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# **Trends and variations in per capita expenditure on adult intellectual disabilities health and social care across Scotland, and by urban/rural class**

## **Abstract**

### **Background:**

Following the global financial crisis in 2007/08, the UK implemented an austerity programme which may impact on services. Scotland comprises both densely-populated urban conurbations and highly-dispersed remote rural and island communities.

### **Method:**

Expenditure data were extracted from Scottish Government statistics. Per capita expenditure was calculated using adjusted Scotland's 2011 census data.

### **Results:**

There was a 3.41% decrease in real term expenditure on adult intellectual disabilities services between 2012/13 and 2014/15 (>£32million). In 2014/15, per capita expenditure on adult intellectual disabilities health care ranged from £1,211-£17,595; social care from £21,147-£83,831; combined health and social care expenditures from £37,703-£85,929. Per capita expenditure on combined health and social care was greater in rural areas; with

more on intellectual disabilities social care, though less on health care.

#### Conclusions:

Scottish expenditure on adult intellectual disabilities services has not kept abreast of rising living costs. It varies considerably across the country: a post-code lottery.

#### Key words

Intellectual disabilities, health services, social services, per capita expenditure, geographic variation, urban/rural variations

#### Introduction

The 2007/08 financial crisis pushed major economies in the world into recession. In response, after initial austerity measures in late 2008, the UK introduced an austerity programme in 2010 aimed at addressing national debt levels (Reeves et al., 2013). Adults with intellectual disabilities experience significant health and social inequalities, including higher rates of multi-morbidity and earlier death than the general population (Hughes-McCormack et al, 2017a; Hughes-McCormack et al, 2017b; Kinnear et al, 2018; O’Leary et al., 2017). They require state funding for dedicated provision of support for health and social care to achieve aspirations for quality of life. It would be of societal concern if year-on-year austerity measures reduced care provision, potentially widening existing inequalities.

Few studies have assessed the specific impact of cuts in public finance on the allocation of health and social care funding levels for this population. Despite noting the poor quality of data on funding of intellectual disabilities services in England, one study concluded that the unit costs of intellectual disabilities social care (after adjusting for inflation) between 2004/05 and 2008/09 have actually risen by 38% for residential care compared to 32% for home care, 21% for day care and an increase by about 24% for health service costs (Royal Mencap Society/Learning Disability Coalition, 2010). Past reports have shown substantial variation in expenditure on intellectual disabilities services across England, with rural areas spending less on intellectual disabilities health services (Forsyth and Winterbottom, 2002), and Local Authority services (social services; Moscone, 2011). There are some overlaps in the management and delivery of care and support for people with intellectual disabilities across NHS and Local Authority boundaries, and geographical variations in NHS or Local Authorities may be accounted for by local arrangements with the other.

In Scotland, the Government allocates funding to its Health Boards and Local Authorities taking account of local population size, demographics, and additional service-delivery demands. The Health Boards and Local Authorities then allocate resources within their geographical areas to their range of populations/services, based on the underpinning principle of the assessed needs of individuals (not, for example, on a fixed daily rate per person with intellectual disabilities). There has not been an explicit linear cut in public

spending on disability during the period studied, but increased demand on services might have led to application of higher eligibility thresholds to prioritise access to services whilst still meeting statutory requirements.

The global financial crisis, and subsequent austerity drives have led Western liberal democracies, including the devolved Scottish Government, to consider how best to address persistent health and social inequalities in the context of reduced public spending (Smith et al., 2016). In 2016, Scotland brought about the integration of health and social care services, requiring NHS Health Boards and Local Authorities to merge their budgets for adult community and preventative health and social care services. It is therefore important to examine expenditure prior to the implementation of integration and any geographic variations in this, to establish the baseline against which any future changes can be compared, whilst austerity continues.

Scotland is a geographically large country, which includes high-density large urban conurbations, as well as dispersed remote and rural areas including small island communities. Clearly, the challenges in service delivery in such contrasting areas are likely to differ, and could have implications on both expenditure and service delivery models.

The primary aims of this study are to investigate if there are any variations in Health Board and Local Authority expenditure on adult intellectual disabilities services across Scotland, and whether there

is a year-on-year impact of austerity over a three year period, 2012/13-2014/15, prior to budgetary integration. Secondary aims are to investigate if local expenditure on intellectual disabilities services is related to the number of adults with intellectual disabilities, and/or the extent of rurality of the area.

## **Method**

Expenditure data for 2012/13, 2013/14 and 2014/15 on adult intellectual disabilities services was extracted from the Scottish Local Government Financial Statistics and the Scottish Health Service Costs (The Scottish Government, 2016; NHS Scotland, 2016), from which data are published annually. The Scottish Local Government Financial Statistics is a publication of the social care expenditure for all Local Authorities in Scotland, while the Scottish Health Service Costs is a publication on health care expenditure in Scottish Health Boards. All Local Authorities and Health Boards are required to make these annual returns to the Scottish Government on their expenditure in order to enable monitoring and benchmarking comparisons between localities. Expenditure is reported in pounds sterling.

Data from all 32 Local Authorities were extracted, and from 13/14 regional NHS Health Boards. One regional Health Board (NHS Western Isles) was excluded from this study as the datasource did not contain information on its expenditure (on request, the Board responded that it employs one nurse and a small proportion of a

psychologist for people with intellectual disabilities, via mental health services).

