The Economic Value of the Adult Social Care sector - Northern Ireland

Final report

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Contents

Abbreviations

Acronyms and definitions

Acronym	Full title
ABS	Annual Business Survey
APS	Annual Population Survey
ASHE	Annual Survey of Hours and Earnings
CH	Companies House
CQC	Care Quality Commission
EBITDAR	Earnings before interest, taxes, depreciation, amortization, and restructuring or rent costs
EBITDA	Earnings before interest, taxes, depreciation, amortization
FTE	Full-Time Equivalent 37 hours a week)
GVA	Gross Value Added
IDBR	Inter-Departmental Business Register
HSCB	Health and Social Care Board
I-O Tables	Input-Output tables
LFS	Labour Force Survey
NISCC	Northern Ireland Social Care Council
NMDS-SC	National Minimum Dataset - Social Care
ONS	Office for National Statistics
PA	Personal Assistant
PAYE	Pay As You Earn
PSSRU	Personal Social Services Research Unit
SfC	Skills for Care
SfCD	Skills for Care and Development
SIC	Standard Industrial Classification

Definitions of key terms

Key term	Definition
Agency	An organisation which provides temporary workers to service providers
Community Care	Social care services that take place out in the community and not in a fixed location
Day Care	Care provided for service users in a day care centre (non-residential) or the provision of activities outside the home
Direct Payment Recipient	An individual who receives payment from the Government or local authority to pay for their own care, rather than having prescribed care provided to them
Direct jobs / employment	All jobs or employment in the adult social care sector
Domiciliary care	Care provided in a service users own or family home
GVA	The measure of the value of goods and services produced by an economy. It is output minus intermediate consumption

Key term	Definition
Independent	Private and voluntary sector providers of adult social care
Indirect jobs / employment	All jobs or employment resulting from the purchase of intermediate goods and services by the adult social care sector
Induced jobs / employment	All jobs or employment resulting from purchases made by those directly and indirectly employed in the adult social care sector
Non-regulated	Employers in the adult social care sector which are not subject to inspections or regulation
Nursing Care	Care provided in a residential setting which requires nursing care
Private	Employers in the adult social care sector owned by for profit private enterprises
Public	Employers in the adult social care sector owned and operated by the Government local authorities and the NHS
Regulated	Employers in the adult social care sector which are inspected and regulated by the national social care inspectors
Residential care	Care provided in a residential setting rather than in a service users' own or family home
Service User	An individual who uses adult social care services
Voluntary	Providers in the adult social care sector run by for not-for-profit organisations

Executive summary

Key Findings

Sector characteristics

- An estimated 870 sites were involved in providing adult social care in Northern Ireland in 2016. Most of these sites provided domiciliary care;
- There were an estimated 38,500 jobs in the adult social care sector in Northern Ireland in 2016. Most of these jobs were involved in providing residential and nursing care, as these sectors could not be separated in the data. The largest number of jobs in an individual sector were in the domiciliary care sector;
- There were an estimated 28,900 Full-Time Equivalents (FTEs) in the adult social care sector in Northern Ireland;
- Most of the adult social care workforce were employed at sites run by private sector providers (290);
- The level of employment in the adult social care sector represents 5% of total employment in Northern Ireland; and
- The average earnings in the adult social care sector in Northern Ireland was estimated to be £16,400.

Economic value of the sector (using the income approach)

- It was estimated that in 2016, adult social care sector GVA was £544 million. Most of this was estimated to be in residential and nursing care sectors combined (£270 million, 50%). The largest proportion of GVA in an individual sector was in the domiciliary care sector (£195 million, 36%);
- This represents 1.4% of total GVA in Northern Ireland;
- It was estimated that the average level of productivity (GVA generated per FTE) in the adult social care sector was £18,800; and
- The estimated GVA in the adult social care sector in Northern Ireland was estimated to be higher than the; Agriculture, forestry & fishing; Arts, entertainment & recreation and Electricity, gas and steam sectors.

Indirect and induced value of the sector (using the income approach)

- The indirect effect of the adult social care sector (resulting from the purchase of intermediate goods and services by the adult social care sector in delivering its services) was estimated to contribute a further 11,100 jobs (8,400 FTEs) and £156 million of GVA to the Northern Irish economy;
- The induced effect of the adult social care sector (resulting from purchases made by those directly and indirectly employed in the adult social care sector) was estimated to contribute a further 21,800 jobs (16,400 FTEs) and £308 million of GVA to the Northern Irish economy; and
- The total direct, indirect and induced value of the adult social care sector in Northern Ireland was estimated to be 71,400 jobs (53,700 FTEs) and £1.0 billion in 2016.

Introduction

Skills for Care and Development (SfCD) required robust estimates of the economic value of the adult social care sector in each of the four nations of the UK. This included:

- The annual Gross Value Added (GVA) generated directly by the adult social care sector (including public sector activities within the sector as well as the independent sector) (direct impact);
- The supply chain multiplier for the adult social care sector (indirect impact); and
- The wage multiplier for the adult social care sector (induced impact).

