



**CRITICAL
CARE**



Building a Better Health Service

CARE COMPASSION TRUST LEARNING



**National Clinical &
Integrated Care Programmes**

Person-centred, co-ordinated care

NATIONAL ADULT CRITICAL CARE CAPACITY AND ACTIVITY CENSUS 2017

HSE Acute Hospitals Division

Critical Care Programme

1. National Adult Critical Care Bed Capacity Census 30th September 2017

The annual national adult Critical Care Bed Capacity Census measures capacity as at 30th September 2017. The Census reports a capacity of 241 adult critical care (Level3 ICU and Level2 HDU) beds. Following resource allocation in HSE NSP2017 and following approval by Minister Harris and implementation of the Critical Care Nursing workforce plan, *Career Pathway*, and following the concerted hard work of clinicians and administrators alike, in 2017, there was an increase of seven ‘hub’ ICU beds across Ireland.

However, the 2017 Census also reports an additional 7.5% of adult critical care bed capacity or eighteen (18) adult ICU beds remain ‘*funding allocated, non-operational*’. To solve this problem, the Critical Care Nursing Workforce Planning Working Group of each Hospital Group and hub Hospital is now facilitating the implementation of the national Critical Care Nursing workforce plan, *Career Pathway*, to recruit nursing graduates to permanent pensionable full-time staff nurse posts, immediately on graduation, to receive standardized and accredited critical care nursing postgraduate specialty certification education and training.

CRITICAL CARE BED CAPACITY CENSUS SEPTEMBER 2017	CRITICAL CARE SERVICE Unit (ICM National Standards)					Commissioned Critical Care Beds (funding allocated, not operational) 2017	Bed spaces available (not commissioned 2017)	Critical Care Bed Capacity 2016
	Level 3s ICU Beds	Level 3 ICU Beds	Level 2 HDU Beds	Critical Care Bed Capacity 2017	ICM National Standard outlier			
RCSI Hospital Group								
Cavan ICU		2	2	4			1	4
Drogheda ICU		5	3	8		1	6	8
Beaumont General ICU		9		9		1	2	8 (+1)

Beaumont HDU							8	
Beaumont Neuro ICU	8			8		2		7(+1)
Connolly Hospital ICU		5		5				5
Dublin Midlands Hospital Group								
Naas ICU		3	0	3		2		4(-1)
Portlaoise ICU		2		2	ICM National Standard outlier			2
Tullamore ICU		4		4			3	4
AMNCH ICU		9	2	11				11
AMNCH PACU			3	3				3
St James Burns ICU	2			2				2
St James ICU/HDU		18	0	18		2	4	18
St James CardioTh ICU	6			6				6
Ireland East Hospital Group								
Mater ICU/HDU	17		12	29			7	27(+2)
Mullingar ICU		5	1	6				6
Navan ICU		2		2	ICM National Standard outlier			2
St Vincents ICU/HDU		10	6	16				15(+1)
Kilkenny ICU		4		4	ICM National Standard outlier			4
Wexford ICU		5		5				5

South-South West Hospital Group								
Clonmel ICU		4		4		1		4
Waterford ICU		5	4	9		1		9
Cork CUH CardioTh ICU	6			6			4	6
Cork CUH General ICU		11		11		1	7	9(+2)
Cork CUH Gen HDU							12	
Mercy ICU		5		5		1	3	5
Tralee ICU		4	1	5		1		5
Saolta Hospital Group								
Letterkenny ICU		5		5				5
Ballinasloe ICU		2	3	5			1	5
Castlebar ICU		2	2	4				4
Sligo ICU		5		5		1	1	5
Galway UHG Cardiothoracic ICU	4			4		2		4
Galway UHG General ICU/HDU		11	6	17		2		17
University of Limerick Hospital Group								
Limerick UHL ICU/HDU		8	8	16	ICM National Standard outlier		12	16
TOTAL				241		18	71	235