Information on the number of adults with intellectual disabilities (aged 16 years or over) in each Scottish Health Board and Local Authority in 2011 was taken from Scotland's Census, 2011 (Scottish Learning Disabilities Observatory, 2016). The estimations for subsequent years (2012 to 2015) were derived by applying the percentage change in the total adult population (National Records of Scotland, 2017a; National Records of Scotland, 2017b). The Scottish population is relatively static in size, growing by only 0.6% over this period, with similar rates of emigration (0.5%) and immigration (0.7%), and a slight drop in birth rate and rise in lifespan accounting for the overall marginal increase (National Records of Scotland, 2017c). We have no national data on survival at birth and lifespan specifically of people with intellectual disabilities, but assume these will have slightly increased over the same time period, as for the general population (O'Leary et al, 2017). Consequently, we consider this to be the best estimate of the size of the population with intellectual disabilities." The total adult population estimates for Health Boards were based on the 2014 NHS Board configuration, accounting for the Health Board boundary changes that occurred within the study period. All annual population estimates were then averaged to obtain the 2012/13, 2013/14 and 2014/15 estimated population size for adults with intellectual disabilities. For example, the population size for 2012 and 2013 was averaged to provide a figure for the 2012/13

population of adults with intellectual disabilities for each Health Board and Local Authority. Per capita spending was then calculated for each Health Board and Local Authority, for each of the three years, by dividing the amount of adult intellectual disabilities services expenditure by the estimated number of adults with intellectual disabilities for that year.

#### Measures and variables:

The Health Board expenditure included adult intellectual disabilities in-patient, out-patient, day-patient, and community intellectual disabilities team expenditures, and resource transfer. Resource transfer refers to monies transferred from NHS to finance the provision of health care by Local Authorities. The Local Authority expenditure included employee and operating costs, transfer payments, support service costs, and revenue contribution to capital with adjustments for inter-account and inter-Authority transfers.

Rurality was classed using the 6-fold Scottish Government urban/rural classification (Scottish Government, 2014b). This is based on the population size and accessibility of an area. It shows where the major proportion of the total population in the Health Boards/Local Authorities resides, thus describing the extent of urbanisation, ruralisation and remoteness. The six classification groups are:

- Class 1, large urban areas: majority of settlements of 125,000 people or more.



- Class 2, other urban areas: majority of settlements of 10,000 to 124,999 people.
  
- Class 3, accessible small towns: majority of settlements of 3,000 to 9,999 people, within 30 minutes' drive of a settlement of 10,000 or more.
  
- Class 4, remote small towns: majority of settlements of 3,000 to 9,999 people, with a drive time of more than 30 minutes to a settlement of 10,000 or more.
  
- Class 5, accessible rural area: majority of settlements of less than 3,000 people, within 30 minutes' drive of a settlement of 10,000 or more.
  
- Class 6, remote rural areas: majority of settlements of less than 3,000 people, with a drive time of more than 30 minutes to a settlement of 10,000 or more.

#### Data analysis:

Statistical analyses were conducted using Stata software version 14.1 (Stata). We adjusted all data on expenditure for inflation, to express them in 2014/15 terms, using the HM Treasury deflator updated on 30.6.17 (HM Treasury, 2017). Real terms expenditures (expenditures adjusted for inflation) are therefore expressed in 2014/15 terms, by multiplying the cost of health and/or social care intellectual disabilities services by the HM Treasury adjustment

factor, obtained from the deflators: 96.953 for 2012/13, and 98.552 for 2013/14, with respect to 100 for 2014/15.

The variation and trends in the per capita expenditure on adult intellectual disabilities services across Health Boards and Local Authorities were examined using bar charts. The distributions of the expenditure on intellectual disabilities services for the years 2012/13 to 2014/15 were not normal. The relationship between per capita expenditure on adult intellectual disabilities services by Health Boards and Local Authorities and the number of adults with intellectual disabilities in localities, was examined using Spearman's correlation. Prior to this, the variables were explored using scatterplots. Trends in per capita expenditure were then further analysed by stratifying the Health Boards and Local Authorities based on their major urban/rural class. One-way analysis of variance and Tukey post-hoc tests were conducted in order to determine whether per capita expenditure differed based on major urban/rural class.

Variation and trends in per capita expenditure on adult intellectual disabilities services were then examined for the combined Health Board and Local Authority for each geographic area, using bar charts. The analyses above were repeated for the combined Health Board and Local Authority data.

## **Results**

In Scottish Health Boards (excluding NHS Western Isles), the number of adults with intellectual disabilities was estimated to be 21,128 in 2012/13; 21,214 in 2013/14; and 21,319 in 2014/15. Across the Health Boards, it ranged from 71 to 5,173 adults in 2014/15. In Local Authorities, the number of adults with intellectual disabilities was estimated to be 21,229 in 2012/13; 21,319 in 2013/14; and 21,426 in 2014/15. Across the Local Authorities, it ranged from 72 to 2,946 adults in 2014/15. These ranges are largely accounted for by the differences in total population size across the different areas of Scotland, with the smallest Health Board comprising only 0.40% of Scotland's population, and the largest 21.49%; and the smallest Local Authority comprising only 0.40% and the largest 11.38%.

Scotland's total real terms expenditure (expressed in 2014/15 terms) on adult intellectual disabilities services by all Health Boards was £260,929,976 in 2012/13; £255,332,930 in 2013/14; and £250,188,001 in 2014/15; a decrease of 4.29% in real terms across the three years. Scotland's total real terms expenditure on adult intellectual disabilities services by all Local Authorities was £718,388,291 in 2012/13; £698,990,381 in 2013/14; and £697,310,000 in 2014/15; a decrease of 3.02% in real terms over the three years. There is extensive variation in both the total and the per capita expenditures on adult intellectual disabilities services, across Health Boards and Local Authorities (tables 1 and 2; figure 1 and figure 2).

- Insert tables 1 and 2; figure 1 and figure 2 about here -

The total real terms expenditure on adult intellectual disabilities services by Health Boards ranged from £77,888 to £77,633,539 in 2012/13; £168,177 to £75,111,798 in 2013/14; and £85,848 to £68,101,740 in 2014/15. There is a large variation in per capita expenditure on adult intellectual disabilities services across Scottish Health Boards, ranging from £ 1,105 to £ 19,072 in 2012/13; £2,379 to £17,768 in 2013/14; and £1,211 to £17,595 in 2014/15.

The total real terms expenditure on adult intellectual disabilities services by Local Authorities ranged from £3,109,754 to £80,975,318 in 2012/13; £3,563,601 to £71,639,338 in 2013/14; and £3,317,000 to £68,617,000 in 2014/15. There is a large variation in per capita expenditure on adult intellectual disabilities services across Local Authorities, ranging from £24,692 to £84,090 in 2012/13; £24,471 to £89,058 in 2013/14; and £21,147 to £83,831 in 2014/15.

