



## Cornwall County Council & Cornwall and Isles of Scilly Economic Forum

### CORNWALL AND ISLES OF SCILLY SECTOR PROFILE:

# MEDICAL & HEALTH

December 2008

This research has been undertaken to update the previous sector profiles that had been requested by Cornwall Enterprise to stimulate a better understanding of their 10 priority sectors. This work will provide additional detail to underpin *Strategy and Action* in order to help to inform future decisions on the kind of support that is provided for local businesses and economic development projects.

*"Our work within the Healthcare Industries Sector in Cornwall has enabled us to identify a number of businesses such as Dental Precision and Research Instruments, Research Instruments, TRAC Services and Dental Precision, with enormous potential to build on their expanding national and international markets. The establishment in Cornwall of a major component of the new Peninsula College of Medicine and Dentistry linked with the shortly to be built dedicated Innovation Centre is an added significant bonus. The commitment in the recent Review of the NHS to boosting innovation and access to medical technologies provides Healthcare Industry businesses in Cornwall with a wonderful opportunity to expand and contribute to the Economic Regeneration of the county given the support that should be available to them via Convergence funding."*

Ron Spencer, General Manager, Cornwall Medi-Park Ltd

### *The Sector*

- The medical and health sector covers those enterprises engaged in the manufacture of pharmaceuticals, medical equipment and retail associated with medical activities, health, and social work.

### *Headline facts*

- The medical and health sector employs 30,800. This equals 15.9% of all employees in Cornwall.
- In line with the situation across Great Britain, employment in Cornwall has increased in absolute terms.
- In line with employment trends, the number of business units in the medical and health sector in Cornwall has increased.
- Earnings at the sector level are only available at a UK level (median gross weekly for all employees). Employee earnings levels in the medical and health sector for the UK vary, with earnings in manufacturing being above the average (median) figure (£375) with earnings in health and social work below the average.
- In 2006 the overall GVA for the sector in Cornwall was £653 million, equal to 9.5% of the total GVA for Cornwall.

### *Overview*

- *'Health – as measured by life expectancy and adult survival rates – has been shown to be just as important as educational attainment in the development of human capital and hence economic productivity.'* (Atun, R.A., and Fitzpatrick, S. 2005).
- The health element of the sector is dominated by the public sector. *'The public sector (including NHS trust or health authority) accounts for 73% of employment in the UK's health sector, whilst 21% are employed in the private sector. The remaining*

workforce is employed in local authorities and other organisations.' (National Guidance Research Forum, 2008, Labour Market Information, [Health Sector Information](http://www.guidance-research.org/future-trends/health/info) <http://www.guidance-research.org/future-trends/health/info>).

- 'Developments in life science industry cover many exciting new scientific discoveries relating to health, such as the human genome project which promises cures in untreatable areas, drug discoveries, screening and treatment in the area of molecular genetics. Developments in bioengineering and biotechnology are able to make useful products for medical treatment, such as artificial blood and artificial internal organs. Mergers, growth and consolidation are taking place within the pharmaceutical and private health care sector.' (Owen, JW, 2003, The National Health Service and the New Health Economy Securing Our Future Health, Regional Health and Social Wellbeing Strategy Conference Belfast, 30th June 2003).