This report provides estimates for these research aims for Northern Ireland. It also provides estimates of employment due to the adult social care sector (direct, indirect and induced employment) and the level of productivity in the sector (GVA per worker).

Sector characteristics

Throughout this research, consideration was given to how to define the adult social care sector (either including all businesses in the relevant Standard Industrial Classification (SIC) divisions that deliver care services, or to focus on regulated services). After a detailed analysis of the data for this research it was judged that it was not possible to robustly identify services not regulated by Regulation and Quality Improvement Authority (RQIA) from the data. Therefore, only services regulated by RQIA (and the jobs in these services) are presented here.

It is also important to note that these figures do not capture Personal Assistants (PAs) employed directly by recipients of direct payments or those people who are self-funding their care, as data was not available to support inclusion.

The adult social care sector is made up of public, private and voluntary sector service providers. Some providers offer more than one service at a site (for example offering residential and nursing care at the same site). Therefore, the total number of sites does not equal the sum of the services delivered at the sites. Nearly 900 sites provide adult social care services (providing nearly 1,000 services), and most of these sites (51%) are run by private service providers. The largest number of sites (340) provide domiciliary care. The total number of sites providing adult social care in Northern Ireland is summarised in Table ES1.1.

Table ES1.1 Estimated number of sites providing adult social care in Northern Ireland - 2016

Type of service	Number of sites where services are provided[1]
Residential care	200
Nursing care	260
Domiciliary care	340
Day care	180
Other services	-
Direct employers	-
Total	**870**

All numbers rounded to nearest 10. Totals may not equal the sum of services due to rounding.

There were estimated to be 38,500 jobs (28,900 Full Time Equivalents, FTEs) in the adult social care sector in Northern Ireland in 2016. This includes jobs providing care to service users as well as support staff (for example office workers, security and cleaners). Most of these were in the private sector (56%). Most jobs were in the combined residential and nursing care sector, however the largest number of jobs in an individual sector was in the

[1] Some sites offer more than one service, therefore the total number of sites is less than the sum of the different types of service.

domiciliary care sector. The total number of jobs and FTE by type of provision is presented in Table ES1.2.

Table ES1.2 Estimated total number of jobs in the adult social care sector in Northern Ireland - 2016

Type of service	Jobs	FTE
Residential care	18,400	13,800
Nursing care[2]	-	-
Domiciliary care	15,200	11,300
Day care	2,800	2,100
Other services	2,100	1,600
Direct employers	-	-
Total	**38,500**	**28,900**

All numbers rounded to nearest 100. Totals may not equal the sum of services due to rounding.

Direct economic value of the adult social care sector

The direct economic value of the adult social care sector has been estimated using three different approaches: the input approach; the expenditure approach; and the output approach. This was to increase the robustness of the estimates, as there were strengths and weaknesses with the availability and quality of the data required for each approach.

Income approach

The income approach estimates the total income received by representatives of the sector in the form of wages and other income. These types of income were estimated using earnings (for wages) and the Gross Operating Surplus (GOS) generated in the sector (for other income). In the case of the adult social care sector, the large majority of income in the sector will be earned in wages paid to social care workers.

Table ES1.3 presents the results using the income approach. In Northern Ireland in 2016, it was estimated that adult social care GVA was £544 million using this approach. The largest proportion of GVA was estimated to be in the residential and nursing care sectors (50% of the total value of the sector).

[2] The Social Care Council register does not differentiate between Adult Residential and Nursing Care for workers providing care to service users. Therefore, the total number of jobs (including support staff) in both sectors are presented in the residential care category.

Table ES1.3 Earnings estimates of adult social care and related GVA

	Earnings (£'000)	GOS (£'000)	GVA estimates (£'000)
Residential care	221,806	48,114	269,920
Nursing care[3]	-	-	-
Domiciliary care	173,638	21,643	195,281
Day care	37,454	-	37,454
Other services	41,679	-	41,679
Personal Assistants	-	-	-
Total	**474,577**	**69,757**	**544,333**

Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

Expenditure approach

The expenditure approach involves estimating the total level of expenditure on adult social care in Northern Ireland (public and private funding). This is then converted to GVA (turnover less purchase of intermediate goods and services) based on turnover (represented by expenditure) to GVA ratios provided in the Annual Business Survey (ABS).

Table ES1.4 presents the results using the expenditure approach. In Northern Ireland in 2016, it is estimated that adult social care GVA was £605 million using this approach. The largest proportion of GVA is estimated to be in the nursing care sectors (43% of the total value of the sector).

Table ES1.4 Expenditure estimates of adult social care and related GVA

	Total expenditure (£'000)	Turnover to GVA ratio	GVA (£'000)
Residential care	158,966	74%	117,133
Nursing care	337,993	76%	257,762
Domiciliary care	202,661	43%	86,511
Day care	92,888	43%	39,652
Other services	148,053	61%	90,593
Direct payments	22,082	61%	13,512
Total	**962,643**		**605,163**

Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

Output approach

The output approach measures the output of the sector by estimating the number of units of each type of service provided, and multiplying this by a unit cost for the service. This estimates the total level of output (the equivalent of turnover) in the sector, which is then converted to GVA.