There was a statistically significant positive correlation between per capita expenditure on adult intellectual disabilities services and the number of adults with intellectual disabilities across Health Boards in 2012/13: Spearman's rank correlation = 0.588, P= 0.035; but there was no significant correlation in 2013/14: Spearman's rank correlation = 0.528, P = 0.064; nor in 2014/15: Spearman's rank correlation = 0.473, P = 0.103. Per capita expenditure on adult intellectual disabilities services showed no significant correlation with the number of adults with intellectual disabilities across Local Authorities: Spearman's rank correlation = -0.070, P= 0.702 in

2012/13; Spearman's rank correlation = -0.238, P= 0.190 in 2013/14;  
Spearman's rank correlation = -0.180, P=0.324 in 2014/15.

Regarding urban/rural class, five Health Boards were classed as “large urban” areas, four as “other urban” areas, one as an “accessible rural” area, and three as “remote rural” areas. None were classed in the “accessible small towns” or “remote small towns” groups. The mean per capita Health Board expenditure on adult intellectual disabilities services across the urban/rural classes for each of the three year periods is shown in table 3. A statistically significant difference between the urban/rural classes in Health Board expenditure was found by one way analysis of variance: F=6.84, P=0.011 in 2012/13; F=8.70, P=0.005 in 2013/14; and F=9.80, P=0.003 in 2014/15, with per capita expenditure lower in rural areas. Tukey test showed that per capita expenditure by Health Boards was statistically significantly lower in “remote rural” areas than in “large urban” areas, and in “remote rural” than in “other urban” areas across all three years, with no significant differences between other classes (table 4).

Regarding urban/rural class, nine Local Authorities were classed as “large urban” areas, 14 as “other urban” areas, four as “accessible rural” areas, and five as “remote rural” areas. None were classed in the “accessible small towns” or “remote small towns” groups. The mean per capita Local Authority expenditure on intellectual disabilities services across the urban/rural classes for each of the three year periods is shown in table 3. A statistically significant

difference between the urban/rural classes in Local Authority expenditure was found by one way analysis of variance:  $F=4.15$ ,  $P=0.015$  in 2012/13;  $F=4.76$ ,  $P=0.008$  in 2013/14; and  $F=4.49$ ,  $P=0.011$  in 2014/15), with per capita expenditure higher in rural areas. Tukey test showed that per capita expenditure by Local Authorities was statistically significantly higher in “remote rural” areas compared to “other urban” areas across all three years, with no significant differences between other classes (table 4).

- Insert tables 3 and 4 about here –

Combined Health Board and Local Authority expenditures:

Scotland’s combined health and social care real terms expenditure on adult intellectual disabilities services was £ 975,904,242 in 2012/13; £950,759,710 in 2013/14; £943,692,001 in 2014/15; a decrease of 3.41% in real terms across the three years. There is extensive variation in both the total and the per capita combined health and social care expenditures on adult intellectual disabilities services across Scotland, shown by geographic area in table 5 and figure 3.

- Insert table 5 and figure 3 about here -

The total health and social care real terms expenditure on adult intellectual disabilities services ranged across areas from £3,624,636 to £232,879,896 in 2012/13; £4,344,921 to £219,021,612 in 2013/14; and £3,813,995 to £209,199,740 in 2014/15. There is a large variation in the per capita combined health and social care

expenditure on adult intellectual disabilities services across areas. The per capita expenditure ranged from £38,471 to £86,084 in 2012/13; £36,852 to £92,379 in 2013/14; and £37,703 to £85,929 in 2014/15. Per capita combined health and social care expenditure was considerably greater in NHS Shetland, a “remote rural” area, for each of the three years, and in general, higher for other rural areas, but not consistently so across Scotland e.g. NHS Orkney is also a “remote rural” area, whilst NHS Fife is an “other urban area”.

The mean per capita combined health and social care expenditure on adult intellectual disabilities services across the urban/rural classes for each of the three year periods is shown in table 3. There was no statistically significant difference between the urban/rural classes in per capita combined health and social care expenditure using one way analysis of variance:  $F= 0.44$  ,  $P=0.729$  in 2012/13;  $F= 0.63$ ,  $P=0.615$  in 2013/14; and  $F= 0.42$ ,  $P=0.742$  in 2014/15). The Tukey test also showed no significant differences between the urban/rural classes.

The change in per capita combined health and social care expenditure between 2012/13 and 2014/15 ranged from -£5,607 to £1,881. For five of the areas it had increased over this three year period, but for eight areas it had decreased. Year-on-year reduction in expenditure was seen in two areas, Greater Glasgow and Clyde, which is the largest area in Scotland, accounting for 21.49% of the total Scottish population, and NHS Borders, which is one of the smaller areas.

Based on the size of the whole adult population in Scotland, the cost of the combined adult intellectual disabilities health and social care services to each adult in the general population was £223 in 2012/13, £216 in 2013/14, and £213 in 2014/15. It varies across areas, ranging from £176 to £322 in 2012/13; £175 to £346 in 2013/14; and £182 to £322 in 2014/15 (table 6).

- Insert table 6 about here -

## **Discussion**

Principal findings and interpretation:

Scotland's combined health and social care expenditure on adult intellectual disabilities services was £975,904,242 in 2012/13; £950,759,710 in 2013/14; and £943,692,001 in 2014/15. This is a real term decrease of 3.41% across the three years, and >£32million.

Per capita expenditure varies considerably across the country, revealing a post-code lottery. Whilst expenditure per capita of adult intellectual disabilities may appear a lot (on average £44,265 in 2014/15), the cost to each adult in the general population is not (on average £213 in 2014/15).

Within context, the 4.29% real term decrease in intellectual disabilities health expenditure and 3.02% real term decrease in intellectual disabilities social care expenditure between 2012/13 and 2014/15 sits within a real term decrease of 2.60% in the Scottish health budget between 2012/13 and 2014/15, and real term decrease of 10.69% in Scottish local government budget between



2012/13 and 2014/15. These figures are derived from the GDP deflators by HM Treasury (2014) on the cash terms budgets for 2012/13, 2013/14 and 2014/15 (Scottish Government, 2012; 2013; 2014a). This suggests that compared to expenditure on other services, intellectual disabilities health expenditure is being disproportionately reduced, whereas intellectual disabilities social care expenditure (whilst reduced) is not disproportionately so.