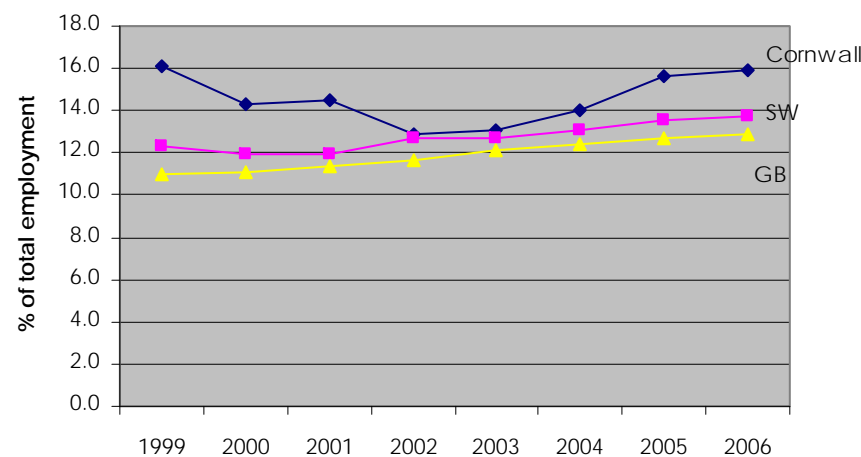
## Employment

- There are 30,800 jobs in the medical and health sector in Cornwall.
- This equals 15.9% of all employees in Cornwall. In contrast, the sector constitutes 12.9% of employment across GB.
- The main categories within the sector in Cornwall are health (18,800) and social work (10,100).
- Between 1999 and 2006 employment in the medical and health sector in Cornwall increased by 28%, compared to increases of 25% and 24% across the SW and GB.
- Growth in employment in this sector in Cornwall is overwhelmingly in full time employment. This is a trend observed across both the SW and GB.
- Full time jobs now account for 48% of the total employment in the sector in Cornwall, lower than both GB (56%) and the SW figure (50%).
- As Fig. 1 shows, there has been a slight decline in employment in the sector in Cornwall, when measured as a proportion of total employment. In contrast there has been an increase across both the South West and GB.
- Table 1 shows that in 2006 employment in medical and health in Cornwall as a percentage of all employment was nearly 25% higher than across Great Britain.