Table. CRITICAL CARE BED CAPACITY CENSUS AT 30TH SEPTEMBER 2017

Census Table Legend



ICM National Standard- in scope



ICM National Standard- outlier

Critical Care Capacity Census 2017- methodology note

On the behalf of HSE Acute Hospitals Division, Critical Care Programme completes an annual Census and collates each Hospital's critical care (ICU and HDU) bed capacity and staffing (medical and nursing) establishment as well as critical care activity profile measurement. Thus, the Census reports critical care bed capacity or bed stock (see table above) and critical care activity profile (see figure below), both as at 30th September 2017.

As part of Census procedure, each hospital's Census return is verified locally and countersigned by the Hospital's CEO, Clinical Director, Director of Nursing, ICU Director, ICU CNMIII, Hospital Group CEO, Chief Clinical Director and CDoN- eight signature verifications. This co-signed individual Hospital critical care capacity and activity profile report is collated, reconciled and validated centrally on behalf of AHD by CCP Census Working Group and subsequently approved by AHD for circulation. Thus, the annual adult national critical care (ICU and HDU) commissioned bed capacity and activity profile is ascertained by Critical Care Census.

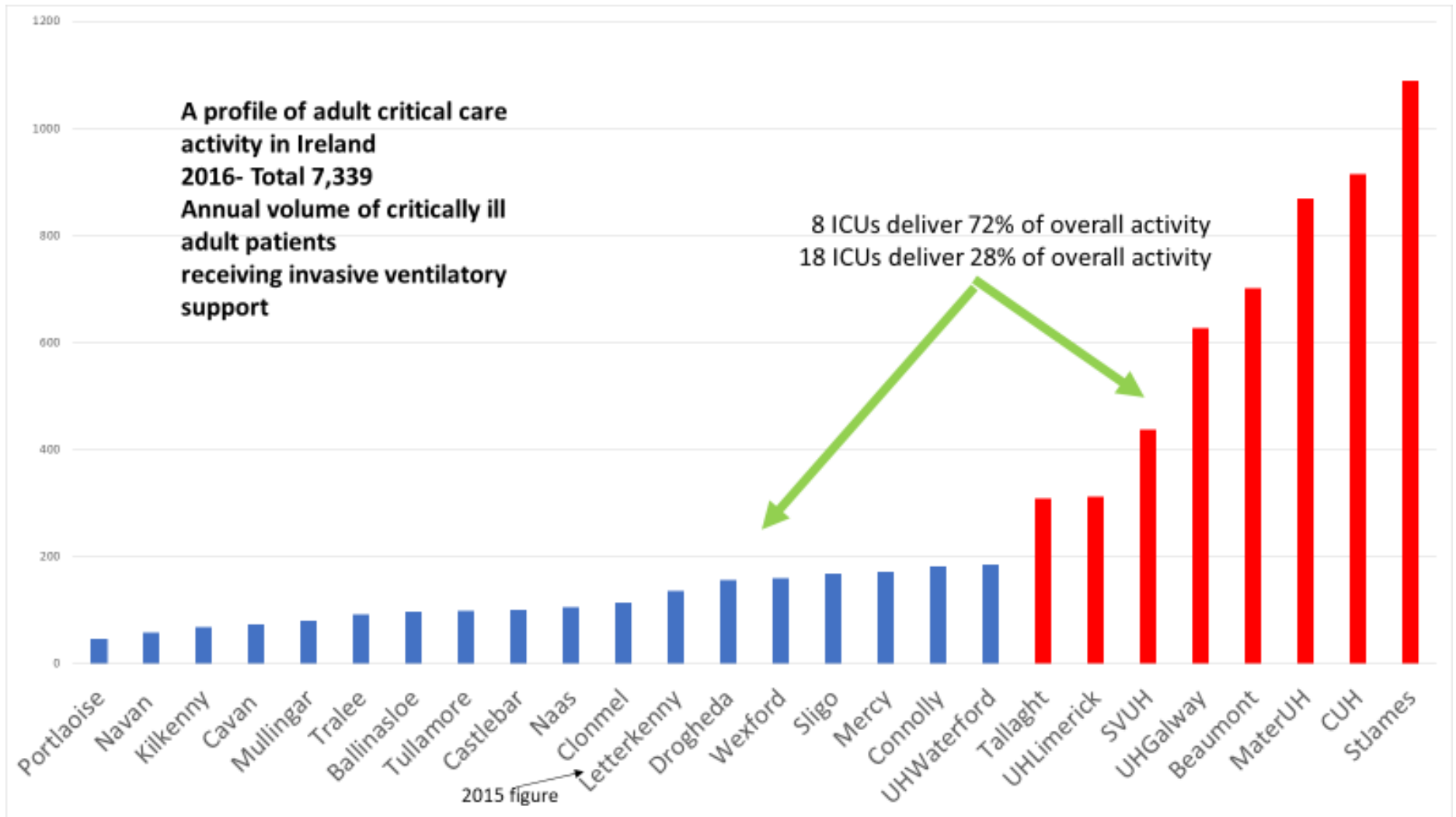
The *National Standards for Adult Critical Care Services 2011*, Joint Faculty of Intensive Care Medicine of Ireland (JFICMI), the Office of Nursing and Midwifery Services Directorate (ONMSD), HSE and the Therapy Professionals Group, HSE, respectively, define the medical, nursing and therapy professional staff requirements to commission a Critical Care Service. Accordingly, for Critical Care Nursing professional staff nurse requirements ONMSD has advised the critical care nursing staff workforce requirement to commission a Level 3 ICU bed and a Level 2 HDU bed is 5.6 x WTE and 2.8 x WTE, respectively, at the least.

