



# Technical Paper –

Differences between the 2009 Census and the September 2009 data in the new monthly publication

The NHS Information Centre  
is England's central, authoritative source  
of health and social care information.

Acting as a 'hub' for high quality, national,  
comparative data, we deliver information for local  
decision makers, to improve the quality and  
efficiency of care.

[www.ic.nhs.uk](http://www.ic.nhs.uk)

**Author:** The NHS Information Centre, Workforce and Facilities Team

**Responsible Statistician:** Ian Bullard

**Version:** 2.0

**Date of Publication:** 21/10/2010

## Introduction

Prior to the new monthly NHS Hospital and Community Health Service (HCHS) Workforce Statistics publication series, The NHS IC last released workforce statistics in March 2010 using September 2009 data as its annual workforce Census publication. In that annual Census collection and the ones in previous years, organisations are asked to report their workforce numbers through an iterative validation cycle until The NHS IC is assured that the data supplied for the annual Census is robust, valid, and correct by following a set procedure with Trusts.

## Census Collection Process

For those Trusts on ESR data is extracted from ESR and sent to each organisation within a spreadsheet that contains inbuilt validation which highlights missing data items, incorrect formats, incorrect values and duplicate records based on census validation criteria.

Organisations validate the data extract, errors are highlighted and either corrected or commented on. Once all errors are addressed, comparison reports for the current year and the signed off census data from the previous year are then generated, which the organisation has to check and then comment on any differences in the data. A sign off sheet is then generated for the organisation to complete to agree that it is a correct and accurate record of their data on census day.

Each submission is then checked by the NHS IC workforce team to ensure all errors have been corrected, and that each change in data contains a valid comment that explains the difference between this and the previous year. Any questions raised during this check are raised directly with the organisation for further comment or clarification.

## Monthly Publication Process

For those Trusts on ESR data is extracted from ESR and a number of steps are undertaken with the data to add value and improve data quality to reflect the validation process of the 'old' annual census classifications of staff groups prior to publication. If all Trusts improve the quality of their data in ESR, specifically around Occupation codes and completeness of Job Role, this methodology can eventually be reduced or even removed and data published direct from ESR.

The methodology used to address issues such as missing data, misclassification of staff e.g. non medical staff having medical occupation codes and vice versa; and using the job role to determine the grade of doctors on a local payscale will be made available within the monthly publication.

## Comparison Issues

The table at the end of this document describes the differences between the 2009 Census and the September 2009 data for the new monthly publication. Workforce statistics from the new monthly publication and historical Censuses can not be directly compared as this will not produce 'like for like' comparisons for the following reasons:

- **Census Collection Process** - The Census collection process enables organisations to update their data in spreadsheets. These updates may not necessarily be entered back into ESR by the Trusts, as asked, thereby failing to improve the data quality of the data held within ESR. By highlighting these issues in the new monthly publication series Trusts will improve the data quality within ESR over time.

- **Headcount, FTE and Role count** - The main differences between the new monthly publication and the Census publication are due to the different processes used to determine headcount, FTE and role count.

The definitions of headcount, FTE and role count are stated in the new monthly publication. Headcount now shows a truer count of the total number of staff in either part time or full time employment within an organisation and/or area of work and role count has been introduced to identify the total count of specific roles within an organisation as some people may have multiple roles either within or across organisations.

The Census headcount figure is part way between the 2 new definitions due to it using a complex summarisation process which affects the true figures at a local level for HCHS Doctors and affects the national figures for non-medical staff.

**Example A** - A doctor works in 2 hospitals, 0.2 of their time at Trust A and 0.8 of their time at Trust B. The differing methodologies for the publications will show this Doctor as:

	New monthly publication			Census publication		
	Headcount	FTE	Role count	Headcount	FTE	Role count
Trust A	1	0.2	1	-	-	-
Trust B	1	0.8	1	1	1	-
Regional	1	1	2	1	1	-
Nationally	1	1	2	1	1	-

**Example B** - A nurse works in 2 hospitals, 0.4 of their time at Trust A and 0.6 of their time at Trust B. The differing methodologies for the publications will show this Nurse as:

	New monthly publication			Census publication		
	Headcount	FTE	Role count	Headcount	FTE	Role count
Trust A	1	0.4	1	1	0.4	-
Trust B	1	0.6	1	1	0.6	-
Regional	1	1	2	2	1	-
Nationally	1	1	2	2	1	-

The example below demonstrates how the new monthly publication may increase the total FTE being returned as the 1.28 FTE limit is applied to each unique role only and not when the roles are aggregated together to produce a total FTE.

**Example C** - A nurse works in 2 roles within Trust A, 0.7 of their time in role A and 0.7 of their time in role B. The differing methodologies for the publications will show this Nurse as:

	New monthly publication			Census publication		
	Headcount	FTE	Role count	Headcount	FTE	Role count
Role A	1	0.7	1	1	0.7	-
Role B	1	0.7	1	1	0.7	-
Trust A	1	1.4	2	2	1.28	-
Regional	1	1.4	2	2	1.28	-
Nationally	1	1.4	2	2	1.28	-

