
# NUOVE OPPORTUNITÀ PER LA GESTIONE APPROPRIATA DEL PAZIENTE AFFETTO DA BPCO

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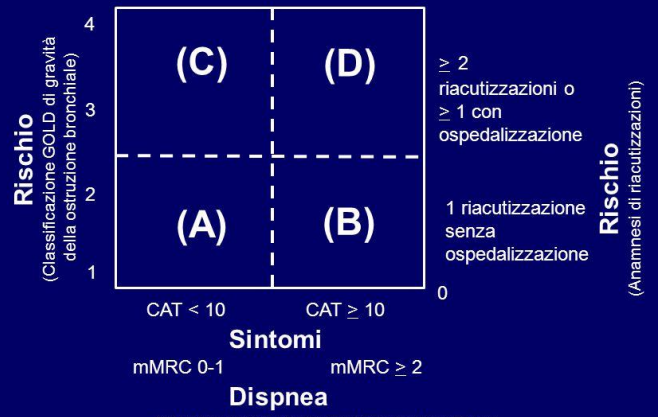
**Progetto strategico mondiale per la diagnosi, trattamento e prevenzione della BPCO:**

## Valutazione combinata di gravità della BPCO




# NUOVE OPPORTUNITA ?

o

# VECCHIE POCO CONSIDERATE ?

# OUTLINE

1. Revolving doors e ricoveri impropri (?)
2. Bundles
3. Riabilitazione
4. Telemedicina
1. Cure palliative

# 1.Revolving doors e ricoveri impropri (?)

Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. Lancet 2012; 380: 37-43.

Chronic obstructive pulmonary disease (COPD) is the name for a collection of long -term conditions that affect the lungs.

It is one of the most common respiratory diseases in the United Kingdom and accounts for 10% of hospital admissions each year.

Nearly a third of these patients are re-admitted to hospital within 28 days of discharge.

# Risk of death and readmission of hospital-admitted COPD exacerbations: European COPD Audit

*ERJ Express*. Published on October 22, 2015

Sylvia Hartl[1,2], Jose Luis Lopez-Campos[3], Francisco Pozo-Rodriguez[4], A. Castro-Acosta[4], M. Studnicka[5], Bernhard Kaiser[5] and C. Michael Roberts[6]

Quindi solo circa il
20% dei ricoveri in EU avviene
per insufficienza respiratoria

SONO TUTTI INCONGRUI ?

TABLE 1 Characteristics of patients admitted with exacerbated COPD (N=16 016)

| | |
|---|---|
| **Sex** | |
| Male | 10 865 (67.8) |
| **Smoking status n=15 181** | |
| Current smoker | 5012 (31.3) |
| Ex-smoker | 9317 (58.2) |
| Never-smoker | 852 (5.3) |
| **Age years** | |
| Total | 70.8±10.8 |
| Male | 71.4±10.4 |
| Female | 69.5±11.3 |
| **BMI kg·m$^{-2}$ n=9011** | |
| Total | 26.6±6.5 |
| Male | 26.6±5.9 |
| Female | 26.7±7.5 |
| **Symptoms on admission** | |
| Dyspnoea increase | 15 409 (96.2) |
| Sputum increase | 10 373 (64.8) |
| Sputum colour change | 8134 (50.8) |
| **Previous admissions during last 12 months n=14 641** | |
| 0 | 6907 (47.2) |
| 1 | 3498 (23.9) |
| >1 | 4236 (28.9) |
| **FEV$_1$ % predicted n=7958** | 44.0±17.5 |
| **GOLD stage in spirometry-proven COPD n=7958** | |
| I | 195 (2.4) |
| II | 2175 (26.5) |
| III | 3737 (45.5) |
| IV | 2098 (25.6) |
| **Blood gas analysis** | |
| pH n=13 041 | |
| >7.35 | 10 589 (81.2) |
| 7.25–7.35 | 1921 (14.7) |
| <7.25 | 531 (4.1) |
| $P_{aCO_2}$ kPa n=13 069 | |
| >6 | 5933 (45.4) |
| >8 | 2164 (16.6) |
| **Ventilatory support n=15 496** | |
| No ventilatory support | 13 142 (84.8) |
| Only NIV | 2068 (13.3) |
| Only IV | 219 (1.4) |
| NIV and IV | 67 (0.4) |

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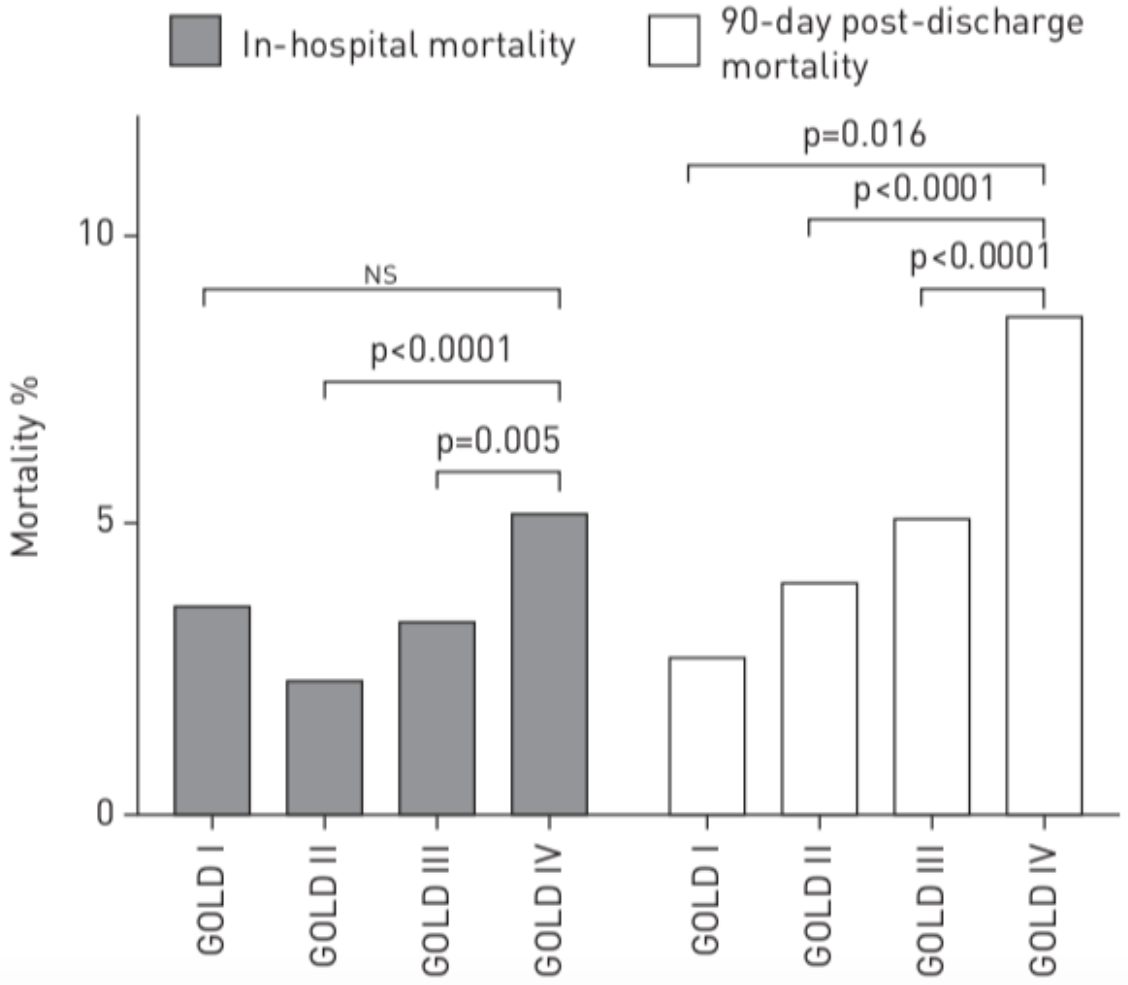

# Risk of death and readmission of hospital-admitted COPD exacerbations: European COPD Audit

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TABLE 4 Logistic regression model for the 90-day readmission risk in subjects discharged with COPD (n=15 191)

| | OR (95% CI) | p |
|---|---|---|
| **Age years** | 1.013 (1.010–1.017) | 0.0001 |
| **Charlson Comorbidity Index points** | 1.093 (1.066–1.121) | 0.0001 |
| **Comorbid chronic pulmonary diseases** | 1.133 (1.036–1.239) | 0.0063 |
| **Ventilatory support** | 1.133 (1.036–1.239) | 0.0015 |
| **Diabetes** | 0.899 (0.815–0.992) | 0.034 |
| **Previous admission (one or more)** | 2.479 (2.301–2.671) | 0.0001 |

Data are from a random effects model adjusting for country.

