

# La NIV in PS: è sostenibile oggi?

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XIII congresso nazionale

**simeu**

GENOVA 30 MAG - 1 GIU 2024



**SPOILER:**

**NO**



# Sostenibilità

economica basate sul PIL. In definitiva, la s. implica un benessere (ambientale, sociale, economico) costante e preferibilmente crescente e la prospettiva di lasciare alle generazioni future una qualità della vita non inferiore a quella attuale. Tale approccio può essere formalizzato mediante funzioni di benessere



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**Ha senso parlare di  
sostenibilità della NIV oggi?**

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

TABLE 2 Recommendations for actionable PICO questions

| Clinical indication <sup>#</sup>                    | Certainty of evidence <sup>¶</sup> | 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     |

<sup>#</sup>: all in the setting of acute respiratory failure; <sup>¶</sup>: certainty of effect estimates: ⊕⊕⊕⊕, high; ⊕⊕⊕, moderate; ⊕⊕, low; ⊕, very low.

**NON È ETICO**

# Noninvasive Ventilation in Patients With Do-Not-Intubate and Comfort-Measures-Only Orders: A Systematic Review and Meta-Analysis

Michael E. Wilson, MD<sup>1,2</sup>; Abdul M. Majzoub, MD<sup>1</sup>; Claudia C. Dobler, MD, PhD<sup>3</sup>; J. Randall Curtis, MD, MPH<sup>4,5</sup>; Tarek Nayfeh, MD<sup>6</sup>; Bjorg Thorsteinsdottir, MD<sup>2,7,8</sup>; Amelia K. Barwise, MB, BCh, BAO<sup>1,8</sup>; Jon C. Tilburt, MD, MPH<sup>7,8</sup>; Ognjen Gajic, MD, MSc<sup>1</sup>; Victor M. Montori, MD, MSc<sup>3,6</sup>; M. Hassan Murad, MD, MPH<sup>2,6</sup>

**Objectives:** To assess the effectiveness of noninvasive ventilation in patients with acute respiratory failure and do-not-intubate or comfort-measures-only orders.

**Data Sources:** MEDLINE, EMBASE, CINAHL, Scopus, and Web of Science from inception to January 1, 2017.

**Study Selection:** Studies of all design types that enrolled patients in the ICU or hospital ward who received noninvasive ventilation and had preset do-not-intubate or comfort-measures-only orders.

**Data Extraction:** Data abstraction followed Meta-analysis of Observational Studies in Epidemiology guidelines. Data quality was assessed using a modified Newcastle-Ottawa Scale.