- **Deaneries** - Deaneries organise the training of trainee doctors within NHS Organisations in England. Yorkshire and Mersey deaneries are not on ESR. The likelihood is that the majority of trainee doctors are on ESR via the Trusts they are based at, however it is possible that not every trainee doctor will be captured in this manner. This will result in a decrease in the HCHS Doctors figures for the new monthly publication.
- **Medical Grades** - A particular Census validation for Trusts to undertake is to update any unrecognised grade codes to nationally recognised ones. Some HCHS Doctors currently on ESR will have 'local' codes and we are unable to grade them correctly as to whether they are Consultant/Registrar etc. The new monthly publication uses a validation that looks at job role to determine the grade code. This will result in a variation in the figures for specific HCHS Doctors staff grades between the new monthly publication and the Census data. The variation will improve over time as Organisations update their grade codes and job roles accordingly.
- **Honoraries** - These are clinical academics employed by Higher Education Institution's (HEI's) or other organisations in a research and/or teaching capacity and who ALSO provide services for NHS Patients, at consultant level, in NHS Facilities. These are a part of the Census where they carry out clinical work within Census week. We recommend organisations to add those honoraries that do clinical work with an FTE of 0.1 to the ESR system so they can be captured. Unfortunately, many honoraries are not on the system in the first place and are captured in the Census collection spreadsheet only. This will result in a decrease in the HCHS Doctors figures for the new monthly publication.
- **Joiners/Leavers** - Variations in figures could be due to the responsiveness of organisations when dealing with joiners/leavers etc. If a person leaves the Organisation on the 29<sup>th</sup> September but has not put a leaving date in the field to denote this, they will be extracted as part of the Census and monthly publication process. However if this record is correctly updated on the Census spreadsheets, the person will not be counted as working on Census date. However, the monthly data will only be corrected when a leaving date has been applied into the ESR system.

NHS Hospital & Community Health Service (HCHS) September 2009 - Differences between annual 2009 Census and monthly provisional data  
 REVISED - 21st October 2010  
 England

	Census September 2009			September 2009 - Monthly Data		
	Headcount	FTE	Role count	Headcount	FTE	Role count
<b>Total<sup>(2)</sup></b>	<b>1,213,099</b>	<b>1,043,031</b>	..	<b>1,203,988</b>	<b>1,046,281</b>	<b>1,229,709</b>
<b>Professionally qualified clinical staff<sup>(1) (2)</sup></b>	<b>624,049</b>	<b>549,031</b>	..	<b>619,887</b>	<b>550,474</b>	<b>634,210</b>
<b>All HCHS doctors (incl locums)<sup>(2)</sup></b>	..	..	..	<b>103,243</b>	<b>97,096</b>	<b>105,914</b>
<b>All HCHS doctors (non locum)</b>	<b>102,961</b>	<b>96,598</b>	..	<b>101,443</b>	<b>95,370</b>	<b>103,808</b>
Consultants (including Directors of public health)	36,950	34,654	..	35,941	34,110	36,794
Registrars	37,108	36,700	..	37,291	36,777	37,613
Other doctors in training	14,394	14,517	..	13,972	13,898	14,003
Hospital practitioners & clinical assistants	2,741	803	..	2,365	477	2,533
Other medical and dental staff	11,768	9,926	..	12,199	10,108	12,865
<b>Total HCHS non-medical staff<sup>(3)</sup></b>	<b>1,110,138</b>	<b>946,433</b>	..	<b>1,100,933</b>	<b>949,184</b>	<b>1,123,795</b>
<b>Qualified nursing, midwifery &amp; health visiting staff</b>	<b>353,570</b>	<b>306,887</b>	..	<b>350,699</b>	<b>307,748</b>	<b>357,925</b>
Qualified Midwives	24,313	19,496	..	24,346	19,603	24,839
Qualified Health Visitors	10,390	8,307	..	10,347	8,285	10,547
Qualified School Nurses	1,527	1,167	..	1,504	1,152	1,534
<b>Total qualified scientific, therapeutic &amp; technical (ST&amp;T) staff</b>	<b>149,596</b>	<b>128,331</b>	..	<b>148,295</b>	<b>128,395</b>	<b>152,416</b>
Qualified Allied Health Professions	73,953	61,865	..	73,333	61,975	75,934
Qualified Therapeutic Radiography Staff	2,338	2,097	..	2,339	2,101	2,353
Qualified Diagnostic Radiography Staff	13,940	11,967	..	13,881	12,032	14,277
Qualified Speech & Language Staff	7,486	5,968	..	7,375	5,946	7,944
Qualified Healthcare Scientists	32,378	29,779	..	31,868	29,393	32,066
Other qualified scientific, therapeutic & technical staff	43,265	36,687	..	43,166	37,027	44,416
<b>Qualified ambulance staff</b>	<b>17,922</b>	<b>17,214</b>	..	<b>17,940</b>	<b>17,234</b>	<b>17,955</b>
<b>Support to clinical staff</b>	<b>352,583</b>	<b>290,986</b>	..	<b>351,305</b>	<b>292,529</b>	<b>357,148</b>
Support to doctors & nursing staff	278,390	228,768	..	276,915	229,244	281,492
Support to scientific, therapeutic & technical staff	59,831	49,129	..	60,720	50,296	61,370
Support to ambulance staff	14,362	13,088	..	14,222	12,990	14,286
<b>NHS infrastructure support</b>	<b>236,103</b>	<b>202,703</b>	..	<b>235,840</b>	<b>203,278</b>	<b>238,351</b>
Central functions	115,818	101,983	..	115,196	101,604	116,192
Hotel, property & estates	75,624	58,211	..	76,136	58,954	77,242
Senior managers	13,077	12,585	..	13,512	12,978	13,557
Managers	31,584	29,924	..	31,264	29,741	31,360

Note

.. = not available

<sup>(1)</sup> Includes all Doctors and all qualified non-medical staff

<sup>(2)</sup> Includes locums - not available in the annual census

<sup>(3)</sup> bank staff have been excluded from the 2009 census figures - these are not on ESR and not included in the monthly extracts

Headcount has been calculated on a different basis between the annual census and monthly data

Headcount totals in the monthly data are unlikely to equal the sum of components

For more information on these differences visit The IC's website: <http://www.ic.nhs.uk/pubs/provisionalmonthlyhchsworkforce>

Copyright © 2010 The NHS Information Centre. All rights reserved