

COPD –Briefcase

Nurse lead telehealth consultations of discharged COPD patients



**HOPE conference
Copenhagen The 15. of juni 2010**

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Background

- **An increasing number of COPD patients (WHO)**
- **COPD exacerbations constitute a heavy patient and societal burden**
- **Telehealth consultations reduce the burden of COPD??**
- **Telehealth RCT are few and small**



Aim

To investigate the effect of telehealth nursing consultations compared to conventional treatment of COPD patients with focus on readmission, mortality and user satisfaction

Setup

- **At OUH-Svendborg Hospital, Funen, Denmark**
- **Controlled intervention study**
- **Qualitative study**
- **Admitted with COPD exacerbation**
- **50 telemedicine patients**
- **50 geographic defined controlled patients**

Result indicators: Economic

4 weeks after discharge:

- Number of readmissions and readmission days
- Mortality
- Consultation time
- Calls to the hotline
- Need for homecare nurse

Result indicators: User Satisfaction

- **Patients**

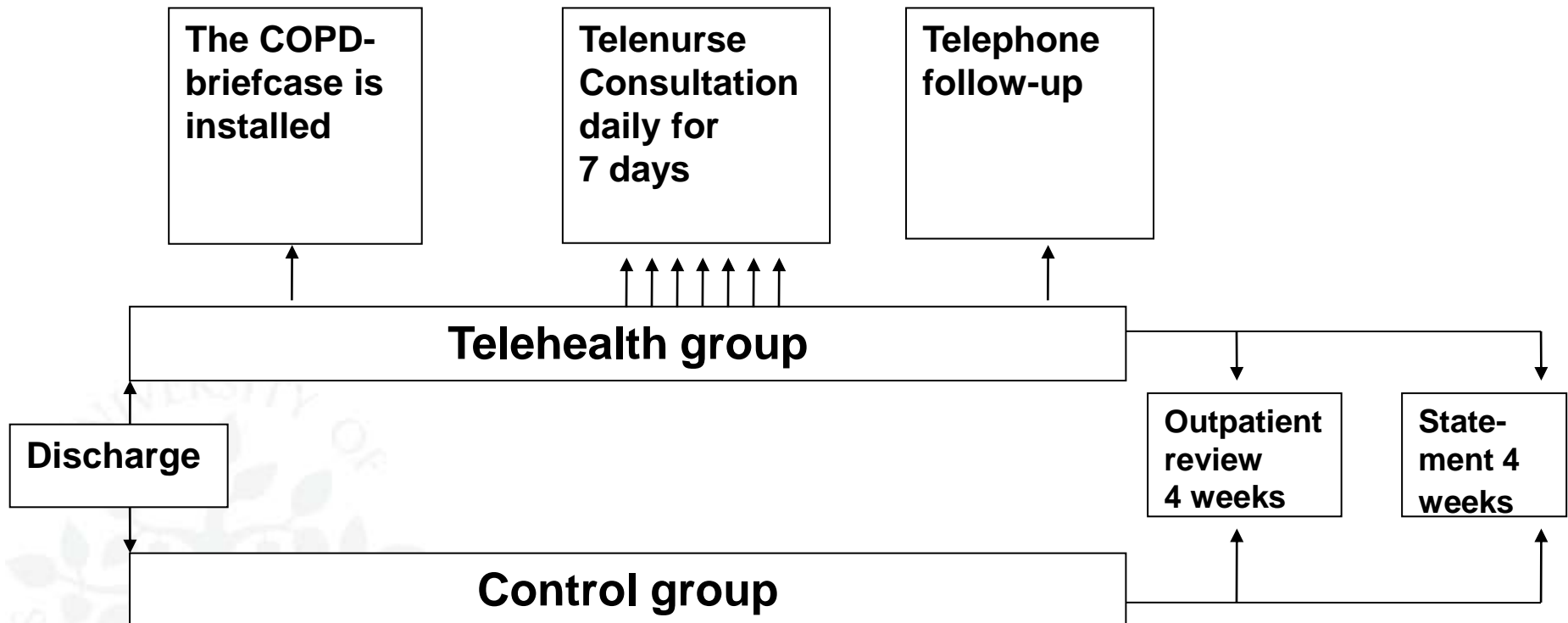
- Patient questionnaire

- **Telehealth nurse**

- Experience and usability (create intimacy, create safety)

- Technical (sound, picture, measurements, functionality)

Organisation of the setup





Setup



UNIVERSITY





Setup



Observation and patient education

- **General and respiratory condition**
- **Physical activity**
- **Psychological, e.g. anxiety**
- **Attend to the treatment**
- **Patient education**

Readmission

	Telemedicine patient: (n: 50)	Control patient: (n: 50)
Total number of Readmission	8 (11 %) (14% reduction)	15 (30%)
Total number of Readmission(exac)	6 (11%) (10% reduction)	11 (22%)
Total days of Readmission	37 (4,6)	116 (7,7)
Readmission days with exac.	15 (2,5) (3 <1 day)	48 (4,4) (2<1day)

Patient satisfaction

	Yes	No	Don't know
	%		
Because of the TVC the patients felt more safe or safe with discharge	76	7	17
Used the equipment without help from anyone*	83	15	2
Could easily or with little difficulties make the TVC measurements work	98	2	
The measurements made the patients feel more safe or no difference	93		7
Found the number of consultation suitable**	88	5	7
Will recommend that the TVC should be the usual care	95	0	5
Preferred TVC to telephone calls***	63	25	12

*5 % some times with help; **5 % wants more consultations; ***20 % preferred both telemedicine and telephone calls

Patient satisfaction

- **Feel more safe**
- **Reduced readmissions**
- **Could be treated and cared for at home**
- **Uninterrupted consultation**
- **Information when needed**
- **Creates intimacy**
- **Could (almost) decide the consultation time**

Nurse satisfaction

Possible to:

- Nurse and give the patients care after discharge
- Create intimacy
- Guide and educate the patients, the relatives and the homecare system
- Control how the patients administrate the treatment after discharge

Technology

- Safe and secure internet is required
- Telemedicine equipment must be easily accessible
- Equipment and connection must function always
- Media training and education is required
- Technical knowledge

Issues: patients

- Not all COPD patients apply (dementia, some psychiatric patients etc.)
- Dependent on the measurements
- Make patients feel diseased
- Isolation

Issues: Organisation

- Management accept
- Economy
- Staff safety
- Education
- Specialist knowledge (clinical and technical)
- Change the role for the staff
- Timesaving
- Legal aspects - laws



Thank you for listening

Any questions?

