

## **Supplementary Material 1. Search terms**

(Medium Care Unit\*[title/abstract] OR  
Medium Medical Care Unit\*[title/abstract] OR  
Intermediate Care Unit\*[title/abstract] OR  
Intermediate Medical Care Unit\*[title/abstract]  
OR  
Medical Intermediate Care Unit\*[title/abstract]  
OR  
High Care Unit\*[title/abstract] OR  
High Medical Care Unit\*[title/abstract] OR  
High Dependency Unit\*[title/abstract] OR  
High-Dependency Unit\*[title/abstract] OR  
Progressive care unit\*[title/abstract] OR  
Step up/down unit\*[title/abstract] OR  
Step-up unit\*[title/abstract] OR  
Step up unit\*[title/abstract] OR  
Step-down unit\*[title/abstract] OR  
Step down unit\*[title/abstract] OR  
Transitional care unit\*[title/abstract] OR

Medium Care Ward\*[title/abstract] OR  
Medium Medical Care Ward\*[title/abstract] OR  
Intermediate Care Ward\*[title/abstract] OR  
Intermediate Medical Care Ward\*[title/abstract]  
OR  
Medical Intermediate Care Ward\*[title/abstract]  
OR  
High Care Ward\*[title/abstract] OR  
High Medical Care Ward\*[title/abstract] OR  
High Dependency Ward\*[title/abstract] OR  
High-Dependency Ward\*[title/abstract] OR  
Progressive care Ward\*[title/abstract] OR  
Step up/down Ward\*[title/abstract] OR  
Step-up Ward\*[title/abstract] OR  
Step up Ward\*[title/abstract] OR  
Step-down Ward\*[title/abstract] OR  
Step down Ward\*[title/abstract] OR  
Transitional care Ward\*[title/abstract])

NOT (

Child\*[title/abstract] OR  
Paediatric\*[title/abstract] OR  
Infant\*[title/abstract] OR  
Neonate\*[title/abstract] OR  
Pediatric\*[title/abstract])

**These terms were used in Medline, Embase & Cochrane**

## Supplementary Material 2. Full Study Characteristics of Intermediate Care Units

Authors, country of origin	# of Consultants	Consultants	# of Registrars	Registrars	# of Residents	Residents	Specific interventions	Renal Replacement Therapy	Intracranial pressure	Sedatives	Multiple vasoactive medication	Single vasoactive medication	Tracheostomy care	NIV/CPAP	High-flow oxygen therapy	Mechanical ventilation (mechanical respiratory support)	Invasive monitoring	Hemodynamic monitoring	Patients per nurse	Format (O/C)	Specialties	Location	# of HDU beds	Name of unit	
Armstrong et al. (2003) [21], Armstrong et al. (2015) [5], the Netherlands																									
Bannister et al. (2016) [22], UK																									
Batra et al. (2001) [23], UK																									
Bellomo et al. (2005) [24], Australia																									
Betten et al. (2016) [25], Norway																									
Coggins and de Cossart (1996) [26], Coggins and Infirmary (1998) [27], UK																									
Confalonieri et al. (2015) [28], Italy																									
Crosby and Rees (1983) [29], Crosby et al. (1990) [30]. UK																									
Daud-Gallotti et al. (2012) [31], Ranzani et al. (2014) [32], Brazil																									
Davies et al. (1999) [33], UK																									
Dhond et al. (1998) [34], UK																									
Eachempati et al. (2004) [35], USA																									
Edbrooke (1996) [36], UK																									
Fox et al. (1999) [37], UK																									
Fujii et al. (2016) [38], Japan																									
Ghosh et al. 2004 [39], UK																									
Gould et al. (2010) [40], Australia																									
Harding (2009) [41], USA																									
Helm and Newman (1992) [42], UK																									
Hilton et al. (1993) [43], USA																									

Definition of abbreviations: MCU=Medium Care Unit; HDU=High Dependency Unit; IMCU=Intermediate Care Unit; PCU=Progressive Care Unit; SDU=Step Down Unit; I= integrated in ICU; W=part of Ward; A=Adjacent to ICU; S=Separate; Su=surgical patients; M=medical patients; O=Open; C=Closed; NIV=Non-invasive Ventilation; CPAP=Continuous Positive Airway Pressure