Per capita expenditure on health care was strongly positively correlated with the number of adults with intellectual disabilities in 2012/13. However, this relationship was not seen for health care expenditure in 2013/14 and 2014/15, nor for social care expenditure across all the three years, suggesting no consistent economy of scale for the larger Health Boards or Local Authorities.

We do not know if, or the extent to which these real term decreases in expenditure on intellectual disabilities services have impacted on health and social inequalities experienced by adults with intellectual disabilities. Having identified the decrease in expenditure, it will be important to further investigate this. Additionally, we do not yet know the impact, if any, that budgetary integration will have on expenditure nor on health and social inequalities. We do however, now have baseline data against which changes may be measured.

Health Board per capita expenditure is less in “remote rural” and “accessible rural” area than urban areas, significantly so for “remote rural” areas compared with “large urban” and “other urban” areas.

Conversely, Local Authority per capita expenditure is greater in

“remote rural” and “accessible rural” areas than urban areas, significantly so for “remote rural” areas compared with “other urban” areas. This may be explained as social care is needed every day so needs to be delivered locally with greater cost in remote rural areas due to distances covered, whereas it may be possible to travel for health care even though it is less accessible. Indeed there is comprehensive coverage of multi-disciplinary intellectual disabilities community teams across the “large urban” and “other urban” areas in Scotland, but limited services in “remote rural” areas, many relying on intellectual disabilities nursing only. Though not significant, combined health and social care costs were marginally greater in “other urban” compared to “large urban” areas, maybe due to delivering comprehensive intellectual disabilities services but in less compact areas than for the “large urban” areas. It should be noted though, that the social care finding was disproportionately influenced by the Shetland islands who are an outlier for per capita expenditure on social care; it is not mirrored to such an extent in the other “remote rural” areas, the Orkney islands, Eilean Siar (Western isles), Highland, or Argyll and Bute, although three of these four are all above the mean per capita expenditure for Scotland, and the other (Highlands) is approximately at the mean. Hence per capita social care expenditure is more in “remote rural” areas, reflecting the particular challenges these areas face in delivering care to very dispersed communities.

These urban/rural findings for health mirror those previously reported for England (Forsyth and Winterbottom, 2002), but differ

with regards to social care (Moscone, 2011). A previous report from Scotland found that adults with intellectual disabilities living in rural areas had more contact with primary and secondary health care services, and dentists and opticians, than adults with intellectual disabilities in a large urban area (Nicholson & Cooper, 2011). Our study has examined specifically intellectual disabilities health services, rather than the generic health services studied by Nicholson & Cooper (2011), accounting for this difference. It seems that in rural areas, there is a greater reliance on generic health services.

In Scotland, out of area placements are a very small percentage of the total population of adults with intellectual disabilities and so have negligible effect on population estimates. Learning Disability Statistics Scotland (Scottish Consortium for Learning Disability, 2017) report that only 3.6% of adults with intellectual disabilities known to Scottish Local Authorities are subject to out of area placements. Therefore these do not have any significant impact on the per capita spending figures. Scotland differs from e.g. England in this respect, as none of the Local Authorities are exclusively areas of prohibitive housing costs; and remote and rural island and highland communities would be very unlikely recipients of out of area placements.

Whilst the 2007/2008 financial crisis spread across much of the world, government responses to it have differed. Our results are set within the UK context of an austerity programme, so may not reflect

experiences in other countries. However, our study findings are important and have implications for policy developments across high income countries.

#### Strengths and Limitations:

The study does have limitations. The individual proportions of health and social care expenditure out of combined health and social care varied considerably across Scotland, no doubt influenced by local factors which studies such as ours cannot capture. There may be some differences in recording expenditure in different Health Boards or Local Authorities, which we are not able to identify from our secondary analysis of Scottish Government routinely collected administrative expenditure data submitted by each Health Board and Local Authority. Our study was restricted to adults only, as it is not possible to disaggregate expenditure on child/young persons intellectual disabilities services as across Scotland, this is integrated within expenditure on children's services more widely. Regarding our estimates of Scotland's population with intellectual disabilities, it is possible, but we think unlikely, that the proportion of people with intellectual disabilities within the general population has marginally fallen over the three year study period; indeed it may have risen if the extent of the inequality gap in lifespan reduced. Hence, we do not think this would make any meaningful difference on measures of per capita expenditure i.e. we do not think we are over- or under-estimating the intellectual disabilities population size, and we consider our methodological approach to be the best

possible. Importantly, in support of this approach, it should be noted that Scotland has not been subject to immigration at the same levels as some other European countries. The study's strengths are the inclusion of the whole of the country, contemporaneous records of actual expenditure which was adjusted for inflation to allow yearly comparisons, and the uniqueness of Scotland's Census, 2011, in identifying all adults with intellectual disabilities in the country, hence allowing per capita expenditure to be calculated.

#### Conclusion:

We conclude that austerity has impacted on Scotland's expenditure on adult intellectual disabilities services, by not keeping abreast of rises in living costs, and with much variation across areas. With the exception of social care expenditure in "remote rural" areas, the variation in expenditure across Scotland – a post-code lottery – is of particular concern, suggesting that health and social care is not equitable across the country for adults with intellectual disabilities. In Scotland, health and social care integration was effected in 2016, with Integration Authorities responsible for funding local services, previously separately managed by NHS Health Boards and Local Authorities. The full benefits and disadvantages of the new arrangements are yet to be seen; we now have baseline expenditure data for the whole country with which trends/changes post-integration can be measured, to support future research on health and social care outcomes.