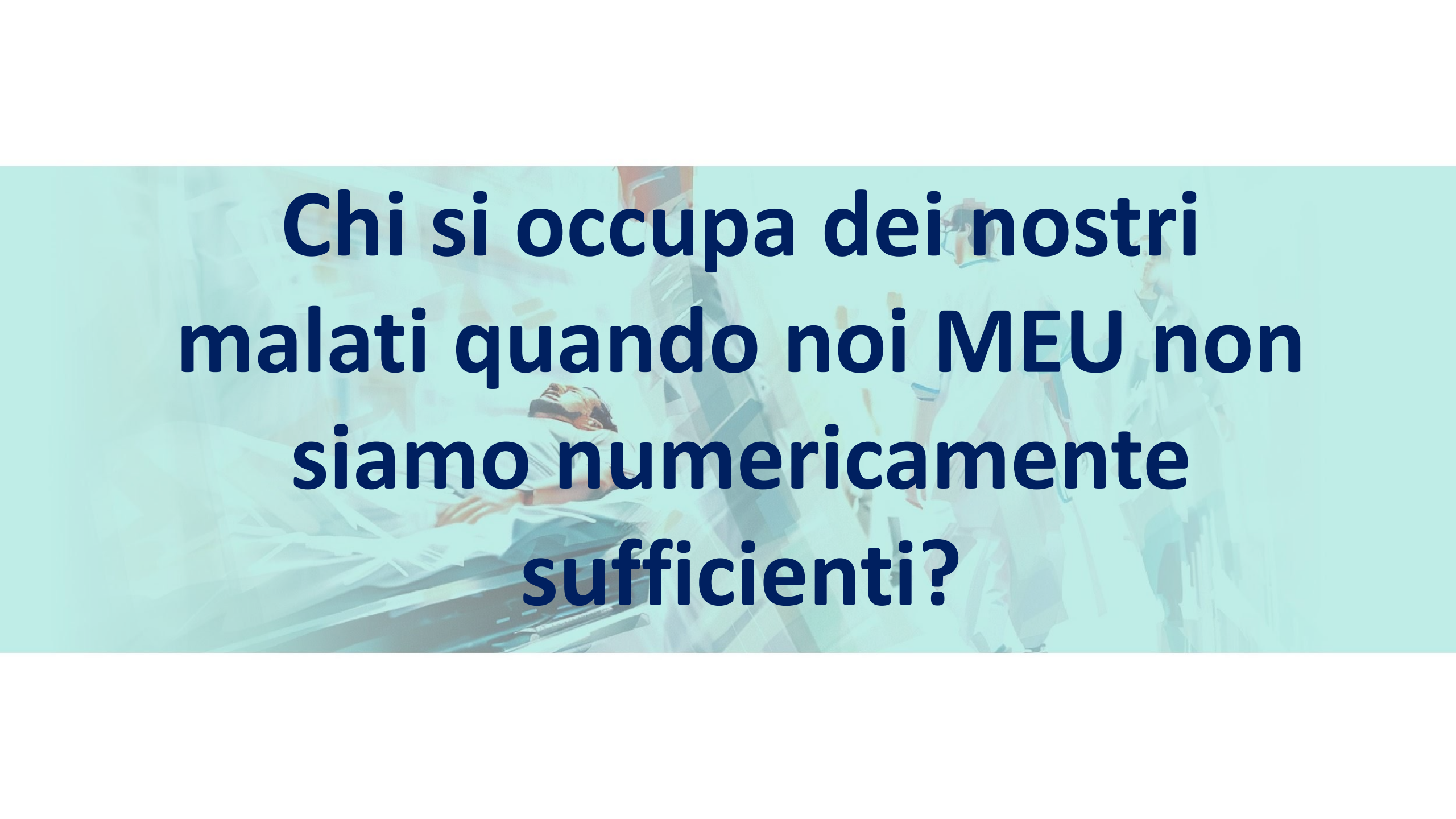
**Data Synthesis:** Twenty-seven studies evaluating 2,020 patients with do-not-intubate orders and three studies evaluating 200 patients with comfort-measures-only orders were included. In patients with do-not-intubate orders, the pooled survival was

56% (95% CI, 49–64%) at hospital discharge and 32% (95% CI, 21–45%) at 1 year. Hospital survival was 68% for chronic obstructive pulmonary disease, 68% for pulmonary edema, 41% for pneumonia, and 37% for patients with malignancy. Survival was comparable for patients treated in a hospital ward versus an ICU. Quality of life of survivors was not reduced compared with baseline, although few studies evaluated this. No studies evaluated quality of dying in nonsurvivors. In patients with comfort-measures-only orders, a single study showed that noninvasive ventilation was associated with mild reductions in dyspnea and opioid requirements.

**Conclusions:** A large proportion of patients with do-not-intubate orders who received noninvasive ventilation survived to hospital discharge and at 1 year, with limited data showing no decrease in quality of life in survivors. Provision of noninvasive ventilation in a well-equipped hospital ward may be a viable alternative to the ICU for selected patients. Crucial questions regarding quality of life in







**Chi si occupa dei nostri  
malati quando noi MEU non  
siamo numericamente  
sufficienti?**

- **Altri specialisti**
- **ARTID (in consulenza)**
- **Gettonisti**
- **Specializzandi**