**Chronic Obstructive Pulmonary Disease Readmissions and Other Measures of Hospital Quality**

Seppo T. Rinne[1,2], Jose Castaneda[3], Peter K. Lindenauer[4,5], Paul D. Cleary[6], Harold L. Paz[7,8], and Jose L. Gomez[8]

American Journal of Respiratory and Critical Care Medicine Volume 196 Number 1 | July 1 2017

Non esistono documentati fattori di rischio che spieghino le ragioni dei frequenti ricoveri del BPCO, ne' misure restrittive economiche penalizzanti per i clinici, possono modificare questo trend.

Tuttavia programmi riabilitativi specifici e care bundle sperimentali alla dimissione hanno dimostrato come sia possibile ridurre il ricorso alle cure ospedaliere

# 2. Bundles

# Comprehensive self management and routine monitoring in chronic obstructive pulmonary disease patients in general practice: randomised controlled trial

*BMJ* 2012;345:e7642 doi: 10.1136/bmj.e7642 (Published 28 November 2012

Erik W M A Bischoff *general practitioner*[1], Reinier Akkermans *biostatistician*[1], Jean Bourbeau *respiratory physician and epidemiologist*[2], Chris van Weel *professor of general practice*[1], Jan H Vercoulen *medical psychologist*[3 4], Tjard R J Schermer *epidemiologist*[1]

Table 3| **Differences in exacerbation rate* per patient between groups**

| Time | Self management (SM) (n=53) | Routine monitoring (RM) (n=55) | Usual care (UC) (n=48) | Rate ratio (95% CI)† | |
|---|---|---|---|---|---|
| | | | | SM *v* UC | RM *v* UC |
| Baseline to 12 months | 2.83 | 3.25 | 2.73 | 1.10 (0.86 to 1.40) | 1.25 (0.98 to 1.58) |
| 12-24 months | 2.45 | 2.38 | 2.17 | 1.16 (0.81 to 1.67) | 1.15 (0.80 to 1.65) |

*Measured by automated telephonic exacerbation assessment system.

**Usual care** reflected the care for COPD patients as provided by most general practices in the Netherlands

Patients in the **self management group** received a translated and modified version of the Canadian self management programme “Living well with COPD.”

For participants in the **routine monitoring group**, practice nurses scheduled routine monitoring visits in the general practice

# A systematic review of the effectiveness of discharge care bundles for patients with COPD

Maria B Ospina,[1] Kelly Mrklas,[1,2] Lesly Deuchar,[1] Brian H Rowe,[1,3,4] Richard Leigh,[5] Mohit Bhutani,[6] Michael K Stickland[1,6,7]

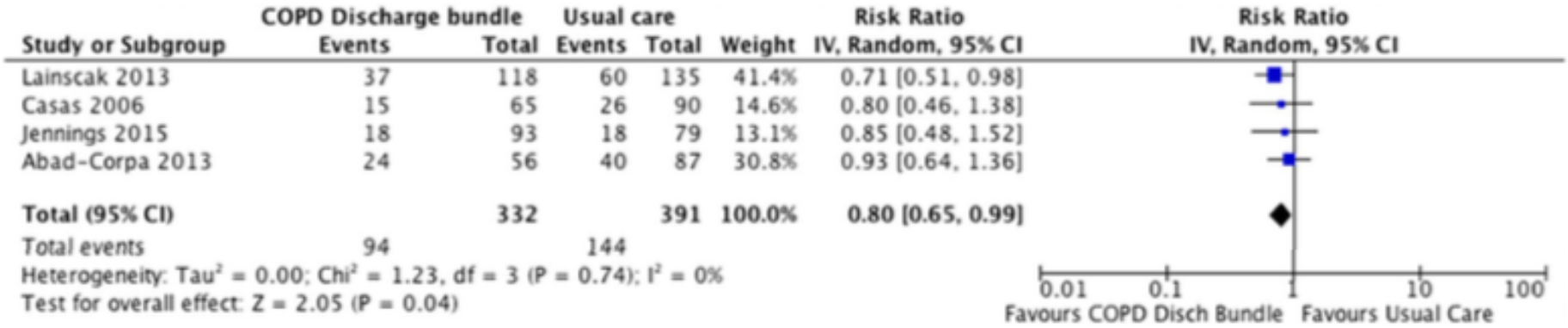



**Figure 2** Effectiveness of discharge care bundles on hospital re-admissions for patients with an exacerbation of COPD (randomised controlled trial data only).

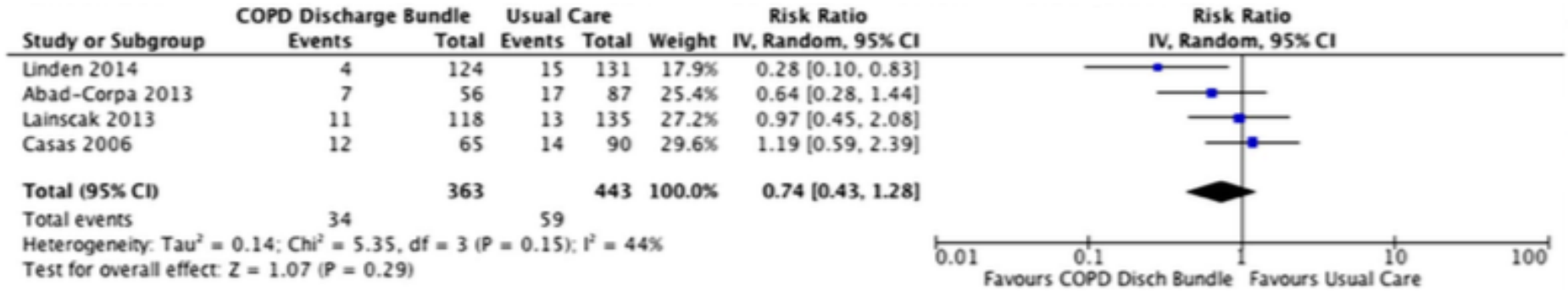



**Figure 3** Effectiveness of discharge care bundles on mortality for patients with an exacerbation of COPD (randomised controlled trials data only).

University of BRISTOL

NHS National Institute for Health Research

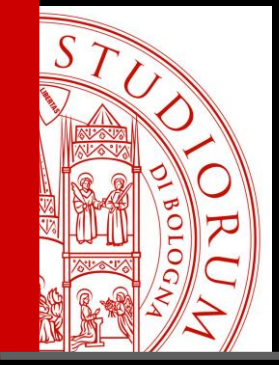
British Thoracic Society

NHS Bristol Clinical Commissioning Group

Bristol Randomised Trials Collaboration

# COPD Care Bundles

An evaluation of the effectiveness of 'care bundles' as a means of improving hospital care and reducing hospital readmission for patients with chronic obstructive pulmonary disease (COPD)



University of BRISTOL

NHS National Institute for Health Research

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## BTS Chronic Obstructive Pulmonary Disease (COPD) Admission Care Bundle

COPD A1

Trust logo

This care bundle describes 5 high impact actions to ensure the best clinical outcome for patients admitted with an acute exacerbation of COPD (AECOPD). The aim is to ensure patient safety with a timely and accurate diagnosis of COPD, correct assessment of oxygenation, early response to respiratory failure and early specialist review. This bundle applies to all patients admitted to hospital with an acute deterioration of known or suspected COPD. Patients seen and assessed in A&E who are diagnosed with an acute exacerbation of COPD who are discharged without admission to hospital either with or without follow up by a community respiratory team should also be included.

Patient sticker

COMPLETE WITHIN 24 HOURS OF ADMISSION

### 1. ENSURE CORRECT DIAGNOSIS OF AN ACUTE EXACERBATION OF COPD

*The diagnosis of an acute exacerbation of COPD starts with a clinical assessment and is supported by review of an ECG and CXR which should be done within 4 hours of admission. The patient should also have documented evidence of spirometry showing airflow obstruction*

CXR done within 4 hours of admission: ☐ ECG done within 4 hours of admission? ☐

Date of CXR :_____ Time CXR carried out: _____ Record of spirometry available in medical records? ☐ (records as no if old notes not available within 4 hours)

Signature

### 2. ASSESS OXYGEN & PRESCRIBE TARGET RANGE FOR OXYGEN

*Early oxygen assessment is associated with improved prognosis. The provision of oxygen, when needed, follows after appropriate assessment. A target range for the oxygen saturation to be achieved (with supplemental oxygen if necessary) should be prescribed (94-98%, Patients at risk of CO2 retention: 88–92%). (BTS Emergency Oxygen Guideline)*

Physiological observations made within 1 hour of admission: ☐ Oxygen prescribed within 1 hour of admission: ☐

