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## **Hospital care in the last year of life**

We welcome the new ‘conversation’ on the future of health and social care in Scotland (*BMJ* 2015; 351 doi: <http://dx.doi.org/10.1136/bmj.h4266> Published 07 August 2015) and see it as a huge opportunity to address issues of ageing and end of life care, especially relating to hospital services. This autumn, as the Scottish government prepares its Strategic Framework for Action on Palliative and End of Life Care and the Scottish Parliament holds an inquiry into palliative care, the timing could not be better.

In March 2014 we published a paper detailing the likelihood of death within 12 months of a cohort of all hospital inpatients in Scotland on a fixed ‘census’ date of 31 March 2010<sup>1</sup>. It attracted a huge amount of media interest<sup>2</sup>. In the study, 10,743 inpatients were identified in 25 Scottish teaching and general hospitals on the census date (cottage and community hospitals and long-stay facilities were excluded). 3,098 (28.8%) patients died during the one-year follow-up period. Mortality rose steeply with age and was three times higher at one year for patients aged 85+, compared to those under 60. Men were more likely to die than women as were those with a ‘medical’ rather than a ‘surgical’ diagnosis. A striking finding was that almost one in 10 patients (9.3%) died during the index admission.

It has now been possible to repeat this analysis for a cohort of patients in hospital in Scotland on 10 April 2013. Our purpose in doing this is primarily one of verification, as well as to look for trends over time. Was the original finding a ‘one off’, unrepresentative of the usual situation in Scottish hospitals on any given day? It would appear not. 10,595 patients were in hospital on 10 April 2013. The population characteristics of the 2010 and 2013 cohorts were similar overall. There was a slightly higher proportion of younger patients (>60 years) in the 2010 cohort compared to the 2013 cohort (z test:  $p < 0.05$ ) and a slightly higher proportion of older patients (‘80-84’ and ‘85 and over’) in the 2013 cohort compared to 2010 (z test:  $p < 0.05$ ). 29.5% of the 2013 cohort had died one year later (Table 1) and 852 (8.0%) died on the index admission. Our study is now being extended to Denmark and New Zealand.

Atul Gawande’s Reith lecture, delivered in Edinburgh last December, urged clinicians to engage actively in another kind of conversation: <sup>3</sup> with patients about end of life issues. He highlighted the key questions that might be asked: What is your understanding of your

situation? What are your fears and hopes if time is short? What are the trade-offs you are willing to make and not make? And what is the course of action that best serves this understanding? We know that, in England at least, these conversations do not happen<sup>4</sup>. In Scotland, around 45% of all people in hospital are over 75 and over one third of these are entering the last year of their lives. We contend that the hospital setting can be an important place for such conversations to begin.

**Table 1: Number and percentage of inpatients in teaching and general hospitals in Scotland on census date of 10 April 2013**


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<sup>1</sup> Clark, David, Armstrong, Matthew, Allan, Ananda, Graham, Fiona, Carnon, Andrew, and Isles, Christopher  
Imminence of death among a national cohort of hospital inpatients. *Palliative Medicine*, 2014, 28 (6). 474-479.  
ISSN 0269-2163 (doi:10.1177/0269216314526443)

<sup>2</sup> <http://endoflifestudies.academicblogs.co.uk/hospitals-and-end-of-life-care-reactions-to-a-paper/>

<sup>3</sup> Gott, M Ingleton, C Bennett, M Gardiner, C Transitions to palliative care in acute hospitals in England:  
qualitative study. *British Medical Journal* 2011, 342:d1773.

**Table 1: Number and percentage of inpatients in teaching and general hospitals in Scotland on census date who died within 12 months**

	Patients in Hospital on 31/03/2010 who died within 12 months		Patients in Hospital on 10/04/2013 who died within 12 months		P value
	No.	%	No.	%	
<b>Gender</b>					0.663
Male	1477	30.4%	1510	31.0%	
Female	1616	27.5%	1616	28.3%	
<b>Age</b>					0.097
Under 60	394	13.1%	333	11.8%	
60-64	191	22.6%	166	21.4%	
65-69	299	29.3%	306	29.6%	
70-74	355	30.0%	396	34.7%	
75-79	490	33.0%	492	35.1%	
80-84	559	39.2%	589	39.0%	
85 and over	805	45.6%	844	44.3%	
<b>Deprivation: SIMD (2012)</b>					0.528
1 (Most)	871	29.7%	872	29.6%	
2	719	30.2%	740	30.0%	
3	569	27.0%	536	28.3%	
4	504	28.1%	506	29.5%	
5 (Least)	424	30.8%	467	30.8%	
Missing	6	9.8%	5	9.1%	
<b>Specialty</b>					0.090
Surgical	685	17.3%	630	17.7%	
Medical	2304	35.0%	2403	35.1%	
Other	104	51.5%	93	52.0%	
<b>Total</b>	3093 (adjusted)	28.8%	3126	29.5%	

**Table 2: Number and percentage of inpatients in teaching and general hospitals in Scotland on census date who died within 12 months**

	Patients in Hospital on 31/03/2010 who died within 12 months		Patients in Hospital on 10/04/2013 who died within 12 months		P value
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