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**Table 1: Total and per capita expenditures on adult intellectual disabilities services by Scottish Health Boards in 2012/13, 2013/14, 2014/15**

Health Board	Total health care expenditure (real terms expenditure in 2014-15 terms, £)			Per capita health care expenditure (real terms expenditure in 2014-15 terms, £)		
	2012/13	2013/14	2014/15	2012/13	2013/14	2014/15
NHS Ayrshire & Arran	17,441,892	17,203,234	17,021,884	10,167	10,035	9,941
NHS Borders	4,635,763	4,937,606	4,858,455	9,539	10,140	9,966
NHS Dumfries & Galloway	8,153,682	8,430,424	8,898,810	13,685	14,160	14,948
NHS Fife	24,416,915	22,797,092	22,622,878	19,072	17,768	17,595
NHS Forth Valley	11,687,895	11,861,670	12,257,535	10,551	10,667	10,952

<b>NHS Grampian</b>	<b>24,931,907</b>	<b>24,983,212</b>	<b>25,046,742</b>	<b>12,225</b>	<b>12,133</b>	<b>12,075</b>
<b>NHS Greater Glasgow &amp; Clyde</b>	<b>77,633,539</b>	<b>75,111,798</b>	<b>68,101,740</b>	<b>15,147</b>	<b>14,610</b>	<b>13,166</b>
<b>NHS Highland</b>	<b>6,869,270</b>	<b>6,170,812</b>	<b>6,100,538</b>	<b>5,439</b>	<b>4,866</b>	<b>4,800</b>
<b>NHS Lanarkshire</b>	<b>30,611,680</b>	<b>30,104,291</b>	<b>29,726,524</b>	<b>12,153</b>	<b>11,926</b>	<b>11,750</b>
<b>NHS Lothian</b>	<b>33,509,781</b>	<b>32,496,546</b>	<b>33,332,905</b>	<b>10,726</b>	<b>10,314</b>	<b>10,467</b>
<b>NHS Orkney</b>	<b>514,881</b>	<b>500,251</b>	<b>496,995</b>	<b>5,966</b>	<b>5,778</b>	<b>5,718</b>
<b>NHS Shetland</b>	<b>77,888</b>	<b>168,177</b>	<b>85,848</b>	<b>1,105</b>	<b>2,379</b>	<b>1,211</b>
<b>NHS Tayside</b>	<b>20,444,883</b>	<b>20,567,817</b>	<b>21,637,147</b>	<b>11,924</b>	<b>11,946</b>	<b>12,514</b>

All of Scotland*	260,929,976	255,332,930	250,188,001	12,350	12,036	11,735
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\*Excluding NHS Western isles

**Table2: Total and per capita expenditures on adult intellectual disabilities services by Scottish Local Authorities in 2012/13, 2013/14, 2014/15**

Local Authority	Total social care expenditure (real terms expenditure in 2014-15 terms, £)			Per capita social care expenditure (real terms expenditure in 2014-15 terms, £)		
	2012/13	2013/14	2014/15	2012/13	2013/14	2014/15
Aberdeen City	31,436,882	30,776,646	31,506,000	37,247	36,152	36,773
Aberdeenshire	40,393,799	42,078,294	41,331,000	48,891	50,446	49,156
Angus	12,454,488	11,894,228	11,604,000	25,732	24,471	23,787
Argyll & Bute	14,525,595	14,672,457	14,266,000	48,121	48,196	47,065
Clackmannanshire	4,579,539	4,164,299	4,431,000	27,985	25,450	27,006

<b>Dumfries &amp; Galloway</b>	<b>23,989,975</b>	<b>22,786,955</b>	<b>23,357,000</b>	<b>40,320</b>	<b>38,327</b>	<b>39,289</b>
<b>Dundee City</b>	<b>20,528,504</b>	<b>20,717,997</b>	<b>22,396,000</b>	<b>29,971</b>	<b>30,205</b>	<b>32,643</b>
<b>East Ayrshire</b>	<b>16,349,159</b>	<b>18,183,294</b>	<b>15,682,000</b>	<b>28,740</b>	<b>31,998</b>	<b>27,621</b>
<b>East Dunbartonshire</b>	<b>16,459,522</b>	<b>16,476,581</b>	<b>15,224,000</b>	<b>45,538</b>	<b>45,348</b>	<b>41,690</b>
<b>East Lothian</b>	<b>12,945,448</b>	<b>17,296,453</b>	<b>16,463,000</b>	<b>32,407</b>	<b>42,991</b>	<b>40,567</b>
<b>East Renfrewshire</b>	<b>12,459,645</b>	<b>12,467,530</b>	<b>12,943,000</b>	<b>35,580</b>	<b>35,356</b>	<b>36,449</b>
<b>Edinburgh City</b>	<b>62,852,104</b>	<b>63,172,741</b>	<b>63,940,000</b>	<b>36,463</b>	<b>36,298</b>	<b>36,325</b>
<b>Eilean Siar</b>	<b>3,414,025</b>	<b>3,563,601</b>	<b>3,806,000</b>	<b>35,303</b>	<b>36,988</b>	<b>39,695</b>

<b>Falkirk</b>	<b>15,736,491</b>	<b>16,123,468</b>	<b>17,874,000</b>	<b>25,771</b>	<b>26,301</b>	<b>29,013</b>
<b>Fife</b>	<b>59,942,446</b>	<b>55,670,103</b>	<b>56,451,000</b>	<b>46,823</b>	<b>43,390</b>	<b>43,906</b>
<b>Glasgow City</b>	<b>80,975,318</b>	<b>71,639,338</b>	<b>68,617,000</b>	<b>27,838</b>	<b>24,528</b>	<b>23,292</b>
<b>Highland</b>	<b>34,194,919</b>	<b>25,893,944</b>	<b>28,440,000</b>	<b>35,806</b>	<b>27,047</b>	<b>29,573</b>
<b>Inverclyde</b>	<b>11,354,986</b>	<b>9,397,070</b>	<b>8,929,000</b>	<b>26,670</b>	<b>22,161</b>	<b>21,147</b>
<b>Midlothian</b>	<b>10,411,230</b>	<b>9,672,051</b>	<b>10,332,000</b>	<b>26,634</b>	<b>24,471</b>	<b>25,755</b>
<b>Moray</b>	<b>11,570,555</b>	<b>11,828,273</b>	<b>10,242,000</b>	<b>31,513</b>	<b>31,818</b>	<b>27,334</b>
<b>North Ayrshire</b>	<b>15,080,503</b>	<b>15,283,302</b>	<b>14,899,000</b>	<b>24,757</b>	<b>25,122</b>	<b>24,527</b>