	Cornwall	SW	GB
Medical and health	15.9	13.8	12.9

Table 1

Fig. 1 Medical & Health employment as a %age of total



Source: Annual Business Inquiry, NOMIS

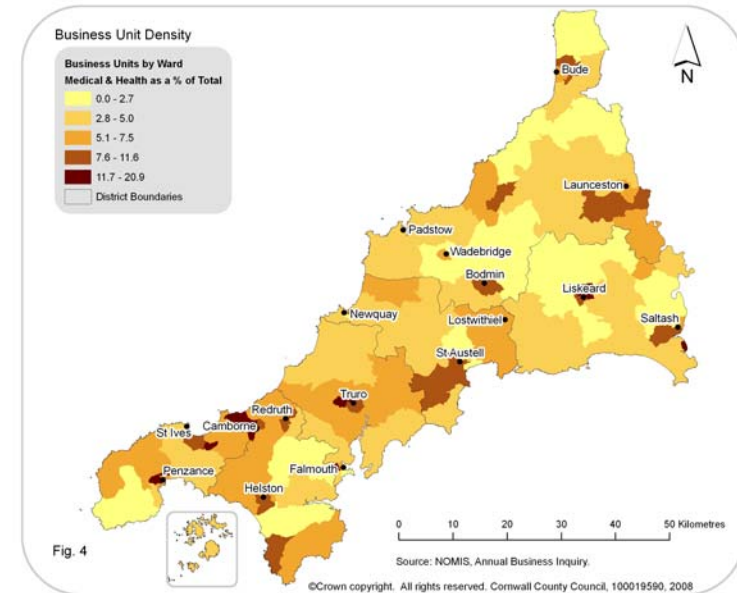
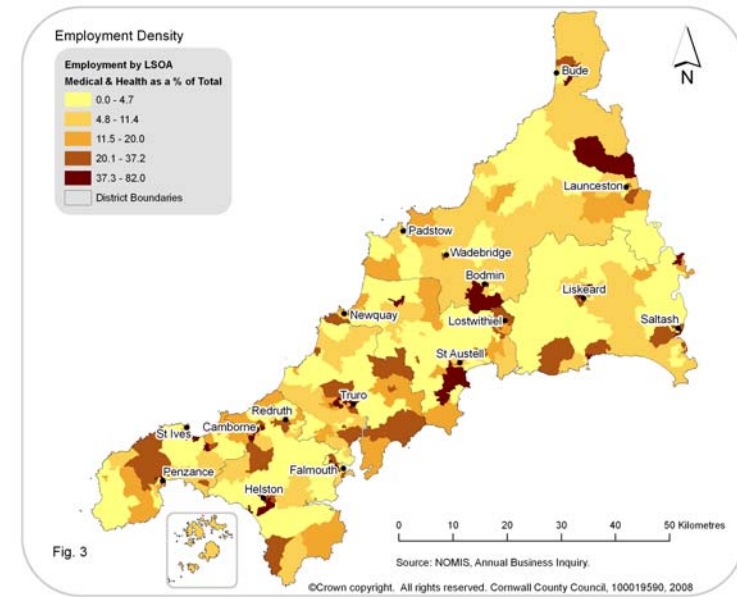
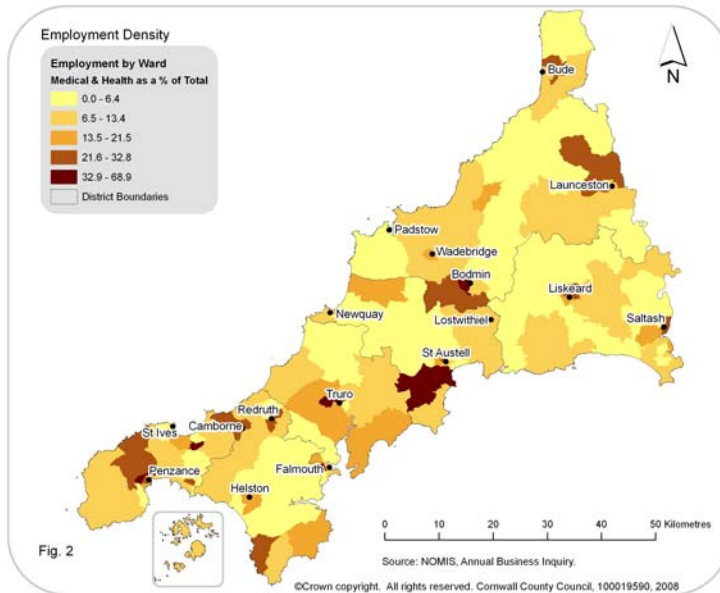
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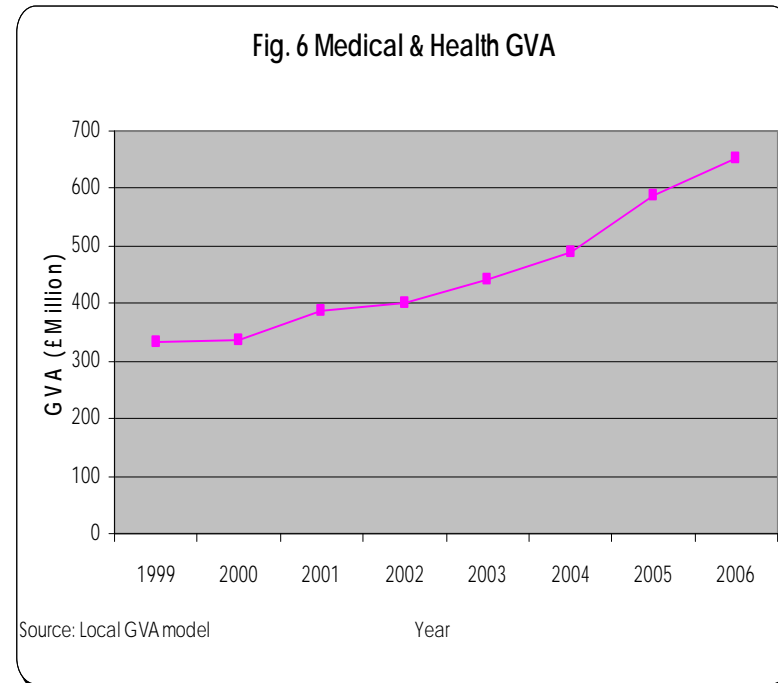
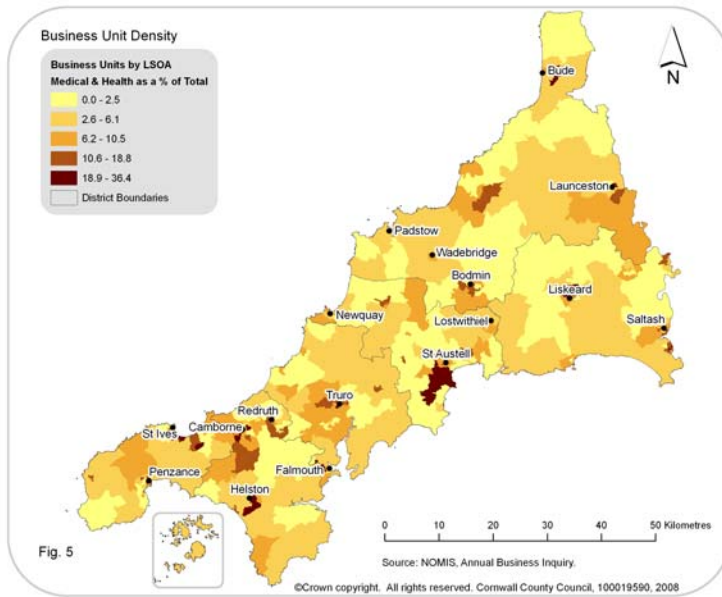
## Business Units