Signature

### 3. RECOGNISE AND RESPOND TO RESPIRATORY ACIDOSIS

*The patients with highest mortality from COPD following hospital admission are those who are admitted in ventilatory failure. An arterial blood gas for all patients admitted to hospital with oxygen saturations of 94% or less (on air or controlled oxygen) is required. Early assessment for suitability for NIV is required for those with Type 2 respiratory failure and a pH of <7.35 after one hour on optimum medical therapy (controlled oxygen and nebulised therapy).*

Oxygen saturations ≤94% after one hour of medical therapy: ☐ ABG carried out: ☐

pH<7.35 on ABG: ☐ Patient started on NIV: ☐

Signature

### 4. ADMINISTER STEROIDS & NEBULISERS WITHIN 4 HOURS OF ADMISSION

*Patient's medical therapy should be optimised on admission. This should follow local guidance detailed below. Consideration should be given to use of corticosteroids, nebulised bronchodilators and antibiotics (where the patient reports a deterioration in their respiratory symptoms from their stable state plus the presence of purulent sputum)*

Nebulisers administered within 4 hours of admission: ☐ Steroids administered within 4 hours of admission: ☐

Antibiotics administered within 4 hours of admission: ☐ Time prescription written: _____

Signature

### 5. REVIEW BY RESPIRATORY TEAM WITHIN 24 HOURS

*Results of the National COPD Audit 2003 suggest that deaths in hospital from COPD occur within 72 hours of admission and that death rates were lower in larger centres. Early review by a member of the respiratory specialist team may help improve patient outcomes*

Respiratory medical or nurse review within 24 hours: ☐

Date of respiratory review: _____ Time of respiratory review: _____

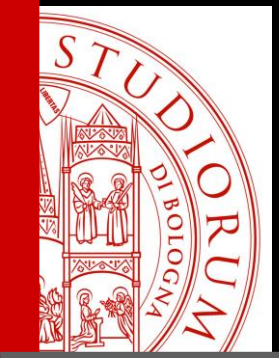
Signature

REMEMBER DISCHARGE BUNDLE

Instructions for use of bundle:

Data entry: https://audits.brit-thoracic.org.uk/
Enquiries: carebundles@brit-thoracic.org.uk

v15 October 2014



University of BRISTOL

National Institute for Health Research

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British Thoracic Society

## BTS Chronic Obstructive Pulmonary Disease (COPD) Discharge Care Bundle

This care bundle describes 5 high impact actions to ensure the best clinical outcome for patients admitted with an acute exacerbation of COPD (AECOPD). The aim is to reduce the number of patients who are readmitted following discharge after an AECOPD and to ensure that all aspects of the patients COPD care is considered.

PRIOR TO DISCHARGE

**1. REVIEW PATIENT'S MEDICATIONS & DEMONSTRATE USE OF INHALERS**

*Assess during medication rounds. Observe the patient using their inhalers and refer to* _____ *if technique is inadequate. Ensure medications have been optimised by respiratory specialist team.*

Inhaler technique checked: ☐ Medications reviewed by respiratory team before discharge? ☐

**2. PROVIDE WRITTEN SELF MANAGEMENT PLAN & EMERGENCY DRUG PACK**

*Prescribe COPD emergency drug pack and provide to patient at discharge. Ensure patient has a completed self management plan describing how and when to use medications provided. Provide oxygen alert card if patient is at risk of CO2 retention (referral to a community team for drug pack and plan is acceptable)*

Self management plan? Given ☐ Already has ☐ Not applicable ☐ Emergency drug pack provided? Yes ☐ No ☐ Not applicable ☐

Oxygen alert card? Yes ☐ No ☐ Not applicable ☐ Referred to community team for pack or plan? Yes ☐ No ☐ Not applicable ☐

**3. ASSESS AND OFFER REFERRAL FOR SMOKING CESSATION**

*Ask every patient whether they are a current smoker and offer referral to smoking cessation service*

Patient is a current smoker: Yes ☐ Ex-smoker ☐ Never smoked ☐
(To be classed as an ex-smoker patients must have abstained for 3 months)

Referral made: Yes ☐ No ☐ Declined ☐ N/A ☐

Has smoking cessation been recorded as discussed? Yes ☐ No ☐

**4. ASSESS FOR SUITABILITY FOR PULMONARY REHABILITATION**

*All patients who report walking slower than others on the level or who need to stop due to dyspnea after a mile or after less than 15 minutes walking should be assessed for and offered pulmonary rehabilitation* _____

Already completed pulmonary rehabilitation? ☐ Referral made? ☐

Declined? ☐ Not applicable: ☐ Not Done: ☐

**5. ARRANGE FOLLOW UP CALL WITHIN 72 HOURS OF DISCHARGE**

*Follow up all patients at home within 72 hours in person or by phone. A call for the patient can be booked by calling* _____ *and faxing completed discharge bundle to:* _____.

Patient has agreed to be contacted: ☐ Patients phone number: _____

Date of call given to patient: _____

Instructions for use of bundle:

# 3. Riabilitazione

CLINICAL THERAPEUTICS

# Pulmonary Rehabilitation for Management of Chronic Obstructive Pulmonary Disease

Richard Casaburi, Ph.D., M.D., and Richard ZuWallack, M.D.

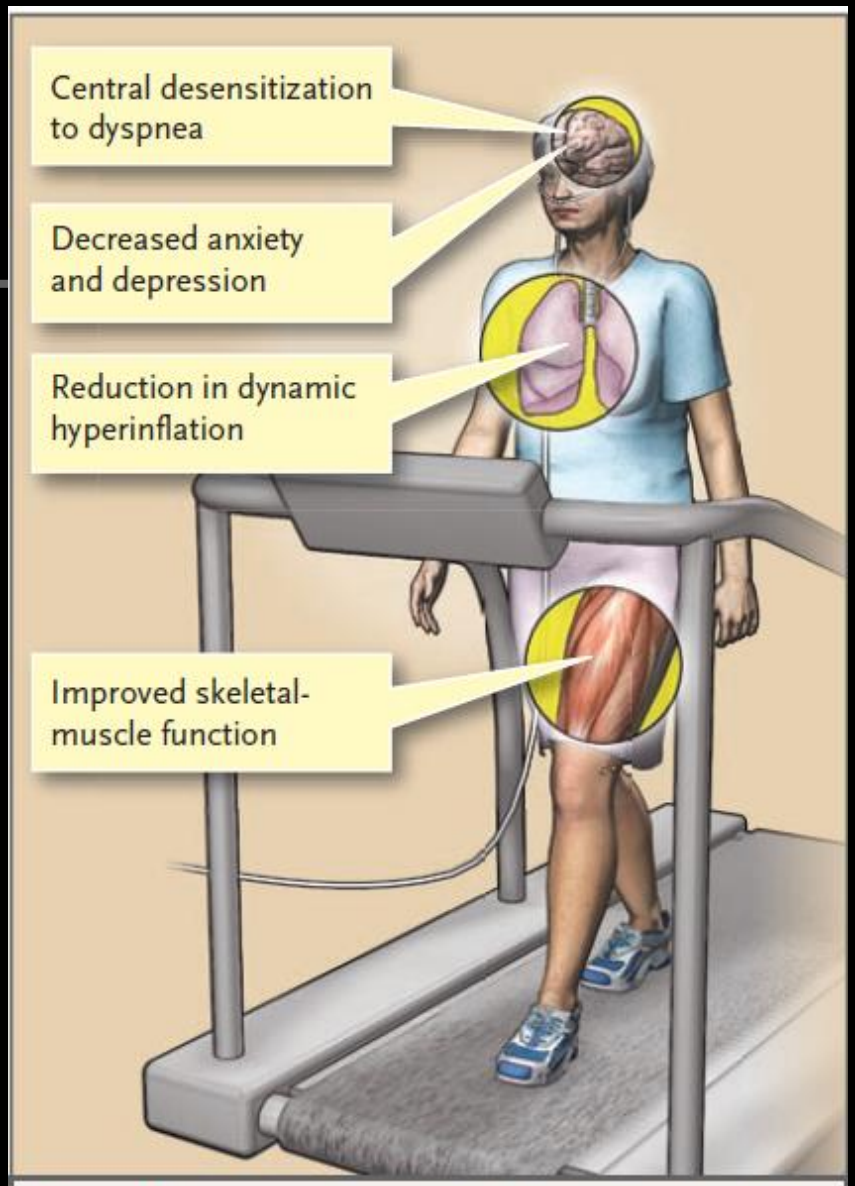



**Figure 1.** Targets of Exercise Training as Part of a Pulmonary Rehabilitation Program for Patients with COPD.

**Frailty and Clinical Outcomes in Chronic Obstructive Pulmonary Disease.**
Kennedy CC et al.
Ann.Thorac. Soc. 2018 Nov 15.

Frailty represents an increased vulnerability to adverse health outcomes. The frailty phenotype conceptual model (≥3 patient attributes of wasting, exhaustion, low activity, slowness, and weakness) is associated with increased morbidity and mortality in geriatric populations.