Authors, country of origin	# of Residents	Residents	Specific interventions	# of Registrars	Registrars	# of Consultants	Consultants											
			Renal Replacement Therapy															
			Intracranial pressure															
			Sedatives															
			Multiple vasoactive medication															
			Single vasoactive medication															
			Tracheostomy care															
			NIV/CPAP															
			High-flow oxygen therapy															
			Mechanical ventilation (weaning)															
			Respiratory support															
			Invasive monitoring															
			Hemodynamic monitoring															
			Patients per nurse															
			Format (O/C)															
			Specialties															
			Location															
			# of HDU beds															
			Name of unit															
Hravnak et al. (2008) [44], Hravnak et al. (2011) [45], Yousef et al. (2012) [46], USA	SDU	24	x	Su	x	6	1	x	x	x	x	x	x	x	x	x	x	x
Innocenti et al. (2014) [47], Italy	HDU	x	x	ED	C	x	1	1	x	0	x	x	x	1	x	x	x	x
Jones et al. (1992) [48], Jones et al. (1999) [49], UK	HDU	6	S	Su	O	2	1	x	x	0	x	x	x	x	x	x	x	1
Kalayi et al. (2001) [50], UK	HDU	4	x	Su	x	x	x	x	x	x	x	x	x	x	x	x	1	1
Keegan et al. (2008) [51], USA	PCU	x	S	Su	O	4	1	x	x	0	x	1	x	0	0	x	x	x
LeVasseur and Calder (1995) [52], Australia	HDU	4	x	Su	x	x	1	1	x	x	x	x	x	x	x	x	x	x
Lucena et al. (2012) [8], Lucena et al. (2013) [53], Alegre et al. (2015) [54], Martinez-Urbistondo et al. (2015) [55], Spain	IMCU	9	A	Su, M	C	3	1	1	x	x	x	1	x	x	x	x	x	1
Nehra et al. (1994) [56], UK	HDU	8	I	Su	x	2	x	x	x	x	x	x	x	x	x	x	x	x
Pilling et al. (2004) [57], UK	HDU	x	x	Su	O	x	1	1	x	0	x	1	x	1	0	x	x	x
Pirret (2002) [58], New Zealand	HDU	3	I	Su	O	3	1	1	1	x	1	1	x	x	x	x	x	x
Potena et al. (2004) [59], Italy	IMCU	x	x	M	x	x	1	0	x	1	x	1	1	x	x	x	x	x
Richards et al. (2012) [60], USA	IMCU	x	S	Su	O	x	x	x	x	x	x	x	x	x	x	x	x	x
Robertson et al. (2011) [19], UK	HDU	10	S	Su, M	O	x	1	x	x	x	x	1	x	x	x	x	1	x
Robertson et al. (2011) [19] UK	x	10	S	Su, M	C	x	1	x	x	x	x	1	x	x	x	x	1	x
Shum et al. (2013) [61], Canada	SDU	x	W	Su, M	O	2	1	1	x	0	x	1	x	1	x	x	0	x
Solberg et al. (2008) [62], Solberg et al. (2014) [63], the Netherlands	IMCU	6	A	Su, M	C	3	x	x	x	x	x	x	x	x	x	x	x	x
Torres et al. (2006) [64], Spain	IMCU	20	A	Su, M	x	x	1	1	x	1	x	1	x	1	x	x	1	x
Yoo et al. (2015) [20], USA	PCU	10	A	M	C	3.5	1	0	x	1	x	x	x	x	0	x	x	1
Yoo et al. (2015) [20], USA	x	15	S	M	O	3.5	1	0	x	1	x	x	x	x	0	x	x	x

<sup>a</sup>This Intermediate Care Unit was described in the same article as the one above, after changing its management format.

<sup>b</sup>This Intermediate Care Unit was described in the same article as the one above, after changing its location and management format.

Definition of abbreviations: MCU=Medium Care Unit; HDU=High Dependency Unit; IMCU=Intermediate Care Unit; PCU=Progressive Care Unit; SDU=Step Down Unit; I= integrated in ICU; W=part of Ward; A=Adjacent to ICU; S=Separate; Su=surgical patients; M=medical patients; O=Open; C=Closed; NIV=Non-Invasive Ventilation; CPAP=Continuous Positive Airway Pressure