- There are 1300 business units in the medical and health sector in Cornwall in 2006.
- Between 1999 and 2006 the number of business units in Cornwall increased by 17%
- The rate of increase was below that experienced across Britain (23%) and the South West (24%) during the same period.
- Medical and health business units make up 6.2% of all units in Cornwall. The comparative figures for the South West and Great Britain are 6.3% and 6.1%
- The distribution of units by sizeband in Cornwall is similar to that found across Great Britain, with a concentration in the 1-10 sizeband, however, the proportion in Cornwall (60%), is below that of the SW (63%) and GB (65%).
- Whereas in Cornwall, the 11-49 sizeband represents the biggest group, accounting for 32% of employees, across the SW and GB the biggest group consists of those in the 200 plus group, 36% and 41% respectively (the figure for Cornwall is 29%).
- Business units in the medical and health sector are larger than the average. Each data unit employs 23.1 employees compared to an average of 8.9 per unit across Cornwall.

## Spatial distribution

- The largest number of jobs (6,200) and greatest concentration of jobs (69%) are found in the Trehaverne and Tregolls ward. They account for 20% of all jobs in this sector in Cornwall.
- There are five wards where the medical and health sector account for 40% or more of total employees. Trehaverne and Gloweth (69%); Gulval and Heamoor (48%), Trescobeas (45%), Bodmin St Mary's (45%) and Hayle South (45%).
- A third of all jobs in the sector in Cornwall are located in three wards - Trehaverne and Gloweth, Truro Boscawen, and Camborne West.
- Seventy-four percent of the 700 jobs in the health manufacturing sub-sector are concentrated in three wards – Illogan South, and St. Columb.
- There are three LSOAs where over two-thirds of employment is within this sector - Heamoor Central, Gloweth and Treiske and Bodmin St Mary's Ward West.
- A quarter of all jobs are located in three LSOAs - Gloweth and Treiske, Truro Boscawen Ward South East and Truro Boscawen Ward City Centre.
- There are four wards in Cornwall where medical and health units make up 15% or more of the total number of business units:- Falmouth Trescobeas (21%), Liskeard North (17%), Gulval and Heamoor (16%) and Hayle South (15%).
- The largest number of units (100), is located in Truro Boscawen Ward City Centre.
- In ten LSOAs, medical and health units account for 25% or more of all units.