Our objective was to describe the risks associated with frailty in COPD patients.

Among adults with COPD frailty was associated with longer duration hospitalization, increased exacerbations and with poor quality of life.

# Patients' perspective on pulmonary rehabilitation: experiences of European and American individuals with chronic respiratory diseases

Rochester CL, Vogiatzis I, Powell P, *et al.*

*ERJ Open Res* 2018; 4: 00085-2018

| | |
|---|---|
| **Has a healthcare provider ever discussed the benefits of PR with you?** | |
| Yes | 939 (55.7) |
| No | 702 (41.7) |
| Not sure | 41 (2.4) |
| Not reported | 3 (0.2) |

| | |
|---|---|
| **Do you think that PR should be a part of healthcare services available to all patients that might benefit from it?** | |
| Yes | 1549 (91.9) |
| No | 3 (0.2) |
| Not sure | 111 (6.6) |
| Not reported | 22 (1.3) |

| | |
|---|---|
| **If you have participated in PR, what do you feel were the major benefits of the programme for you? You can choose more than one option.** | |
| Improved physical functioning in daily life | 658 (75.8) |
| Improved mood or sense of emotional wellbeing | 439 (48.6) |
| Improved knowledge about lung condition | 474 (52.4) |
| Improved control of symptoms | 416 (46.0) |

# Lower mortality after early supervised pulmonary rehabilitation following COPD-exacerbations: a systematic review and meta-analysis

Ryrsø *et al. BMC Pulmonary Medicine* (2018) 18:154

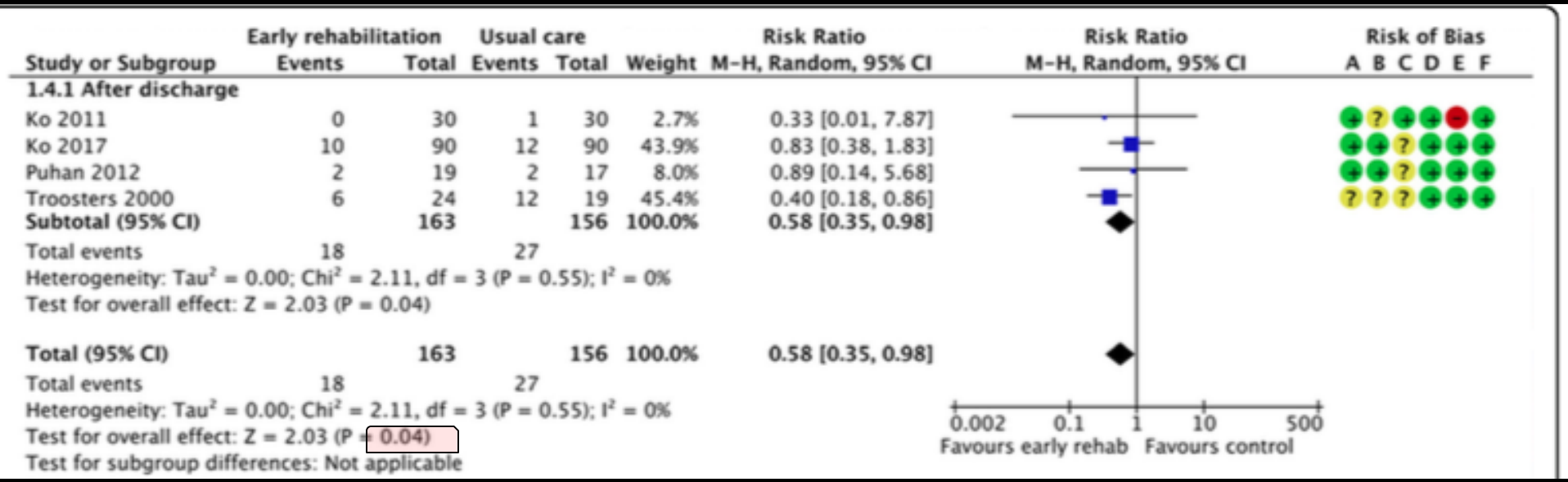



**Fig. 3** The effect of supervised early PR versus usual care on mortality at the longest follow up

# Lower mortality after early supervised pulmonary rehabilitation following COPD-exacerbations: a systematic review and meta-analysis

Ryrsø *et al. BMC Pulmonary Medicine* (2018) 18:154

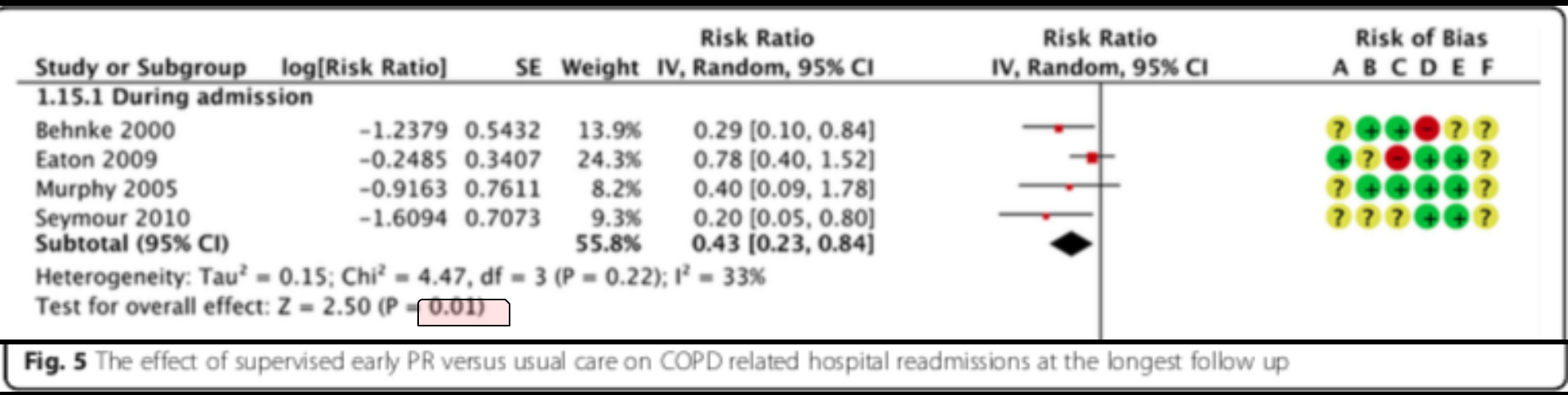



**Fig. 5** The effect of supervised early PR versus usual care on COPD related hospital readmissions at the longest follow up

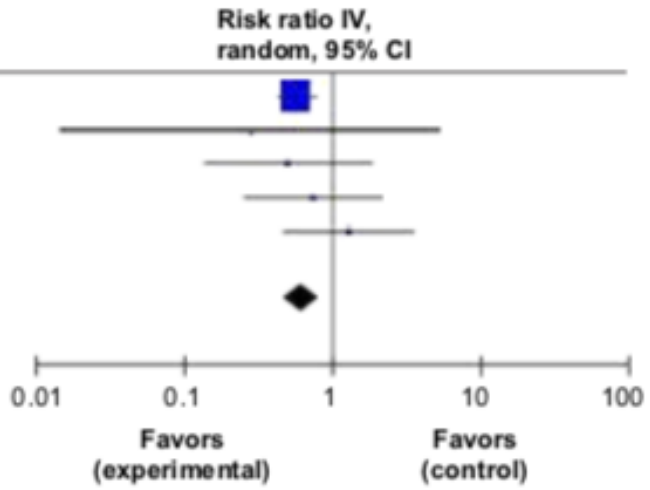
# Efficacy of supervised maintenance exercise following pulmonary rehabilitation on health care use: a systematic review and meta-analysis

International Journal of COPD 2018:13 257–273

**A**

| Study or subgroup | Experimental Events | Experimental Total | Control Events | Control Total | Weight (%) | Risk ratio IV, random, 95% CI |
|---|---|---|---|---|---|---|
| Guell et al (2017)[25] | 19 | 34 | 30 | 31 | 81.0 | 0.58 (0.43–0.78) |
| Moullec et al (2008)[23] | 0 | 11 | 2 | 16 | 0.9 | 0.28 (0.01–5.39) |
| Roman et al (2013)[22] | 3 | 26 | 5 | 22 | 4.4 | 0.51 (0.14–1.89) |
| Spencer et al (2010)[18] | 5 | 31 | 6 | 28 | 6.6 | 0.75 (0.26–2.20) |
| Wilson et al (2015)[20] | 6 | 30 | 6 | 39 | 7.2 | 1.30 (0.47–3.63) |
| **Total (95% CI)** | | **132** | | **136** | **100** | **0.62 (0.47–0.81)** |
| Total events | 33 | | 49 | | | |