2. Critical care activity measurement

HSE Acute Hospitals Directorate requests an annual profile of critical care activity in all adult ICUs in Ireland. Activity is estimated using the comparator- invasive ventilatory support. Census 2017 repeats this and finds just over 7,339 critically ill adult patients received invasive ventilatory support in Ireland in 2016.

In summary, the 10 central hospitals deliver 77% of critical care activity in Ireland with the remaining 16 hospitals delivering 23% of critical care activity, using this measure.

(Limitation- It should be noted the measure is a crude comparator as noninvasive ventilatory support and other invasive organ supports (e.g. continuous renal replacement therapy, pharmacologic and mechanical circulatory supports, nutritional supports etc.) are also delivered to critically ill patients and for long durations in ICUs in Ireland.)



Graph. A profile of 2016 adult critical care activity in Ireland

Volume-outcome evidence in critical care. There is a body of evidence in the intensive care medicine literature- and in other acute care literatures- to support a volume-outcome relationship (Nguyen, *Chest* 2015). The ICM *National Standard 2.4* references this evidence- “*For maintenance of skills and professional competencies, a Critical Care Service Unit will likely be treating at least 200 Level 3 patients per annum and therefore likely to entail Critical Care Units of 6 beds or more*” (JFICMI National Standards 2011, p5).

In line with specialty service policy direction and in line with the evidence base, critical care capacity provision and expansion at centres is required. HSE *National Service Plan 2018* is clear on this- “*Following the organisation of hospitals into Hospital Groups, it is clear that critical care capacity building is required in the ‘hub’ hospitals to meet the on-going and increasing critical care requirements of complex, multi-specialty, severely critically ill patients*” (p51).

3. HSE/HPSC ICU Influenza Surveillance- 2016-2017 season

Fortunately, due to the decreased virulence of the predominant seasonal Influenza A(H3N2) strain as well as increased vaccine uptake, the volume of adults with NVRL influenza diagnosis admitted to ICU decreased by 110 (or 68% decrease) in comparison with prior 2015-2016 influenza season.

Ends