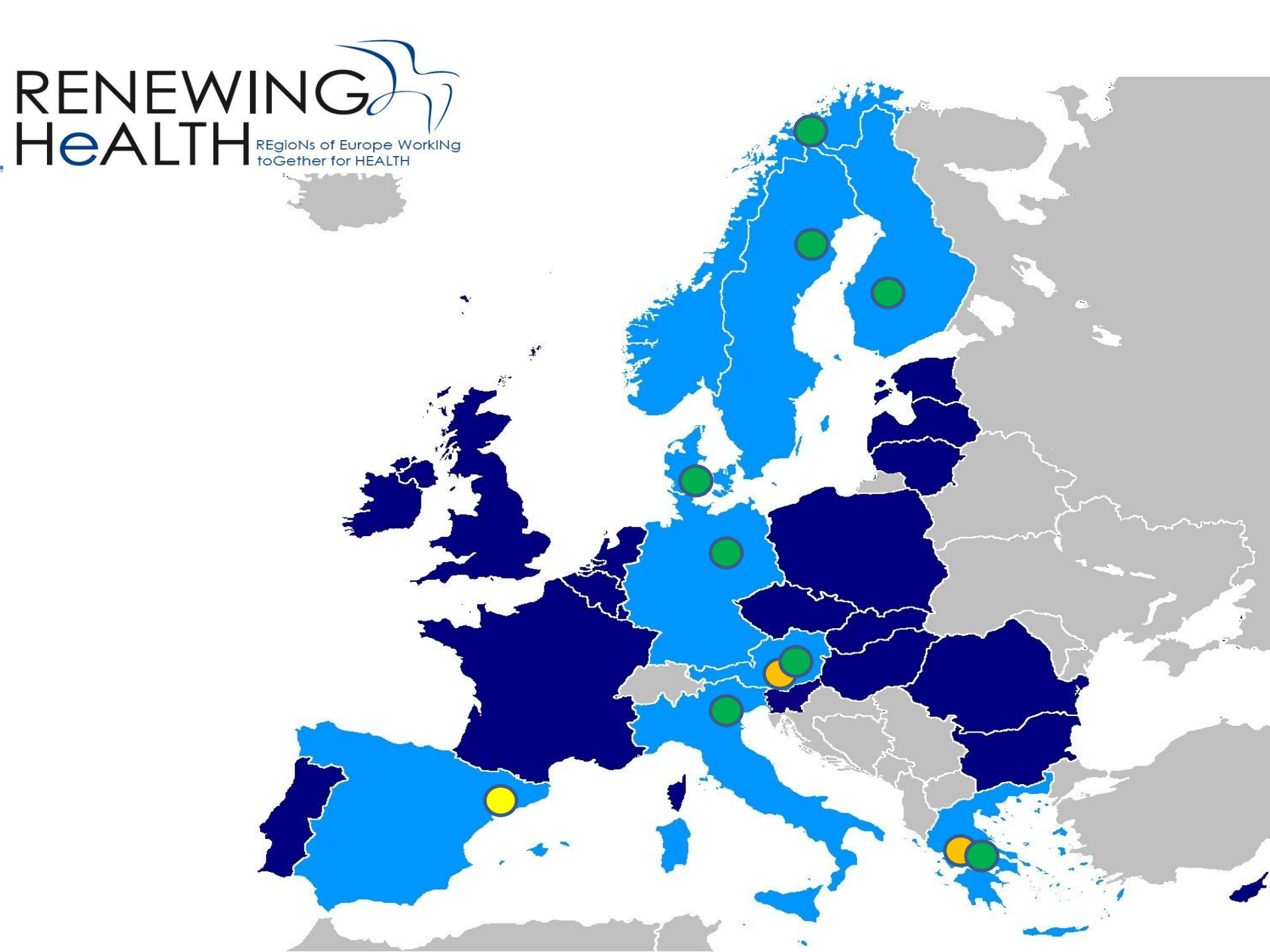

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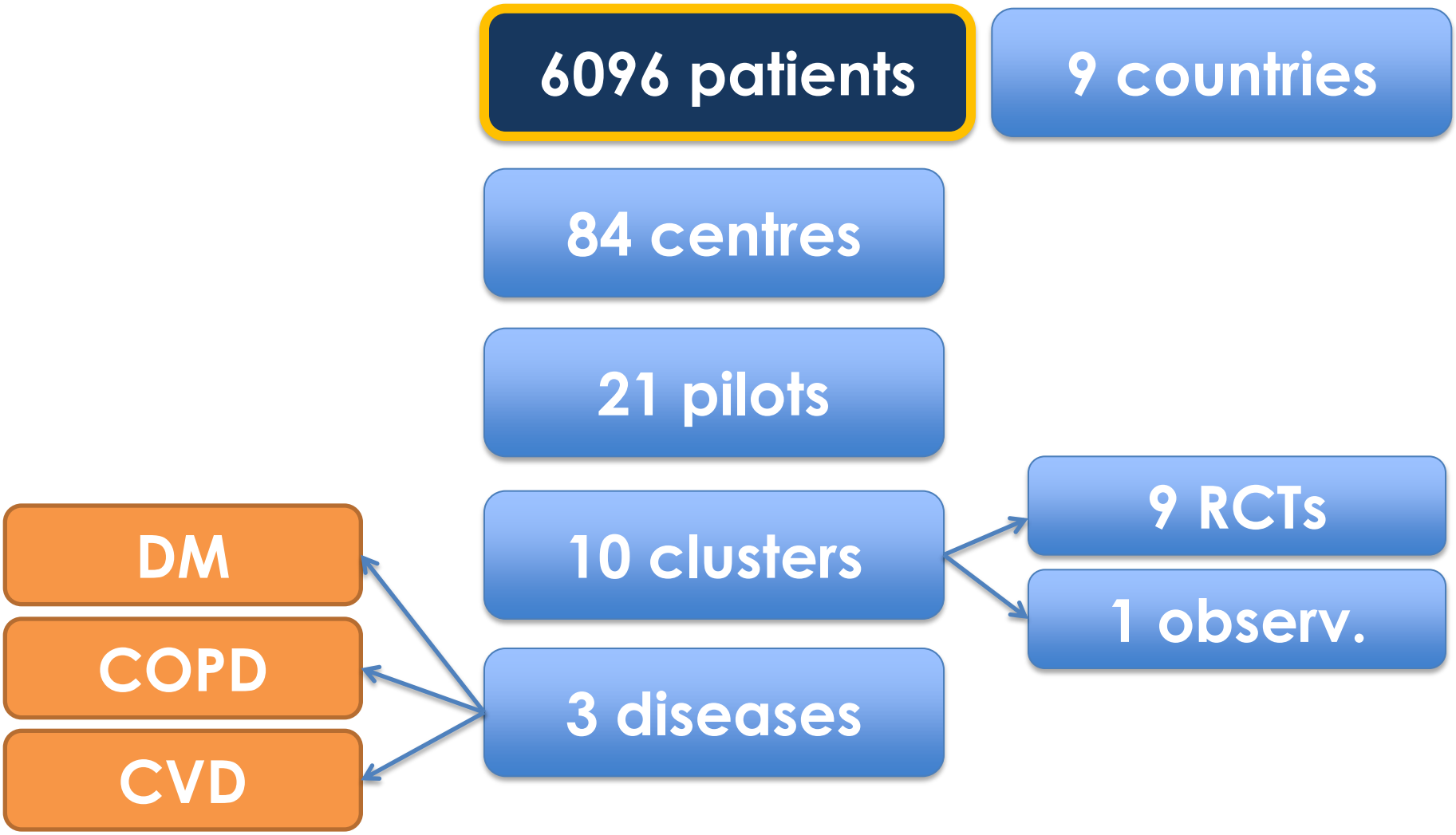

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RH clusters

Cluster	PATHOLOGY	VENETO	SOUTHERN DENMARK	NORRBOTTEN	NORWAY	CATALONIA	S. KARELIA	THESSALY	CARINTHIA	BERLIN	N
Cluster 1	DM			X	X		X		X		755
Cluster 2		X						X		X	930
Cluster 3			X								400
Cluster 4	COPD		X			X		X			826
Cluster 5		X							X	X	625
Cluster 6	CVD			X			X				475
Cluster 7		X						X			465
Cluster 8		X									2080
Cluster 11				X							450
Cluster 10		X									152
TOTAL											**7158**

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Why clusters

- The concept of clusters has been introduced for:
  - grouping existing telemedicine services, although using heterogeneous technological platforms, according to their aim, timing and duration of the intervention
  - increase the statistical power of the trials by aggregating data from the various pilots of a same cluster
  - promoting close collaboration and sharing of experience among teams which have never worked together before RENEWING HEALTH