# Delegare agli ARTID in consulenza i nostri ventilati?



# I gettonisti sanno fare la NIV?

- 98 CV di 6 Coop diverse
- solo MEU o equipollenti
- 7/98 competenti in NIV

**7%**



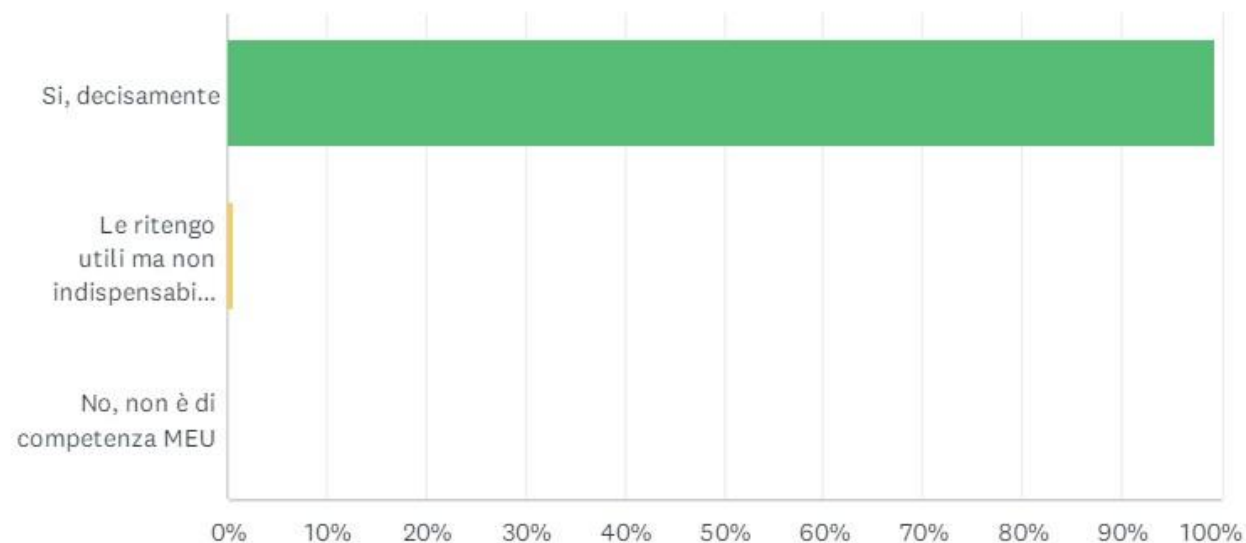
**NO**

- ~~Altri specialisti~~
- ~~ARTID (in consulenza)~~
- ~~Gettonisti~~
- Specializzandi



## D1 Ritieni che CPAP e NIV siano competenze indispensabili per l\* specialist\* MEU?

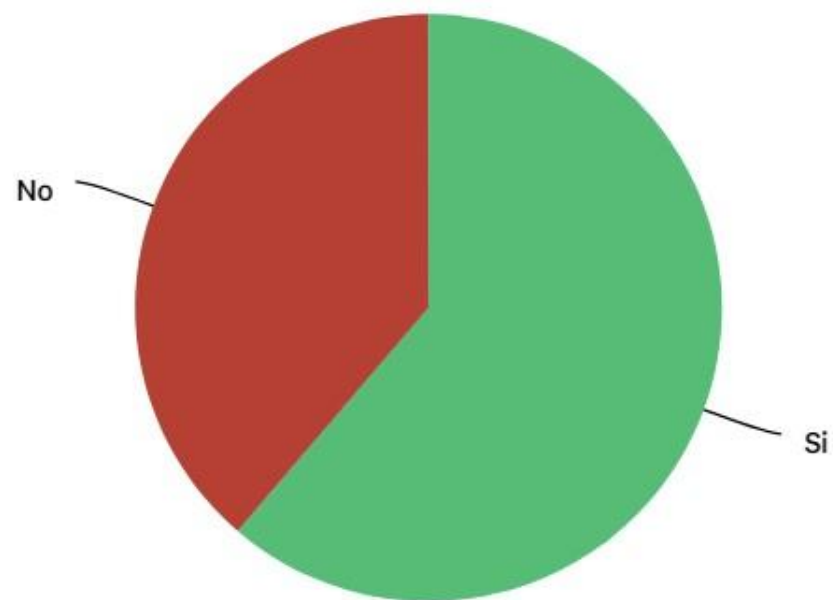
Risposte: 173    Saltate: 0



| OPZIONI DI RISPOSTA                                           | RISPOSTE |     |
|---------------------------------------------------------------|----------|-----|
| Sì, decisamente                                               | 99.42%   | 172 |
| Le ritengo utili ma non indispensabili per essere un buon MEU | 0.58%    | 1   |
| No, non è di competenza MEU                                   | 0.00%    | 0   |
| TOTALE                                                        |          | 173 |