<b>North Lanarkshire</b>	<b>48,230,586</b>	<b>44,058,974</b>	<b>44,813,000</b>	<b>37,326</b>	<b>34,035</b>	<b>34,537</b>
<b>Orkney Islands</b>	<b>3,109,754</b>	<b>3,844,671</b>	<b>3,317,000</b>	<b>36,234</b>	<b>44,657</b>	<b>38,374</b>
<b>Perth &amp; Kinross</b>	<b>15,362,083</b>	<b>15,309,684</b>	<b>16,218,000</b>	<b>28,326</b>	<b>28,039</b>	<b>29,447</b>
<b>Renfrewshire</b>	<b>22,569,699</b>	<b>21,557,147</b>	<b>22,859,000</b>	<b>29,289</b>	<b>27,941</b>	<b>29,530</b>
<b>Scottish Borders</b>	<b>20,846,183</b>	<b>20,275,591</b>	<b>18,595,000</b>	<b>42,906</b>	<b>41,647</b>	<b>38,154</b>
<b>Shetland Islands</b>	<b>5,989,500</b>	<b>6,361,109</b>	<b>6,004,000</b>	<b>84,090</b>	<b>89,058</b>	<b>83,831</b>
<b>South Ayrshire</b>	<b>17,126,855</b>	<b>17,294,423</b>	<b>16,956,000</b>	<b>31,892</b>	<b>32,197</b>	<b>31,600</b>
<b>South Lanarkshire</b>	<b>36,545,543</b>	<b>36,333,103</b>	<b>36,444,000</b>	<b>30,377</b>	<b>30,113</b>	<b>30,122</b>

<b>Stirling</b>	<b>11,293,101</b>	<b>11,188,002</b>	<b>10,614,000</b>	<b>33,995</b>	<b>33,480</b>	<b>31,412</b>
<b>West Dunbartonshire</b>	<b>11,427,186</b>	<b>12,372,149</b>	<b>12,526,000</b>	<b>30,232</b>	<b>32,823</b>	<b>33,262</b>
<b>West Lothian</b>	<b>14,232,669</b>	<b>16,636,902</b>	<b>16,231,000</b>	<b>24,692</b>	<b>28,728</b>	<b>27,804</b>
<b>All of Scotland</b>	<b>718,388,291</b>	<b>698,990,381</b>	<b>697,310,000</b>	<b>33,851</b>	<b>32,805</b>	<b>32,568</b>

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**Table 3: Mean per capita expenditure on intellectual disabilities services across the urban/rural classes for 2012/13, 2013/14, 2014/15**

Urban/rural class	Mean per capita health care expenditure (real terms expenditure in 2014-15 terms, £)			Mean per capita social care expenditure (real terms expenditure in 2014-15 terms, £)			Mean per capita combined health and social care expenditure (real terms expenditure in 2014-15 terms, £)		
	2012/13	2013/14	2014/15	2012/13	2013/14	2014/15	2012/13	2013/14	2014/15
Large urban areas (Class 1)	12,435	12,186	11,994	34,387	33,632	33,833	45,472	44,724	44,411
Other urban areas (Class 2)	13,369	13,158	13,359	30,194	29,589	29,460	49,350	48,052	48,438
Accessible rural areas (Class 5)	9,539	10,140	9,966	38,929	41,725	38,803	52,436	51,777	48,112

Remote rural areas	4,170	4,341	3,910	47,911	49,189	47,707	57,364	59,806	56,071
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(Class 6)

All of Scotland*	10,592	10,517	10,393	35,233	35,306	34,709	49,945	49,771	48,625
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\*Excluding NHS Western Isles for health care expenditure

**Table 4: Tukey post-hoc test showing only statistically significant differences in mean per capita expenditure across the urban/rural classes for 2012/13, 2013/14, 2014/15**

Major urban/rural class	Year	Contrast	Std. Error	P value	Lower 95% CI	Upper 95% CI
<b>Health Boards</b>						
6 vs 1	2012/13	-8265.080	2118.036	0.016	-14877.160	-1652.998
6 vs 1	2013/14	-7844.741	1787.247	0.008	-13424.170	-2265.316
6 vs 1	2014/15	-8084.713	1777.680	0.006	-13634.270	-2535.155
6 vs 2	2012/13	-9199.120	2215.095	0.011	-16114.200	-2284.039
6 vs 2	2013/14	-8816.501	1869.148	0.005	-14651.600	-2981.398

<b>6 vs 2</b>	<b>2014/15</b>	<b>-9449.208</b>	<b>1859.142</b>	<b>0.003</b>	<b>-15253.080</b>	<b>-3645.341</b>
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**Local Authorities**

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<b>6 vs 2</b>	<b>2012/13</b>	<b>17716.940</b>	<b>5160.587</b>	<b>0.010</b>	<b>3626.926</b>	<b>31806.950</b>
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<b>6 vs 2</b>	<b>2013/14</b>	<b>19600.280</b>	<b>5535.511</b>	<b>0.007</b>	<b>4486.607</b>	<b>34713.940</b>
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<b>6 vs 2</b>	<b>2014/15</b>	<b>18247.880</b>	<b>5124.383</b>	<b>0.007</b>	<b>4256.722</b>	<b>32239.050</b>
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**Table 5: Total and per capita expenditures on combined adult intellectual disabilities health and social care services by geographic (Health Board) area, 2012/13, 2013/14, 2014/15**

Geographic area	Total health and social care expenditure (real terms expenditure in 2014-15 terms, £)			Per capita health and social care expenditure (real terms expenditure in 2014-15 terms, £)		
	2012/13	2013/14	2014/15	2012/13	2013/14	2014/15
NHS Ayrshire & Arran	65,998,410	67,964,253	64,558,884	38,471	39,646	37,703
NHS Borders	25,481,946	25,213,196	23,453,455	52,436	51,777	48,112
NHS Dumfries & Galloway	32,143,656	31,217,380	32,255,810	53,950	52,435	54,183
NHS Fife	84,359,362	78,467,195	79,073,878	65,893	61,156	61,499