Examples…

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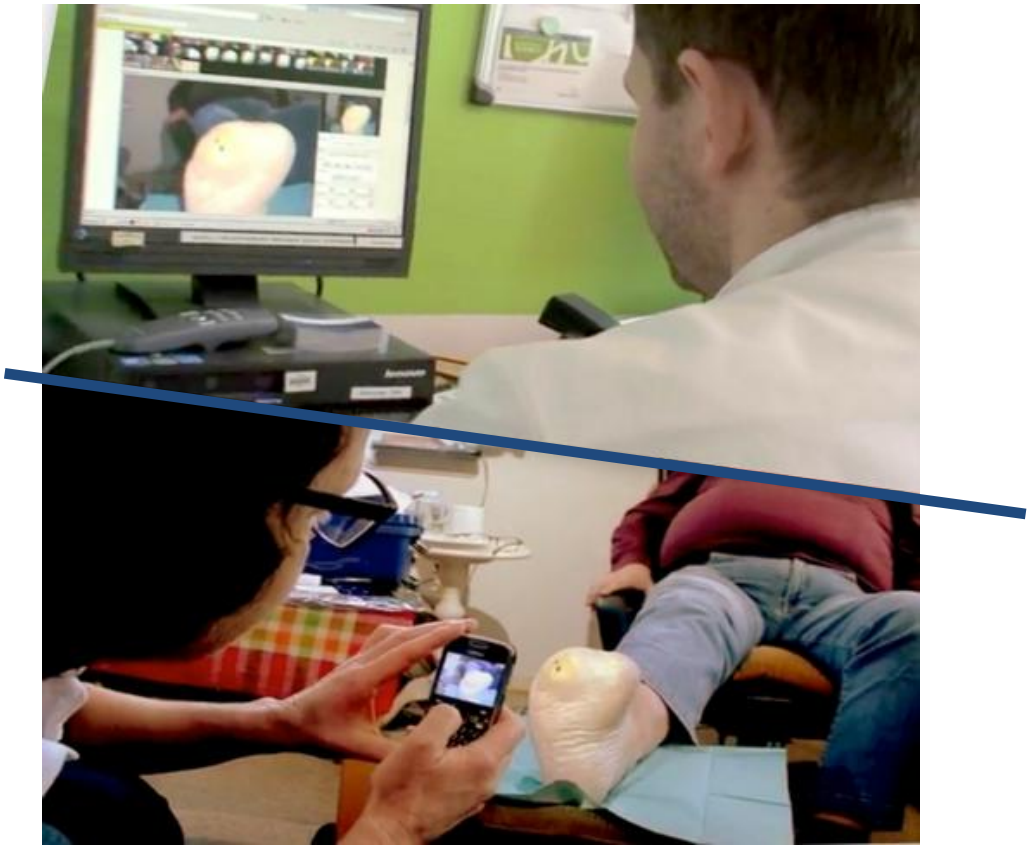
Cluster 3: Diabetes