Heterogeneity: $\tau^2$=0.00; $\chi^2$=2.69, *df*=4 (*P*=0.61); $I^2$=0%
Test for overall effect: *Z*=3.46 (*P*=0.0005)




**B**

| Study or subgroup | Log (rate ratio) | SE | Weight (%) | Rate ratio IV, random, 95% CI |
|---|---|---|---|---|
| Guell et al (2017)[25] | –0.432 | 0.237 | 64.5 | 0.65 (0.41–1.03) |
| Spencer et al (2010)[18] | –0.47 | 0.434 | 19.2 | 0.63 (0.27–1.46) |
| Wilson et al (2015)[20] | 0.262 | 0.471 | 16.3 | 1.30 (0.52–3.27) |
| **Total (95% CI)** | | | **100** | **0.72 (0.50–1.05)** |

Heterogeneity: $\tau^2$=0.00; $\chi^2$=1.87, *df*=2 (*P*=0.39); $I^2$=0%
Test for overall effect: *Z*=1.71 (*P*=0.09)

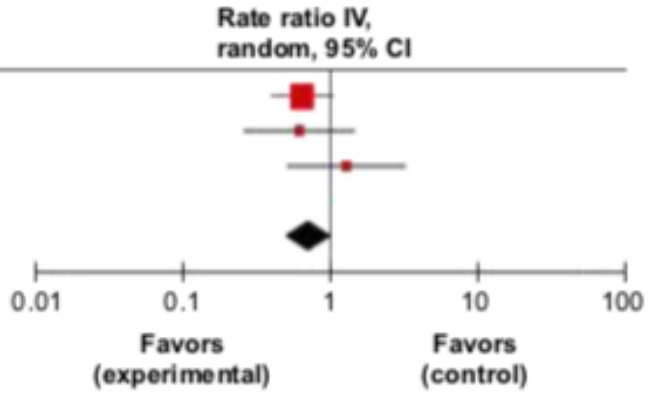



**Figure 2** Trial-level data, effect estimates, and forest plot of comparison for the overall risk (of experiencing at least one event) (**A**) and incidence rates (**B**) of respiratory-cause hospitalization.

# Efficacy of pulmonary rehabilitation in chronic respiratory failure (CRF) due to chronic obstructive pulmonary disease (COPD): The Maugeri Study

M. Carone[a,*], A. Patessio[a], N. Ambrosino[b], P. Baiardi[c], B. Balbi[a], G. Balzano[d], V. Cuomo[e], C.F. Donner[f], C. Fracchia[g], S. Nava[c], M. Neri[h], E. Pozzi[i], M. Vitacca[j], A. Spanevello[e]

Respiratory Medicine (2007) 101, 2447–2453

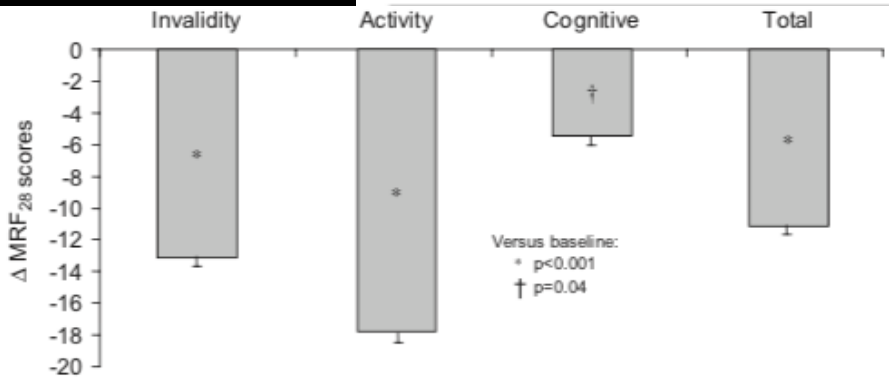



**Figure 1** Improvement in $MRF_{28}$ scores (patients with CRF) (mean value ± SE) after PR programme.

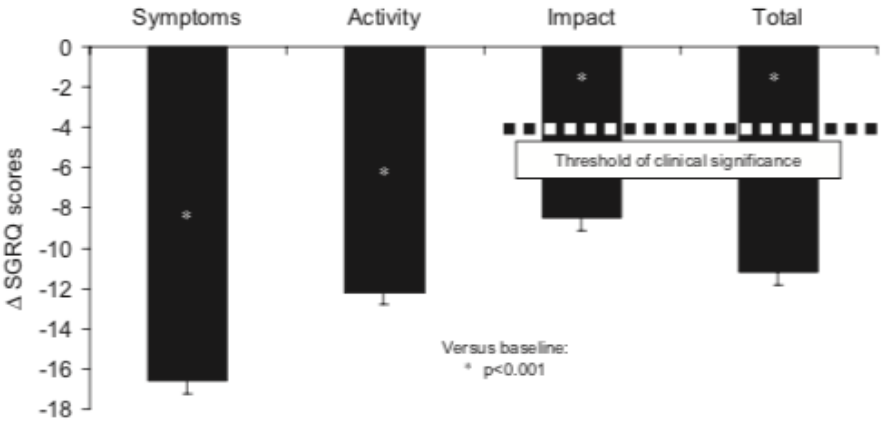



**Figure 2** Improvement in SGRQ scores (patients without CRF) (mean value+SE) after PR programme.

# 4. Telemedicina

PERSPECTIVE

## Why Health Care Is Going Home

Steven H. Landers, M.D., M.P.H.

Imperial College London

THE LANCET

## Technologies for global health

Peter Howitt, Ara Darzi, Guang-Zhong Yang, Hutan Ashrafian, Rifat Atun, James Barlow, Alex Blakemore, Anthony M J Bull, Josip Car, Lesong Conteh, Graham S Cooke, Nathan Ford, Simon A J Gregson, Karen Kerr, Dominic King, Myutan Kulendran, Robert A Malkin, Azeem Majeed, Stephen Matlin, Robert Merrifield, Hugh A Penfold, Steven D Reid, Peter C Smith, Molly M Stevens, Michael R Templeton, Charles Vincent, Elizabeth Wilson

*"...care for the future is the patient's home, where clinicians can combine old-fashioned sensibilities and caring with the application of new technologies to respond to major demographic, epidemiologic, and health care trends"*

N ENGL J MED 363;18 NEJM.ORG OCTOBER 28, 2010

The New England Journal of Medicine

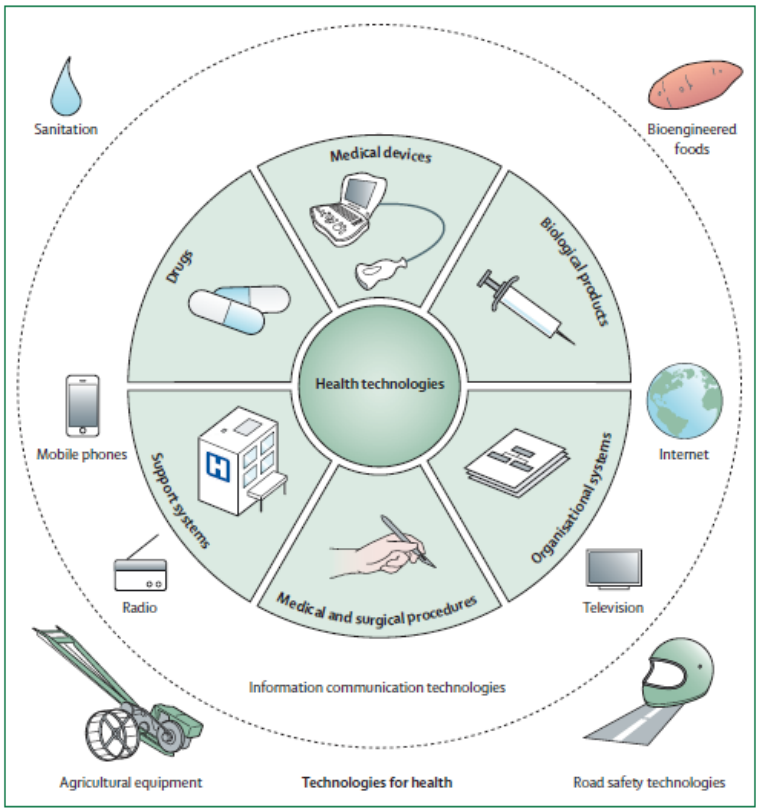



*Figure 1:* Overview of technology for global health

# Healthcare professionals responses to the introduction of new technology

## The Stethoscope case

- "That it will ever come into general use because its beneficial application requires much time and gives a good bit of trouble both to the patient and the practitioner"

(*John Forbe 1819*)

- "The Stethoscope can only have detractors who are deaf or those who not want to hear"

(*De Lens 1831*)

# Disease management in COPD


| | Home hospitalisation | Standard care | P value |
|---|---|---|---|
| HSU | | | |
| - re-hospitalisation | 0.24 ± 0.57 | 0.38 ± 0.70 | |
| - ER visits | 0.13 ± 0.43 | 0.31 ± 0.62 | 0.01 |
| Days of hosp. | 1.71± 2.33 | 4.15± 4.10 | 0.001 |
| HRQL (SGRQ) | -6.9 | -2.4 | 0.05 |

*Hernandez et al. Eur Respir J 2003*

The ‘potential benefits do not equate with effectiveness and the evidence for the effectiveness of telemedicine in COPD compared with, for example, cardiac failure remains weak.