<b>NHS Forth Valley</b>	<b>43,297,025</b>	<b>43,337,440</b>	<b>45,176,535</b>	<b>39,087</b>	<b>38,973</b>	<b>40,365</b>
<b>NHS Grampian</b>	<b>108,333,143</b>	<b>109,666,425</b>	<b>108,125,742</b>	<b>53,119</b>	<b>53,259</b>	<b>52,127</b>
<b>NHS Greater Glasgow &amp; Clyde</b>	<b>232,879,896</b>	<b>219,021,612</b>	<b>209,199,740</b>	<b>45,436</b>	<b>42,601</b>	<b>40,443</b>
<b>NHS Highland</b>	<b>55,589,784</b>	<b>46,737,214</b>	<b>48,806,538</b>	<b>44,011</b>	<b>36,852</b>	<b>38,404</b>
<b>NHS Lanarkshire</b>	<b>115,387,809</b>	<b>110,496,368</b>	<b>110,983,524</b>	<b>45,808</b>	<b>43,775</b>	<b>43,870</b>
<b>NHS Lothian</b>	<b>133,951,232</b>	<b>139,274,694</b>	<b>140,298,905</b>	<b>42,877</b>	<b>44,205</b>	<b>44,058</b>
<b>NHS Orkney</b>	<b>3,624,636</b>	<b>4,344,921</b>	<b>3,813,995</b>	<b>41,997</b>	<b>50,186</b>	<b>43,878</b>
<b>NHS Shetland</b>	<b>6,067,388</b>	<b>6,529,286</b>	<b>6,089,848</b>	<b>86,084</b>	<b>92,379</b>	<b>85,929</b>



<b>NHS Tayside</b>	<b>68,789,957</b>	<b>68,489,726</b>	<b>71,855,147</b>	<b>40,119</b>	<b>39,779</b>	<b>41,558</b>
<b>All of Scotland*</b>	<b>975,904,242</b>	<b>950,759,710</b>	<b>943,692,001</b>	<b>46,191</b>	<b>44,817</b>	<b>44,265</b>

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**\*Excluding NHS Western Isles**

**Table 6: Total expenditure on combined adult intellectual disabilities health and social care services by total adult population in each geographic (Health Board) area, 2012/13, 2013/14, 2014/15**

Geographic area	Total expenditure per adult in the general population (real terms expenditure in 2014-15 terms, £)		
	2012/13	2013/14	2014/15
NHS Ayrshire & Arran	213	220	209
NHS Borders	269	266	247
NHS Dumfries & Galloway	255	248	256
NHS Fife	279	259	260

<b>NHS Forth Valley</b>	<b>176</b>	<b>175</b>	<b>182</b>
<b>NHS Grampian</b>	<b>226</b>	<b>227</b>	<b>222</b>
<b>NHS Greater Glasgow &amp; Clyde</b>	<b>246</b>	<b>231</b>	<b>219</b>
<b>NHS Highland</b>	<b>209</b>	<b>175</b>	<b>183</b>
<b>NHS Lanarkshire</b>	<b>216</b>	<b>207</b>	<b>207</b>
<b>NHS Lothian</b>	<b>191</b>	<b>196</b>	<b>196</b>
<b>NHS Orkney</b>	<b>201</b>	<b>241</b>	<b>210</b>
<b>NHS Shetland</b>	<b>322</b>	<b>346</b>	<b>322</b>

<b>NHS Tayside</b>	<b>200</b>	<b>199</b>	<b>207</b>
<b>All of Scotland*</b>	<b>223</b>	<b>216</b>	<b>213</b>

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**\*Excluding NHS Western Isles**

Figure 1: Per capita real terms expenditure on adult intellectual disabilities services by Scottish Health Boards, 2012/13, 2013/14, 2014/15