## Gross Value Added

- The medical and health sector in Cornwall has shown an increase in both relative and absolute terms of GVA. In relative terms growing slightly from 8.3 to 9.5%, in absolute terms (as shown in fig. 2) the sector has grown from £334 million in 1999 to £653 million in 2006.
- In 2006, the sector contributed to 9.5% of the economy in Cornwall. In 2004, the figure was 8.2% compared to 7.9% for the UK as a whole.
- Since 1999, the annual growth rate in GVA has been 10.1% compared to the 7.9% growth in GVA across all sectors in Cornwall.
- There were variations in the growth rates within the sector, with General practitioners (17.8%) and other medical care (16%) at the top end of the range and nursing homes and residential at the lower end (4.4%).
- Health and social makes the largest contribution in Carrick, where it accounts for 15.9% of total GVA.
- Hospitals (28.9%) and social services (27.7%) are the biggest groups in terms of contribution to GVA within the sector in Cornwall.
- In terms of growth rates, the highest was achieved by the pharmaceuticals sub-sector at 72.6% per annum. (However, this category is relatively small and its contribution to GVA in 2006 was still below that achieved in 1996).
- For further detailed analysis of medical and health GVA refer to Nankivell (2008) The Cornwall economy 1996-2006.

## Productivity

- The productivity of the sector in Cornwall, measured by GVA per worker, equals £20,300. This is 74% of the average rate for Cornwall.
- Productivity, measured using the GVA per Full Time Equivalent (FTE) equalled £27,200, 20% below the average FTE figure for Cornwall.

## Earnings

- In 2007 median earnings for employees in the medical and health sector across the UK varied. Amongst those engaged in manufacturing, earnings ranged from 17% to 42% above the average for all employee earnings.
- Amongst those engaged in health and social work, median earnings averaged 88% of all earnings.

**NB Earnings data by employment sector only available at a UK level.**

## Caveats:

The size of the sector in this profile may differ to other research as each sector is made up by aggregating a number of other "subsectors" (see notes for employment SIC sectors incorporated in this profile). Other studies may use a broader or narrower definition.

**Totals from each profile should not be added as data included within one profile may also be included within another profile. For example, 3220 - Manufacture of television and radio transmitters... and 3230 - Manufacture of television and radio receivers ..., are included in both the ICT sector profile and the Creative Industries (Broad) sector profile. Fish processing is included in both food and drink and fishing.**

This profile only analyses the *economic* value of a sector. The social, cultural and environmental value of a sector should also be thoroughly considered.

Sector definitions used in this profile may vary slightly between GVA and employment as the GVA data does not have such a detailed sector breakdown. This is because calculating GVA on a local level relies upon numerous data sources, some of which are only available at a broad sector level. For this reason, it has not been possible to include GVA data for some of the more specific or cross-cutting sectors without further extensive research. In addition, the national accounting system's classification limits the way in which we can understand the economy, for example, for the marine profile surf shops and wetsuit manufacturing cannot be drawn from the current structure, they are included in retail and rubber manufacturing, respectively. Again, further extensive research would be required to penetrate this detail.

All data in this profile refers to workplace.

### Business units

Business units, in this publication, refer to business premises and/or head offices. This is the most comprehensive measure of activity as it incorporates counts of individual branches or sites – this is more useful than mapping the enterprise or business alone as this would only provide a count of the location of each head office.

The source of the business units data is the Inter-Departmental Business Register. This register is produced by the Office for National Statistics using VAT (value added tax) and PAYE (pay as you earn) records, therefore, it captures all businesses that either trade over the VAT threshold – for 2006 a turnover of 61,000, and/or are PAYE registered – employ at least one member of staff who earns more than £94/week, or £408/month.

### Annual Business Inquiry (ABI) - Employee Analysis, Workplace Analysis

Data source: NOMIS. Based on a sample.

Discontinuities in 2003 and 2006 make comparisons difficult over a period of time. The 2006 discontinuity means that comparisons of the 2006 ABI employment estimates with earlier years do not provide a reliable comparison.

Elements contributing to the discontinuity include:

1. Change in reference date from December to September.
2. Use of Business Register Survey data within the ABI/1 results.

3. Change to the Minimum Domain Methodology.

NOMIS state that *'It is not possible to measure the impact of the changes made precisely, however the scale of the overall discontinuity between the 2005 and 2006 ABI/1 is estimated to be in the range of 150,000 to 350,000 (0.6 to 1.3 per cent of the total number of employees) in a downward direction.'*

All employment data from the ABI employee analysis has been rounded to the nearest 100 in line with release of data rules.