The uncritical rollout of telehealth for COPD is hence problematic, because this technology is expensive, might require disruptive reorganisation of care and infrastructure support,  and is, furthermore, not without risk.

*McInstry et al 2014*

# 5. Cure Palliative

. . . I've been to many other [doctors] on different subjects—like I've got a gallbladder problem—and I go to those doctors and they say "This is what's wrong and this is what we've got to do." But you go to the respiratory doctor and they just leave me with the feeling that they don't know what they're talking about. They don't know, so they can't tell you. That's my feeling when I leave.

Patient with COPD


J. Randall Curtis, *Chest* 2002;122;356-362

# Ma allora quando cominciare a parlare di come morire ?

# GRANDI INSUFFICIENZE D'ORGANO "END STAGE":

# CURE INTENSIVE O CURE PALLIATIVE?

# "DOCUMENTO CONDIVISO"

# PER UNA PIANIFICAZIONE DELLE SCELTE DI CURA

**Tabella 2 – Tabella riassuntiva dei criteri clinici specifici per iniziare a valutare l'opzione di un trattamento palliativo anziché intensivo**

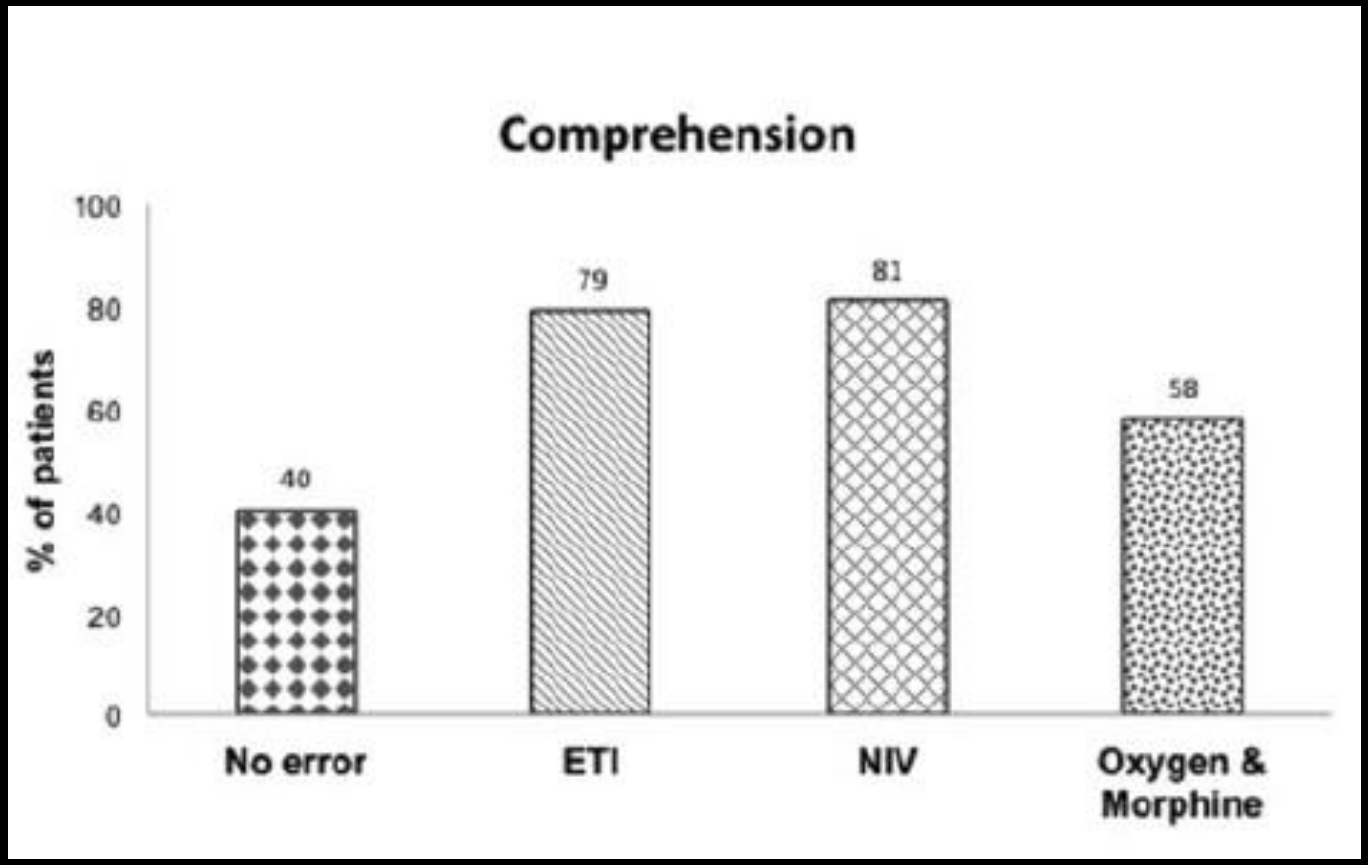
| | |
|---|---|
| **INSUFFICIENZA CARDIACA CRONICA (con terapia medica ottimale)** | classe NYHA IV<br>> 1 ospedalizzazione negli ultimi 6 mesi<br>ipotensione periferica e/o ritenzione di liquidi<br>necessità di frequente o continuo supporto farmacologico infusionale<br>scarsa risposta alla risincronizzazione cardiaca quando indicata<br>cachessia |
| **INSUFFICIENZA RESPIRATORIA CRONICA (BPCO)** | età > 70 anni<br>FEV1 < 30% predetto<br>dipendenza dall'ossigeno-terapia<br>>1 ammissione/anno in ospedale per BPCO riacutizzata<br>insufficienza cardiaca congestizia e/o altre comorbidità<br>calo ponderale/cachessia<br>ridotta autonomia funzionale<br>aumento dipendenza |
| **INSUFFICIENZA RESPIRATORIA CRONICA (IPF)** | età > 70 anni<br>Pattern istologico "UIP" (se noto)<br>dipendenza dall'ossigeno-terapia<br>aspetto radiologico di "Honeycomb" all'HRTC del torace<br>ridotta autonomia funzionale<br>aumento dipendenza |

# Parlare vuol dire farsi capire !?

# End-of-Life Discussion, Patient Understanding and Determinants of Preferences in Very Severe COPD Patients: A Multicentric Study

Annalisa Carlucci[a], Michele Vitacca[b], Alberto Malovini[c], Paola Pierucci[d], Aldo Guerrieri[e], Luca Barbano[b], Piero Ceriana[a], Antonella Balestrino, Carmen Santoro, Lara Pisani[f], Nadia Corcione[f], and Stefano Nava[f]

COPD: JOURNAL OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE
2016, VOL. 0, NO. 0, 1–7



# Di fatto spesso scegliamo NOI per LORO

# End-of-Life Discussion, Patient Understanding and Determinants of Preferences in Very Severe COPD Patients: A Multicentric Study

Annalisa Carlucci[a], Michele Vitacca[b], Alberto Malovini[c], Paola Pierucci[d], Aldo Guerrieri[e], Luca Barbano[b], Piero Ceriana[a], Antonella Balestrino, Carmen Santoro, Lara Pisani[f], Nadia Corcione[f], and Stefano Nava[f]