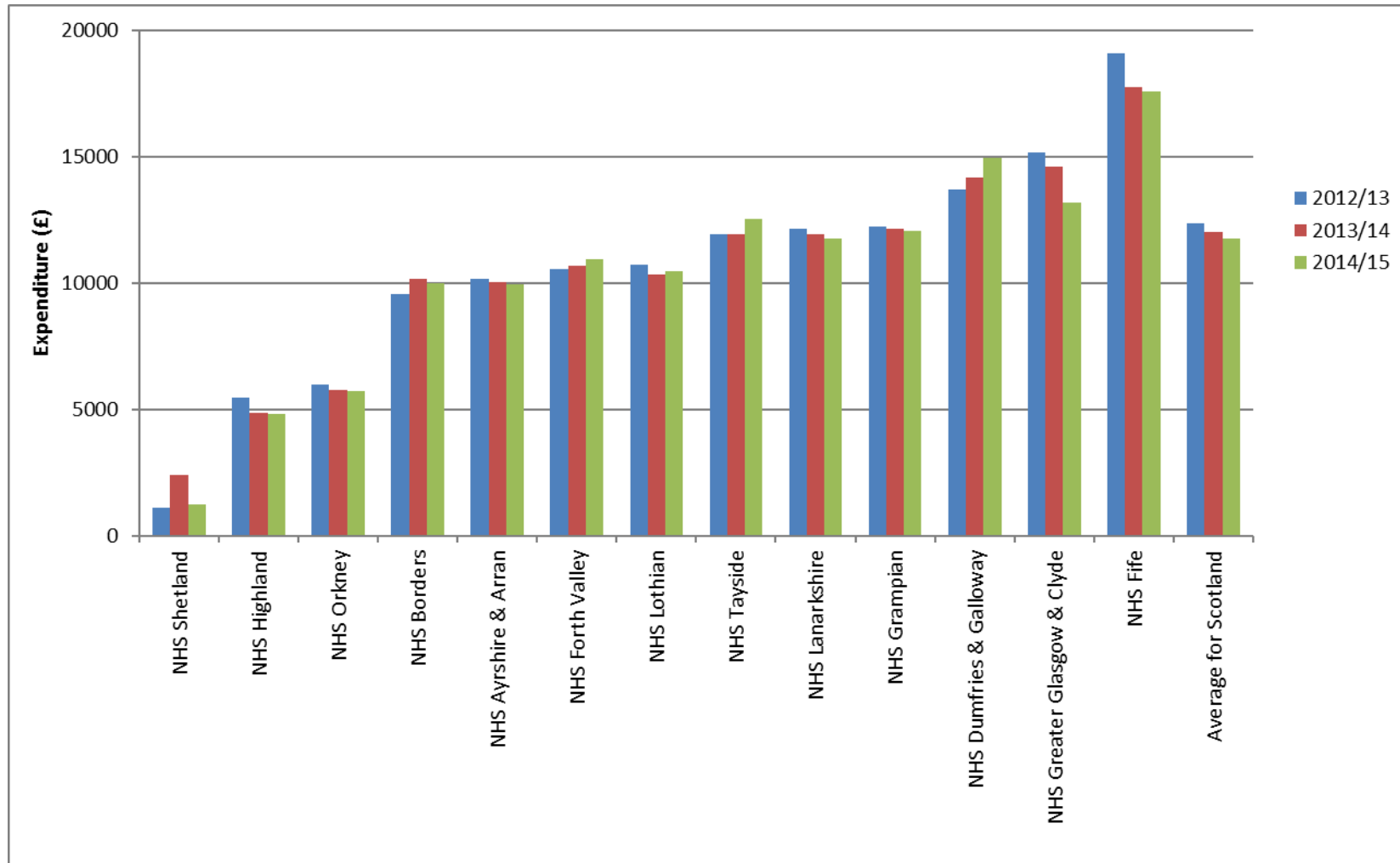
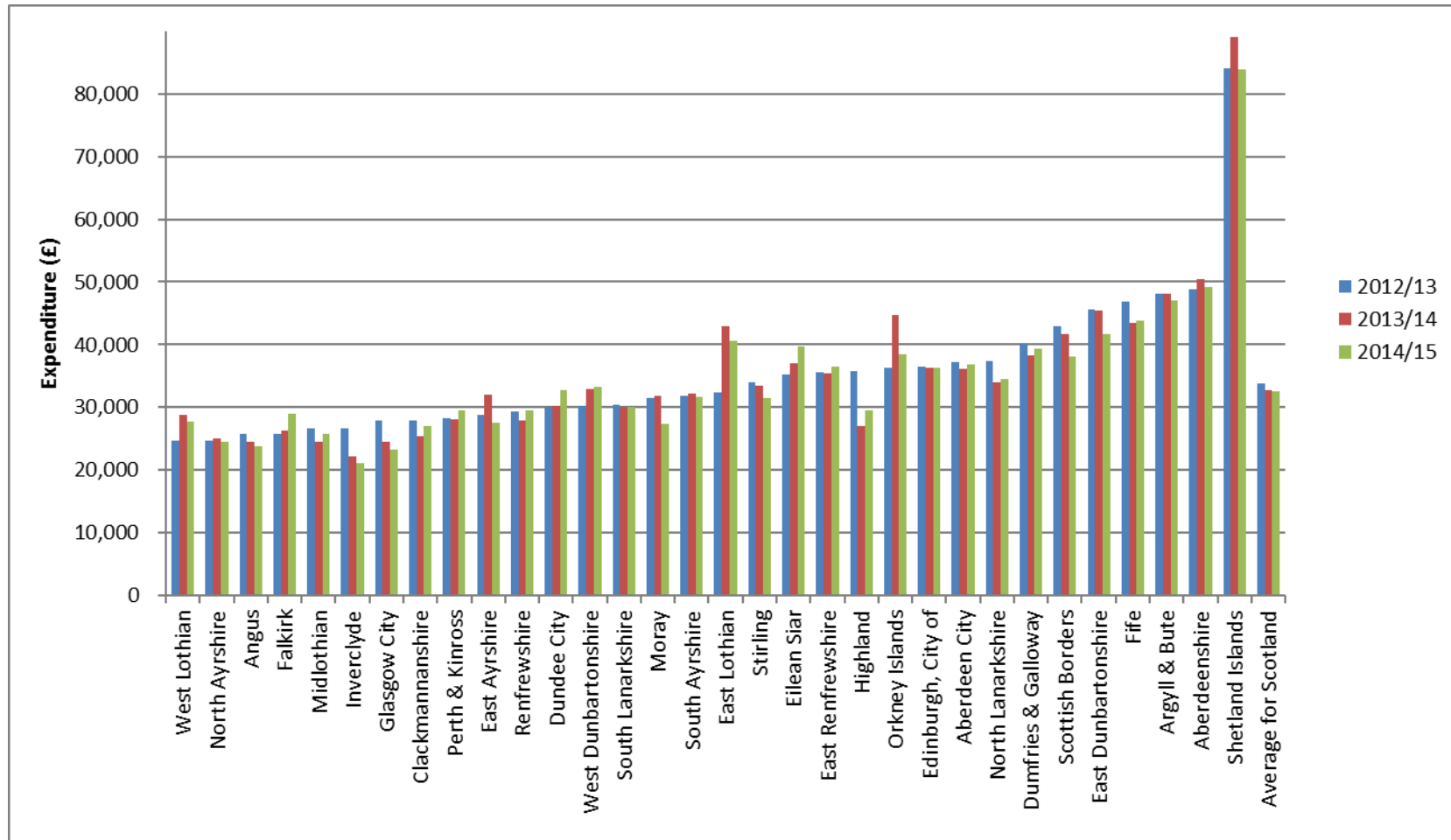


Figure 2: Per capita real terms expenditure on adult intellectual disabilities services by Scottish Local Authorities, 2012/13, 2013/14, 2014/15



**Figure 3: Per capita real terms expenditure on combined adult intellectual disabilities health and social care services by geographic (Health board) area, 2012/13, 2013/14, 2014/15**