## D2 La tua scuola di specializzazione prevede formalmente la formazione su CPAP e NIV?

Risposte: 173    Saltate: 0



| OPZIONI DI RISPOSTA | RISPOSTE |     |
|---------------------|----------|-----|
| Si                  | 61.27%   | 106 |
| No                  | 38.73%   | 67  |
| TOTALE              |          | 173 |

### D3 La formazione su CPAP e NIV nella tua scuola avviene tramite:

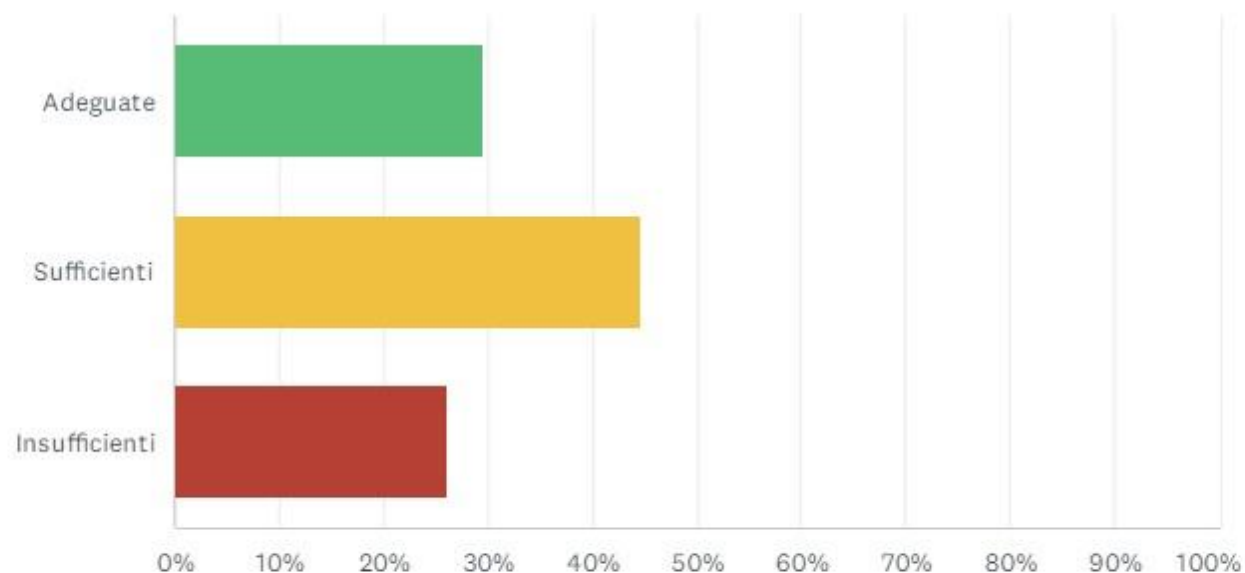
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| OPZIONI DI RISPOSTA                                               | RISPOSTE |     |
|-------------------------------------------------------------------|----------|-----|
| corsi/lezioni dedicati                                            | 45.93%   | 79  |
| invio a corsi esterni (es. SIMEU)                                 | 6.40%    | 11  |
| tutoraggio bedside da parte degli strutturati esperti             | 24.42%   | 42  |
| non ho ricevuto nessun tipo di formazione ufficiale su CPAP e NIV | 23.26%   | 40  |
| TOTALE                                                            |          | 172 |