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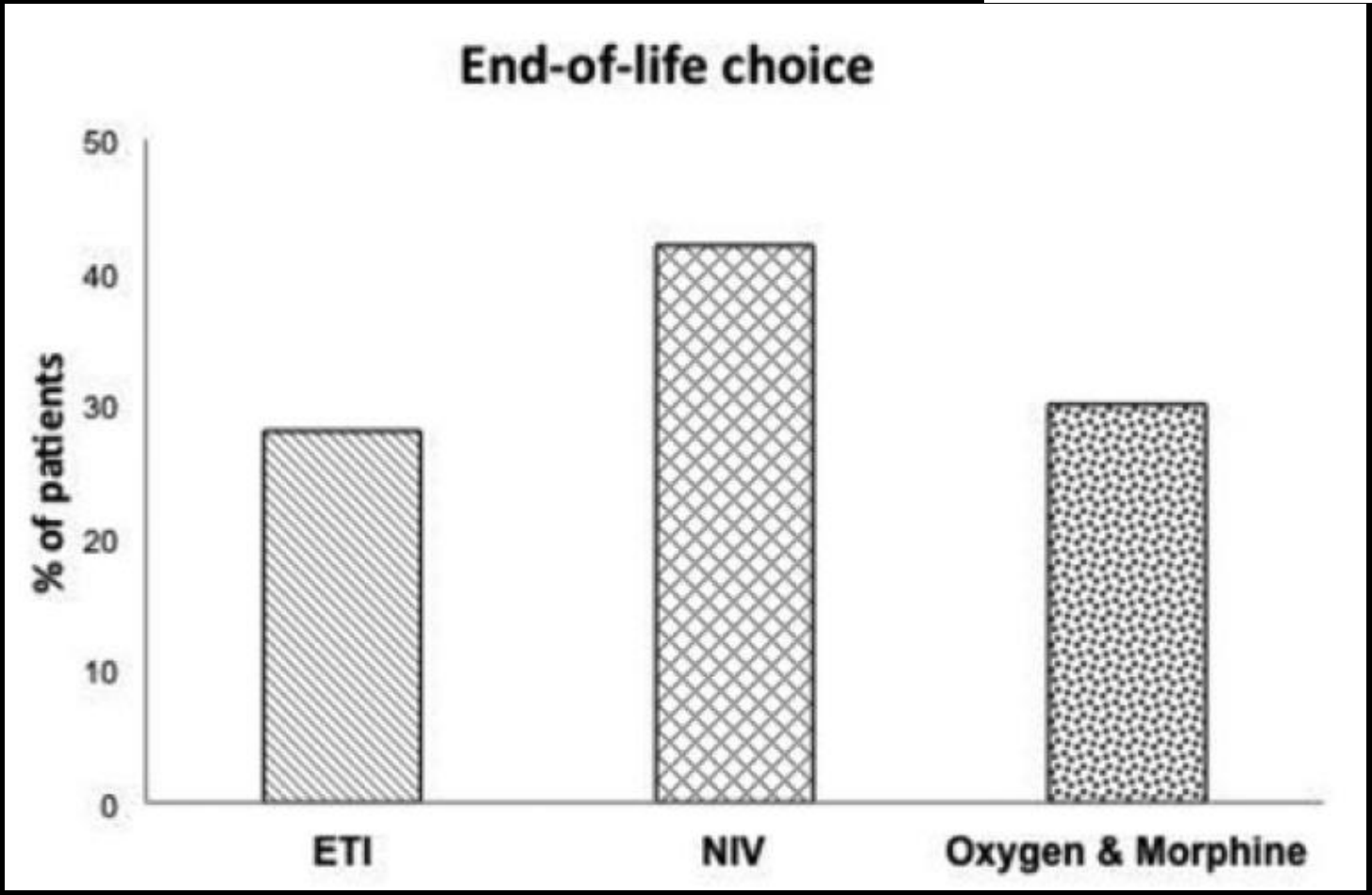
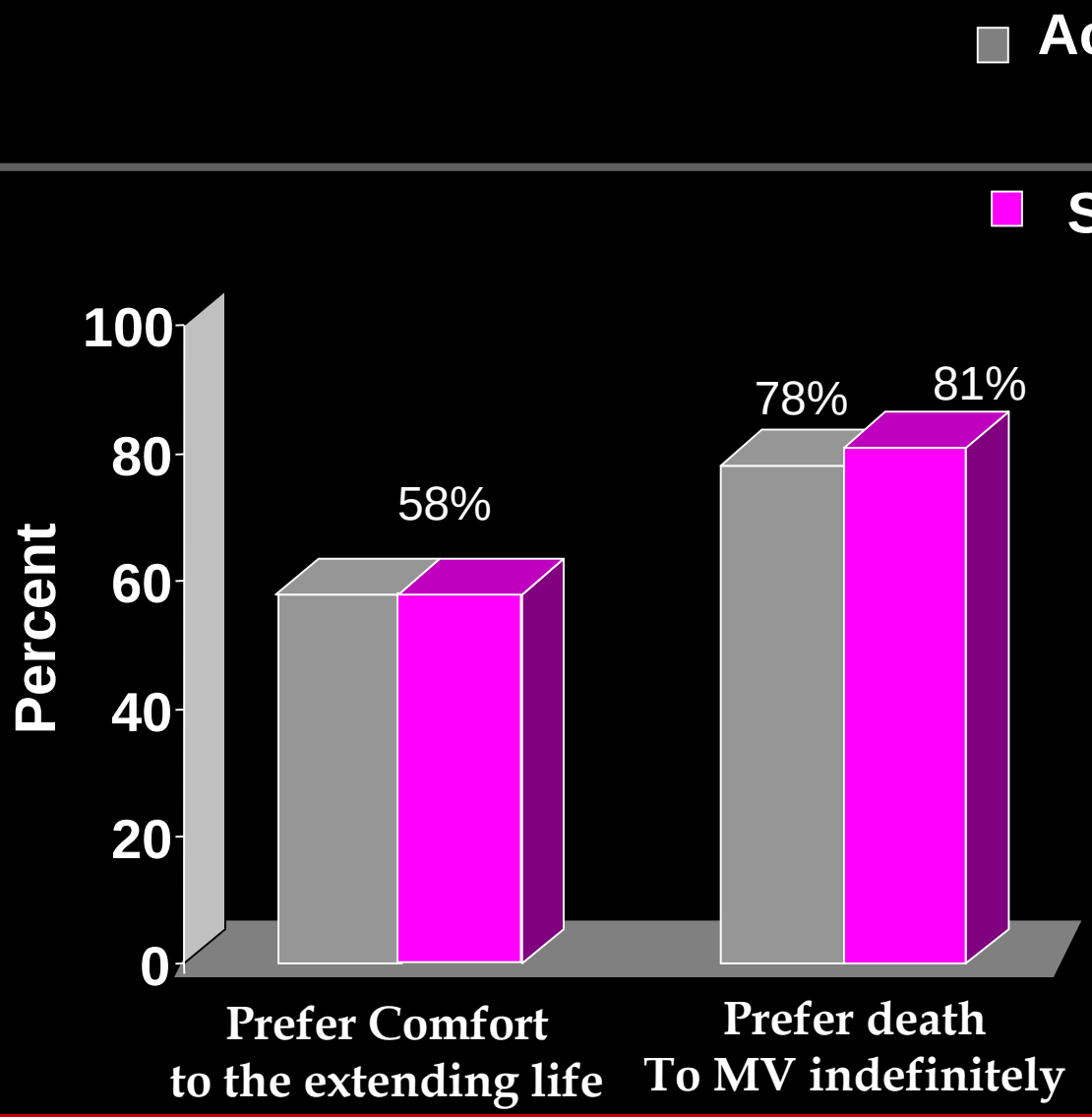


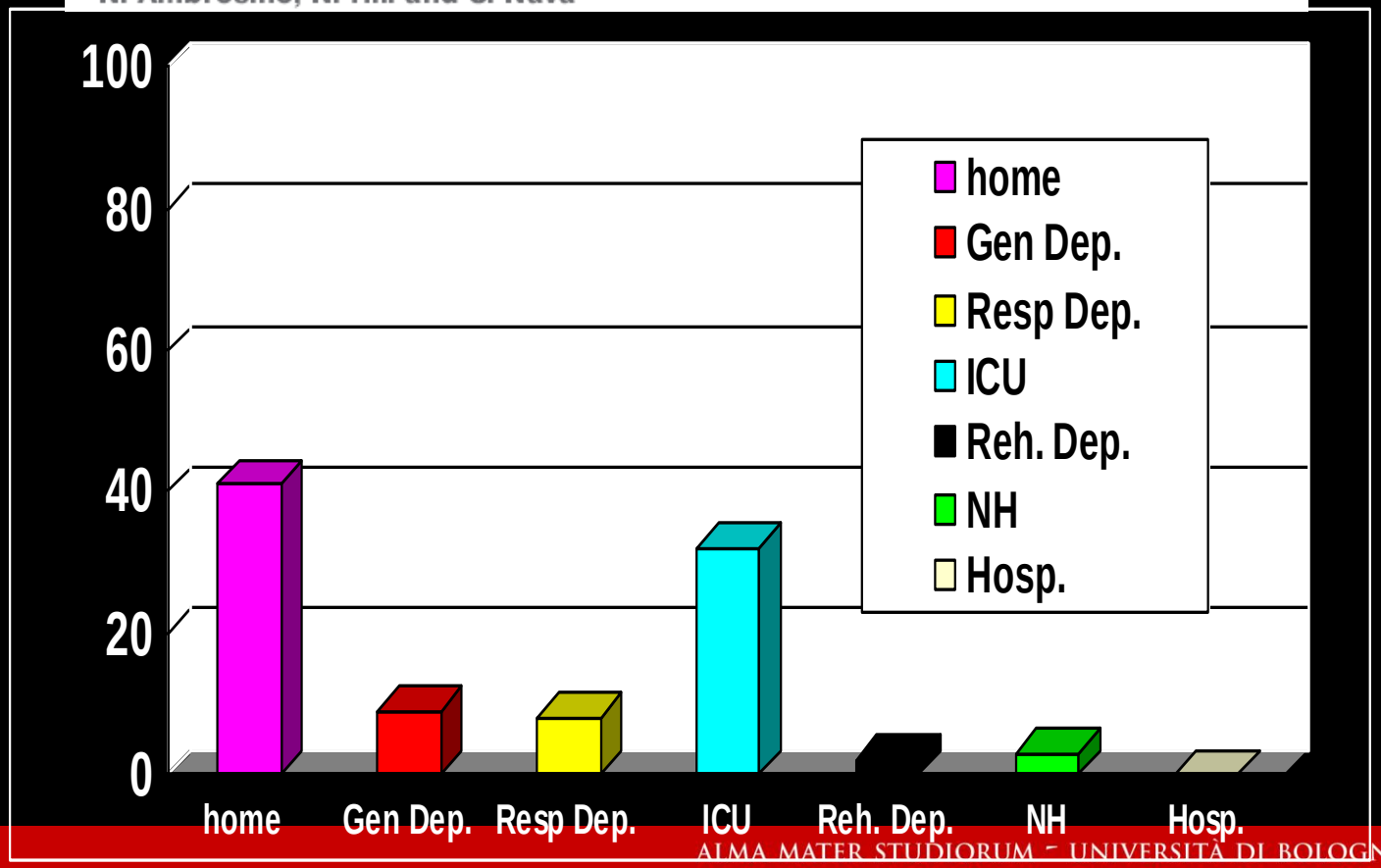
## Claessens et al J Am Geriatr Soc. 2000; S146-53