Benjamin Schnack Rasmussen, MD, PhD student

A telemedical approach to patients with diabetes

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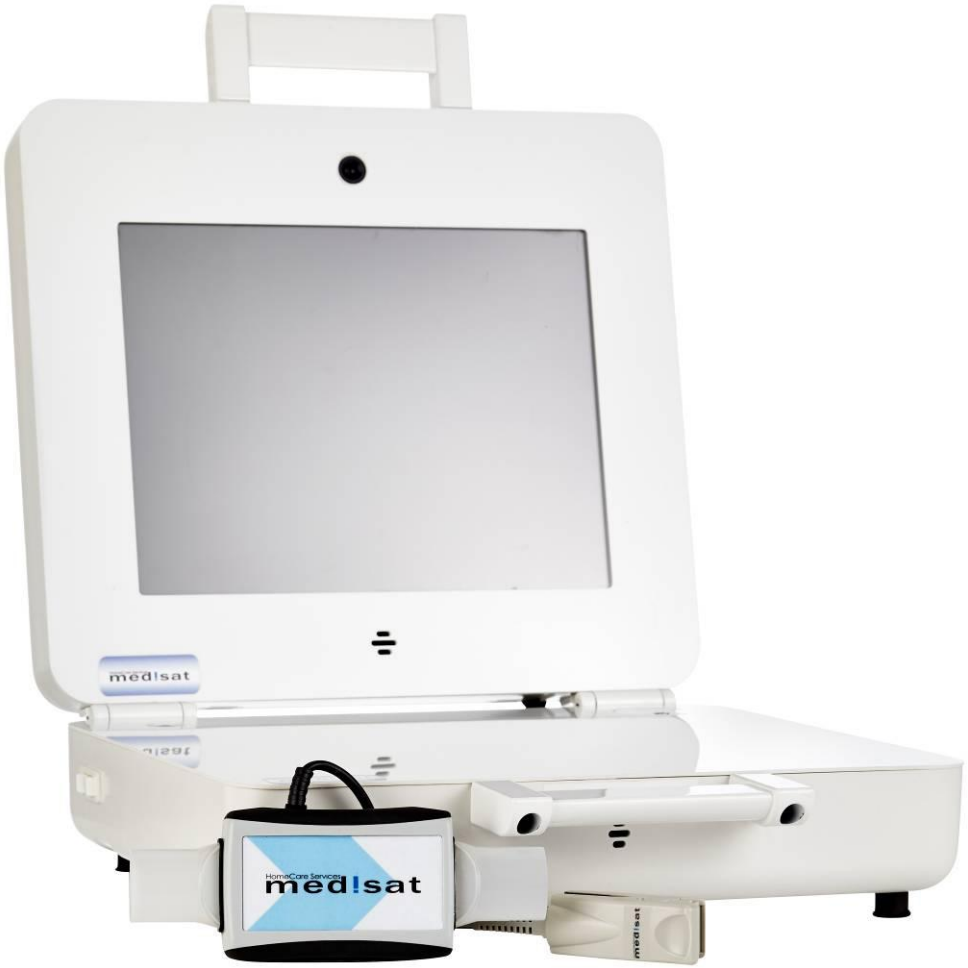
Cluster 4; COPD

Anne Sorknæs, PhD;

Telemedical nurse consultations in hte homes of chronically ill lung patients – a safe alternative to hospital admission



And what are the results of

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MAST huskesedlen

Multidisciplinary evaluation (domaines):

1. Health problem and characteristics of the application
2. Safety
3. Clinical effectiveness
4. Patient perspectives
5. Economic aspects
6. Organisational aspects
7. Socio-cultural, ethical and legal aspects

Transferability assessment:

- Cross-border
- Scalability
- Generalizability

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Before we get started..

- We have not yet collected all data, therefore not the entire data collection is included the results
- We have several PhD students that are working on scientific articles, which is why we cannot go into specifics
- There are challanges as always when research meets reality

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Clinical Effectiveness

The Renewing Health services provided are at least as safe and efficient as regular services. There is a tendency for the improvement of Quality of Life (SF36)

- Diabetes:
  - Tendency for the improvement of HbA1c (not significant – and only in one of out seven trials)
  - Some pilots experienced less visits to the doctor
- COPD:
  - No reduction in hospital admissions
- CHF:
  - Monitoring on a distance shows a reduction in hospital admissions (one of out six trial sites)

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Patient perspective

- Collected via SUTAQ (Service User Technology Acceptabilty Questionnaire)
- In almost all pilots the patients are very positive towards to the use of telemedicine.
- The patients
  - Feels it improves the treatment of their condition
  - Improves their access to the health care sector
  - Has a better understanding of the disease and of their own treatment

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Economic aspects

- The price for the use of telemedicine is highter than conventional treatment (Average 20 % higher)
  - One reason being that the price for the telemedical equipment is typically high (€300-900) plus the fact there is no reduction in the time spent on the treatment of the patient

- It can be because:
  - Telemedicine is still expensive. There are too high prices in the introduction of equipment
  - The maturity of the solution
  - The RCT set-up
  - The short time frame
  - Not enough change of the organisation and
  - Ekslusion of relevant patient groups!

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Organisational aspects

- The implementation of telemedicine results in organisational changes
- The communication between health care staff is increased
- Time savings are smaller than expected

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Solutions could be..

- Not to go the RCT way but ”all-in” on the organisational change
- Made sure the technology was stable – or used another and simpler solution
- Followed the patients over a longer period of time
- Included the fragile patients

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But did we get it right?

- Is RCT the right tool for telemedicine services?
  - RCTs kill the business case!
  - RCT excludes the most fragile patients – who has the biggest benefits.
- Did we actually measure at the right time?
  - New services and no change management!
  - What if we look at the setup in daily production?
- Is the market ready?
  - No change in reimbursement systems, no large scale deployment!

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New Technology + Old Organizations = Costly old organizations

Hal Wolf, visiting professor at CIMT

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Thank you

Chief Innovation Officer Claus Duedal Pedersen

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Follow the further journey on.. www.RenewingHealth.eu