## D4 Come valuteresti le tue competenze circa l'utilizzo di CPAP e NIV in DEA/PS e Medicina d'Urgenza?

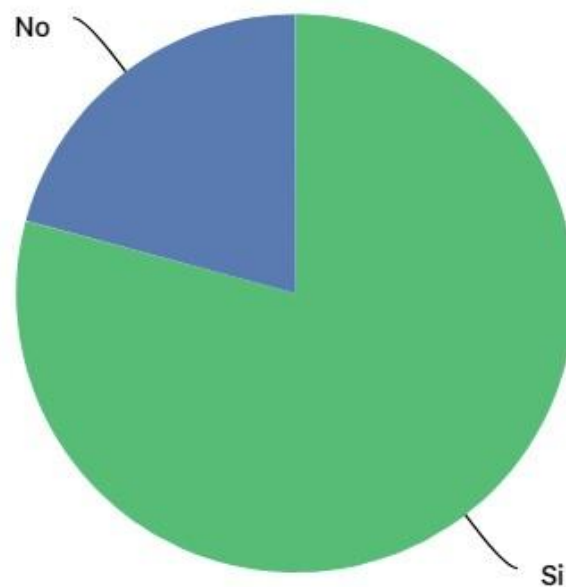
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| OPZIONI DI RISPOSTA |  | RISPOSTE |     |
|---------------------|--|----------|-----|
| Adeguate            |  | 29.48%   | 51  |
| Sufficienti         |  | 44.51%   | 77  |
| Insufficienti       |  | 26.01%   | 45  |
| TOTALE              |  |          | 173 |

## D5 Hai partecipato o hai intenzione di partecipare a corsi CPAP e NIV a spese tue per implementare le tue competenze?

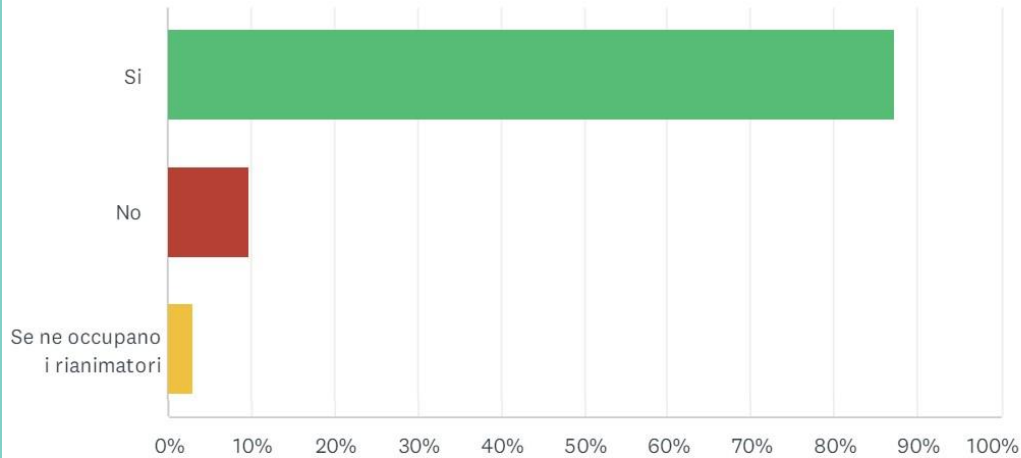
Risposte: 173 Saltate: 0



| OPZIONI DI RISPOSTA |  | RISPOSTE |     |
|---------------------|--|----------|-----|
| Si                  |  | 79.19%   | 137 |
| No                  |  | 20.81%   | 36  |
| TOTALE              |  |          | 173 |

