

Online Table S13. Cost and resource use of CPAP or NIV.

Author	Country	Journal	Type of study	Number of patients	Ages	Cost and resources
Oktem et al. [1]	Turkey	Respirati on	Longitudinal study in one center in Istanbul (2001-2006)	34 children, 23 on NIV	4 m -17 yrs	No information on the investigations that led to the prescription of NIV nor on health insurance Patients spent a median of 32 (3 - 270) days in hospital before discharge due to the delay in supplying home equipment Ventilator failure seen in 2 patients (NIV or IV ?) without any serious complication
Tibbals et al. [2]	Australi a	J Ped Child Health	Longitudinal (1979-2008) in one center (Melbourne)	168 children	3 weeks - 19 yrs	58 CPAP, 50 BPAP, 48 tracheotomy + other Median annual cost of all care of a patient at home: 115 300 AUS dollar (range 82 000 - 200 000), no distinction IV-NIV
Nathan et al. [3]	Malaysi a	Pediatr Pulmonol	Longitudinal study in one center (2001-2014)	70 patients, 60 on NIV (30 CPAP + 30 BPAP)	1.1 - 11 yrs (for NIV)	No information on the investigations that led to the prescription of NIV Lack of health insurance for children on NIV Equipment bought by family 24 (83%), or sponsor 5 (17%), borrowed 41 (57%) by medical social worker (35 (85%) or other source 6 (15%)
Leske et al. [4]	Argenti na	Pediatr Pulmonol	Longitudinal study in one center in Buenos Aires (2007-2018)	244 children	3 - 14 yrs	Home ventilation (IV + NIV) possible in a low-income country, 210/244 (86%) used NIV, 84% had health insurance 173/244 (71%) had sleep studies, 147/173 (91%) PSG, and 13/173 (7.5%) nocturnal SpO ₂ + PtcCO ₂ , and 2 diurnal ABG + nocturnal SpO ₂ > 50% of patients lived > 100 km and 34% > 500 km from NIV center NIV was started electively in 116/244 (47.5%) patients, subacutely in 80/244 (32.8%) and acutely in 48/244 (19.7%).

Abbreviations: m: months, yrs: years, CPAP: continuous positive airway pressure, BPAP: bilevel positive airway pressure, NIV: noninvasive ventilation, IV: invasive ventilation, AUS: Australian dollar, PSG: polysomnography, SpO₂: pulse oximetry, PtcCO₂: transcutaneous carbon dioxide pressure, ABG: arterial blood gases.

References

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2. Tibballs J, Henning R, Robertson CF, *et al.* A home respiratory support programme for children by parents and layperson carers. *J Paediatr Child Health* 2010; 46: 57-62.
3. Nathan AM, Loo HY, de Bruyne JA, *et al.* Thirteen years of invasive and noninvasive home ventilation for children in a developing country: A retrospective study. *Pediatr Pulmonol* 2017; 52: 500-507.
4. Leske V, Guerdile MJ, Gonzalez A, *et al.* Feasibility of a pediatric long-term home ventilation program in Argentina: 11 years' experience. *Pediatr Pulmonol* 2020; 55: 780-787.