### Geographical anomalies

Data from different sources differs in its geographical coverage. The ABI covers Great Britain, ASHE data covers the United Kingdom.

### Earnings data

Earnings data by employment sector is only available at a UK level. Earnings levels in Cornwall are substantially lower and although it is expected that the difference applies across all sectors, the exact relationship is unknown, therefore care should be taken in interpreting the data.

## Data:

### Employment

#### Medical and health sector

	Part Time Workers	Full Time Workers	Total
1999	13900	10200	24100
2000	13200	9700	22800
2001	13700	10800	24500
2002	12300	10700	23000
2003	12300	11300	23600
2004	13300	11700	25000
2005	14300	14400	28700
2006	15900	14900	30800

Source: NOMIS, Annual Business Inquiry © Crown Copyright

## Medical and health employment as a % of total

	Cornwall & IoS	South West	Great Britain
1999	16.1	12.3	11.0
2000	14.3	11.9	11.1
2001	14.5	11.9	11.4
2002	12.9	12.7	11.6
2003	13.1	12.7	12.1
2004	14.0	13.1	12.4
2005	15.6	13.6	12.7
2006	15.9	13.8	12.9

Source: NOMIS, Annual Business Inquiry © Crown Copyright

## Business units

	Cornwall and Isles of Scilly	South West	Great Britain
1999	1,100	11,000	115,500
2000	1,200	10,900	114,900
2001	1,100	11,000	116,500
2002	1,100	11,100	116,400
2003	1,200	11,400	119,600
2004	1,200	11,800	123,000
2005	1,300	13,500	139,100
2006	1,300	13,700	142,400

Source: NOMIS, Annual Business Inquiry © Crown Copyright

## Business units as a percentage of all units

	Cornwall and Isles of Scilly %	South West %	Great Britain %
1999	6.3	5.9	5.4
2000	6.3	5.7	5.3
2001	5.9	5.6	5.4
2002	5.8	5.7	5.3
2003	5.8	5.7	5.4
2004	5.7	5.7	5.5
2005	6.3	6.4	6.0
2006	6.2	6.3	6.1

Source: NOMIS, Annual Business Inquiry © Crown Copyright

## GVA

Medical and Health GVA data has been sourced from the Local GVA model for Cornwall level data and the Office for National Statistics (ONS) for UK statistics. The following tables provide the raw data from which the graphs on page one were produced.

### GVA (£ million)

	Cornwall	UK
1999	334	56763
2000	336	60711
2001	388	65893
2002	401	70761
2003	443	76967
2004	489	82339
2005	588	na
2006	653	na

Source: Owen Nankivell, (2008) *Local GVA model*; ONS, (2006), *UK Input-Output Analyses*.

### GVA (% of total)

	Cornwall	UK
1999	8.3	7.1
2000	7.7	7.2
2001	8.1	7.5
2002	7.5	7.6
2003	7.5	7.8
2004	8.2	7.9
2005	9.2	na
2006	9.5	na

Source: Owen Nankivell, (2008) *Local GVA model*; ONS, (2006), *UK Input-Output Analyses*.

## Earnings

**Employee weekly pay – medical and health sector** [NB Earnings data by employment sector only available at a UK level].

### Weekly pay - Gross (£) – For all employee jobs: United Kingdom, 2007

Description	Code	Median	As % of all
<b>ALL EMPLOYEES</b>		374.9	100.0
Manufacture of pharmaceuticals, medicinal chemicals and botanical products	244	525.4	140.1
Manufacture of basic pharmaceutical products	2441	486.6	129.8
Manufacture of pharmaceutical preparations	2442	535.3	142.8
Manufacture of medical and surgical equipment and orthopaedic appliances	3310	436.7	116.5
Dispensing Chemists	5231	214.7	57.3
Retail sale of medical and orthopaedic goods	5232	x	na
<b>HEALTH AND SOCIAL WORK</b>	N	331.1	88.3
Hospital activities	8511	379.3	101.2
Medical practice activities	8512	235.4	62.8
Dental practice activities	8513	261.6	69.8

Other human health activities	8514	387.2	103.3
Veterinary activities	8520	247.4	66.0
Social work activities	853	265.0	70.7
Social work activities with accommodation	8531	258.5	69.0
Social work activities without accommodation	8532	271.1	72.3

Source: ONS (2007), Annual Survey of Hours and Earnings, Table 16.1a Weekly pay - Gross (£) - For all employee jobs: United Kingdom, 2007.