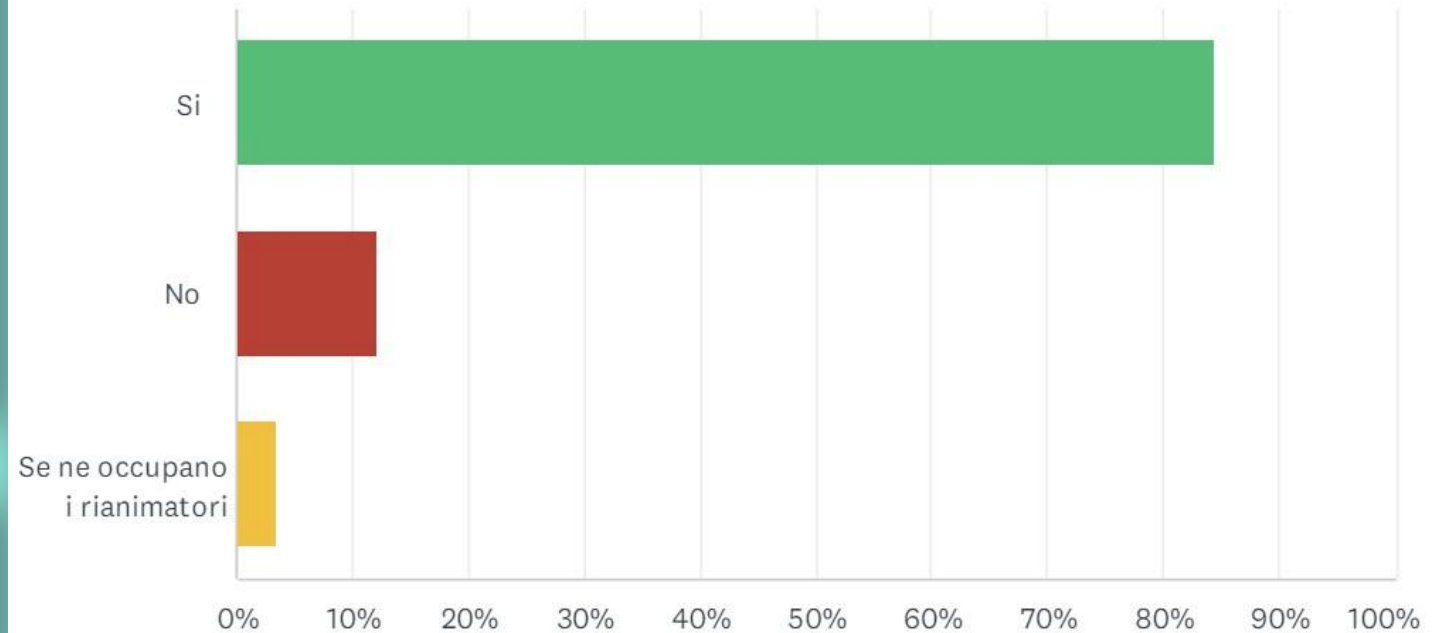
### D6 Usi abitualmente la CPAP in DEA/PS?

Risposte: 172 Saltate: 1



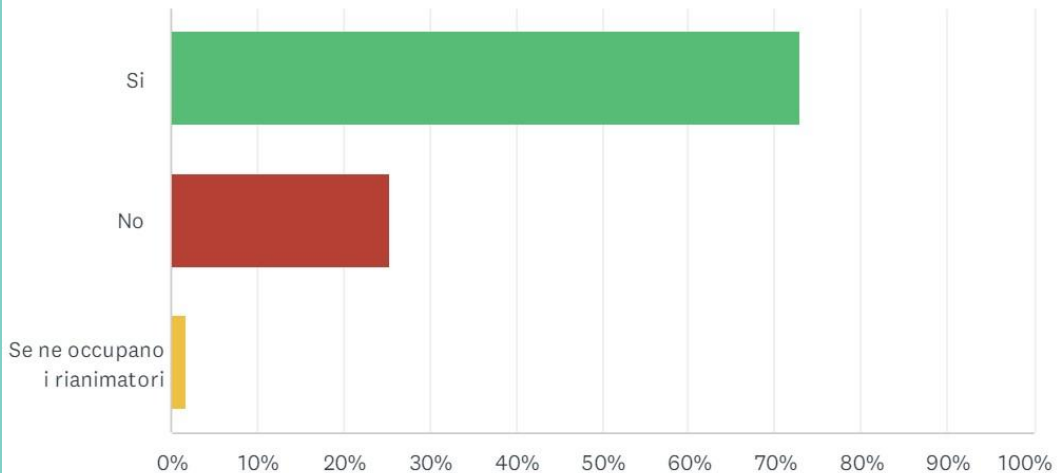
### D7 Usi abitualmente la PSV NIV in DEA/PS?

Risposte: 173 Saltate: 0



### D8 Usi abitualmente HFNC in DEA/PS?

Risposte: 173 Saltate: 0



# Soluzioni?

- Organizzare l'accettazione per intensità di cura
- Sensibilizzare gli stakeholders (a partire dai Direttori MEU...)
- Formazione obbligatoria e capillare
  1. Preospedaliero
  2. Strutturati
  3. Scuole di Specializzazione
  4. Gettonisti
  5. Infermieri



# Provocazione

**Rete NIV analoga alle reti STEMI e Stroke?**

1. Ventilatori in tutte le medicalizzate?
2. HUB e SPOKE: come decidere chi fa cosa?





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**Grazie**





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# TITOLO DEL CAPITOLO

CAPITOLO 1

# Titolo del testo

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