Eur Respir J 2010; 35: 1064–1071
DOI: 10.1183/09031936.00061009


# Last 3 months of life in home-ventilated patients: the family perception

M. Vitacca, M. Grassi, L. Barbano, G. Galavotti, C. Sturani, A. Vianello, E. Zanotti, L. Ballerin, A. Potena, R. Scala, A. Peratoner, P. Ceriana, L. Di Buono, E. Clini, N. Ambrosino, N. Hill and S. Nava



# Official ERS/ATS clinical practice guidelines: noninvasive ventilation for acute respiratory failure

Eur Respir J 2017;

Bram Rochwerg[1], Laurent Brochard[2,3], Mark W. Elliott[4], Dean Hess[5], Nicholas S. Hill[6], Stefano Nava[7] and Paolo Navalesi[8] (members of the steering

TABLE 2 Recommendations for actionable PICO questions

| Clinical indication# | Certainty of evidence¶ | Recommendation |
|---|---|---|
| **Prevention of hypercapnia in COPD exacerbation** | ⊕⊕ | Conditional recommendation against |
| **Hypercapnia with COPD exacerbation** | ⊕⊕⊕⊕ | Strong recommendation for |
| **Cardiogenic pulmonary oedema** | ⊕⊕⊕ | Strong recommendation for |
| **Acute asthma exacerbation** | | No recommendation made |
| **Immunocompromised** | ⊕⊕⊕ | Conditional recommendation for |
| ***De novo* respiratory failure** | | No recommendation made |
| **Post-operative patients** | ⊕⊕⊕ | Conditional recommendation for |
| **Palliative care** | ⊕⊕⊕ | Conditional recommendation for |
| **Trauma** | ⊕⊕⊕ | Conditional recommendation for |
| **Pandemic viral illness** | | No recommendation made |
| **Post-extubation in high-risk patients (prophylaxis)** | ⊕⊕ | Conditional recommendation for |
| **Post-extubation respiratory failure** | ⊕⊕ | Conditional recommendation against |
| **Weaning in hypercapnic patients** | ⊕⊕⊕ | Conditional recommendation for |

*Recommendation*

We suggest offering NIV to dyspnoeic patients for palliation in the setting of terminal cancer or other terminal conditions. (Conditional recommendation, moderate certainty of evidence.)

# CONCLUSIONI

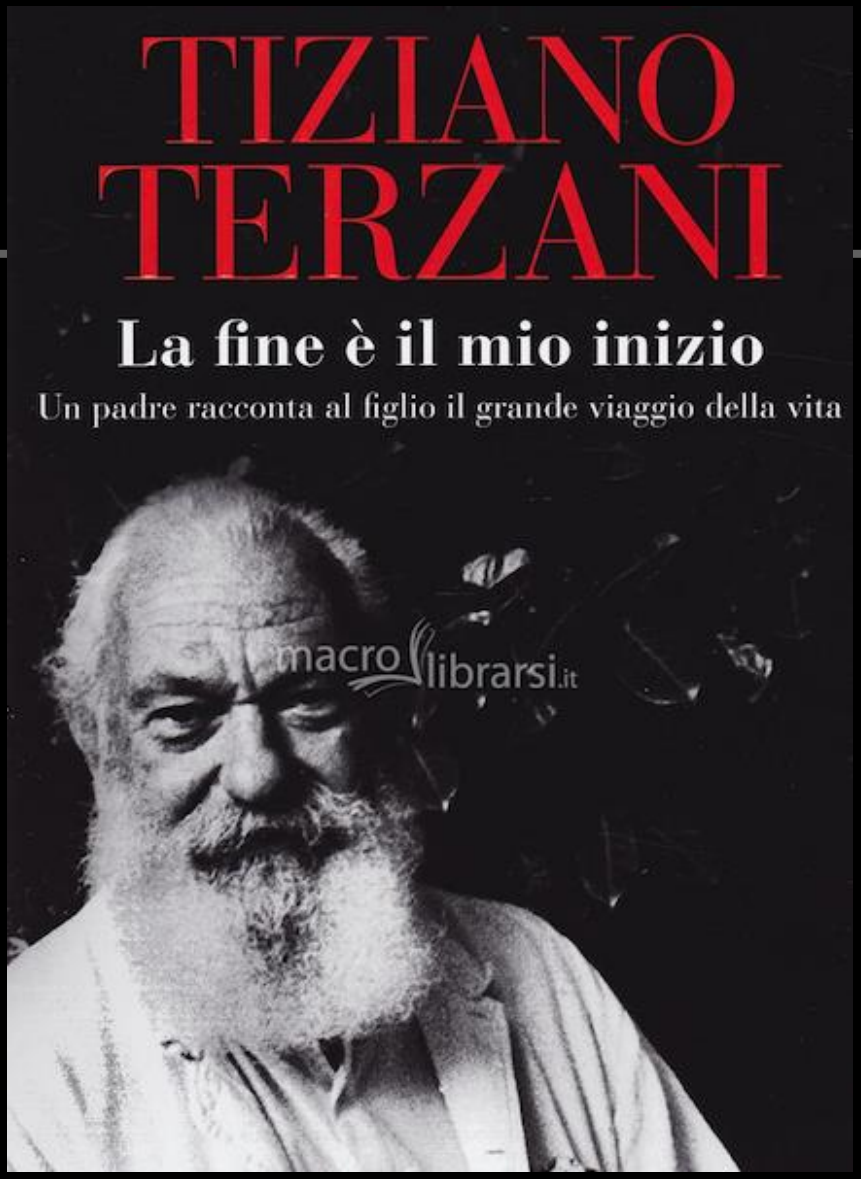
1. I frequenti ricoveri del COPD non debbono essere considerati impropri, ma inevitabili nella attuale organizzazione

2. La riduzione degli stessi passa dalla corretta applicazione di bundles all'ingresso e dimissione

3. La riabilitazione e' il cardine del trattamento post dimissione

4. Il ruolo della telemedicina e' tuttora incerto

5. Non esiste solo la qualita' di vita di questi pazienti, ma anche la qualita' dell'end of life.



TALK and LISTEN
Hable con ella (( Pedro Almodovar)


CONSIDER THE PATIENT'S NEEDS
Through a glass darkly (Ingmar Bergman)


TAKE TOGETHER the DECISION
Mar adentro (Alejandro Amenábar)


DO NOT PROLONG SUFFERING
*Les invasions barbares* (Denys Arcand)

***Le scaphandre et le papillon*** **(Julian Schnabel)**


***Johnny got his gun*** (Dalton Trumbo)


***Million dollars baby*** (Clint Eastwood)

"La medicina oggi può e deve togliermi il dolore;
se non lo fa, mi ucciderò ma non sarà un suicidio, sarà un'OMISSIONE DI SOCCORSO"

Prof. Sandro Bartoccioni, Cardiochirurgo

Cittta' di Castello, 25 agosto 1947 – Città di Castello, 2 giugno 2006