### Comparative earnings data

The table below shows earnings levels in Cornwall compared to both the South West and Great Britain. All data for 2007.

### Median Earnings by workplace 2007

Area	All		All Full-time		All Part-time	
	£	%	£	%	£	%
Cornwall	304.9	81.3	373.3	81.7	140.4	97.6
South West	349.2	93.1	427.8	93.7	144.7	100.6
United Kingdom	374.9	100	456.7	100	143.9	100
Area	Male		Male full-time		Male part-time	
	£	%	£	%	£	%
Cornwall	358.9	77.3	399	80.1	149.7	108.6
South West	441.4	95	476.5	95.6	147.9	107.3
United Kingdom	464.5	100	498.3	100	137.8	100
Area	Female		Female Full-time		Female Part-time	
	£	%	£	%	£	%
Cornwall	239	83.1	344.4	87.4	138.7	95.3
South West	267	92.9	363.3	92.2	144	98.9
United Kingdom	287.5	100	394	100	145.6	100

Source: Annual Survey of Hours and Earnings, (2007). Table 7.1a Weekly pay - Gross (£) - For all employee jobs: United Kingdom, 2007.

## References

Atun, R.A., and Fitzpatrick, S. (2005), Advancing Economic Growth: Investing in Health. A summary of the issues discussed at a Chatham House conference held on 22–23 June 2005.

National Guidance Research Forum, (2008), Labour Market Information, Health Sector Information <http://www.guidance-research.org/future-trends/health/info>  
Office for National Statistics, (2007), Annual Survey of Hours and Earnings - 2007, Weekly pay - Gross (£) - For all employee jobs.

Owen, JW, (2003), The National Health Service and the New Health Economy Securing Our Future Health, Regional Health and Social Wellbeing Strategy Conference Belfast, 30th June 2003.

## NOTES:

### Spatial distribution

The maps indicating the spatial distribution of employment and business units use both ward and Lower Super Output Areas. The wards are those used for District Council elections. Super output areas are a new geographical hierarchy designed to improve the reporting of small level statistics. They are now used in preference to administrative boundaries such as wards as they are of roughly equal population levels and are based on the area's characteristics, not historical events. The lower super output areas have a mean population size of 1,500.

### Gross Value Added (GVA)

#### What is Gross Value Added?

GVA measures the contribution each sector, industry or producer makes to the economy, and when added, the total value of economic activity in a particular area. It is used as an indicator of the value of economic activity that takes place within a sector, or area.

Medical & health in this profile refers to the following SIC(2003) activities:

2441 Manufacture of basic pharmaceuticals

2442 Manufacture of pharmaceutical preparations

3310 Manufacture of medical and surgical equipment and orthopaedic appliances

5231 Dispensing chemists

5232 Retail sale of medical and orthopaedic goods

8511 Hospital activities

8512 Medical practice activities

8513 Dental practice activities

8514 Other human health activities

8520 Veterinary activities

8531 Social work activities with accommodation

8532 Social work activities without accommodation

### Sector profiles in this format:

Advanced Engineering  
Agriculture & forestry  
Agri-food  
Creative industries  
Environmental Technology  
Fishing  
Food and Drink  
Information & communication technology  
Manufacturing  
Marine  
Medical & health  
Tourism  
Voluntary

For further information about this or the other profiles in the series please contact Peter Wills, Corporate Economy and Europe Unit, Cornwall County Council: 01872 322520, [pwills@cornwall.gov.uk](mailto:pwills@cornwall.gov.uk)