Table ES1.5 presents the results using the output approach. In Northern Ireland in 2016, it was estimated that adult social care GVA was £551 million using this approach. The largest proportion of GVA was estimated to be in the nursing care sectors (40% of the total value of the sector).

[3] The Social Care Council register does not differentiate between Adult Residential and Nursing Care for workers providing care to service users. Therefore, the total number of jobs (including support staff) in both sectors are presented in the residential care category.

Table ES1.5 Output estimates of adult social care and related GVA

	Total output (£'000)	Turnover to GVA ratio	GVA (£'000)
Residential care	110,566	74%	81,470
Nursing care	291,904	76%	222,614
Domiciliary care	302,601	43%	129,174
Day care	62,817	43%	26,815
Other services	138,000	61%	84,441
Direct payments	14,383	43%	6,140
Total	**920,270**		**550,653**

Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

Indirect and induced economic value of the adult social care sector

The estimations above describe the direct economic value of the adult social care sector. The sector also contributes to the economy through:

- **Indirect effects** - resulting from the purchase of intermediate goods and services by the adult social care sector in delivering its services, which support additional employment and GVA within its supply chain; and
- **Induced effects** - resulting from purchases made by those directly and indirectly employed in the adult social care sector, who use their earnings to buy other goods and services.

It was estimated that the indirect effects of intermediate purchases made by the adult social care sector contribute an additional 11,100 jobs[4] and between £156 million and £173 million of GVA in Northern Ireland.

The induced effects (associated with the purchases of goods and services by individuals directly or indirectly employed by the sector) were estimated to support a further 22,000 jobs and £308 million to £342 million of GVA in the wider economy. These are larger in size to the indirect effects.

Key indicators

The key findings from the research are presented in Table ES1.6. This presents estimates which show that:

- There are an estimated 38,500 jobs in the adult social care sector, and 28,900 FTEs. These jobs generated between £532 million and £605 million in GVA, and the level of productivity (GVA per worker) was estimated to be between £18,800 and £20,900 per FTE.
- The indirect effect of the adult social care sector was estimated to be over 11,000 jobs (over 8,000 FTEs) and between £156 million and £173 million in GVA. The indirect effect is due to the purchase of intermediate goods and services by the adult social care sector.
- The induced effect of the adult social care sector (additional spending by those directly and indirectly employed through the adult social care sector) was estimated to be the 22,000 jobs (over 16,000 FTEs) and between £308 million and £342 million of GVA.

[4] These are jobs, not FTE

The total direct, indirect and induced value of the adult social care sector in Northern Ireland is estimated to be over 71,000 jobs, nearly 54,000 FTEs and between £1.0 billion and £1.1 billion in GVA.

All employment numbers rounded to nearest 100, productivity numbers rounded to the nearest £100. Totals may not equal the sum of services due to rounding.

Table ES1.6 Summary of findings

	Income approach	Expenditure approach	Output approach
Total direct employment		38,500	
Total FTE employment		28,900	
Total direct GVA (£'000)	544,333	605,163	550,653
Estimated productivity per job (£)	14,200	15,700	14,300
Estimated productivity per FTE (£)	18,800	20,900	19,100
Indirect employment (jobs)		11,100	
Indirect employment (FTE)		8,400	
Induced employment (jobs)		21,800	
Induced employment (FTE)		16,400	
Total jobs due to adult social care activity		71,400	
Total FTEs due to adult social care activity		53,700	
Indirect GVA (£'000)	155,679	173,077	157,487
Induced GVA (£'000)	308,006	342,425	311,581
Total GVA due to adult social care activity (£'000)	**1,008,018**	**1,120,665**	**1,019,721**

All employment numbers rounded to nearest 100, productivity numbers rounded to the nearest £100. Totals may not equal the sum of services due to rounding.

1 Introduction

Skills for Care and Development (SfCD) is the sector skills council for people working in early years, children and young people's services, and those working in social work and social care for adults and children in the UK. They have four partner organisations, one in each nation of the UK. These are Skills for Care (SfC) in England; Northern Ireland Social Care Council (The Social Care Council) in Northern Ireland; Scottish Social Services Council (SSSC) in Scotland; and Social Care Wales in Wales.

SfCD required robust estimates of the economic value of the adult social care sector in each of the four nations of the UK. These estimates will be used in policy discussions and decisions about the sector. The evidence base will demonstrate how the sector contributes to the economy. The estimates may help to influence the views of decision-makers who see social care as a drain or burden to the economy.

1.1 Research aims

The objective for this research was to estimate the economic value of the adult social care sector services in the UK, and the value of the sector in each of the four nations individually. This included:

- The annual Gross Value Added (GVA) generated directly by the adult social care sector (including public sector activities within the sector as well as the independent sector) (direct impact);
- The supply chain multiplier for the adult social care sector (indirect impact); and
- The wage multiplier for the adult social care sector (induced impact).

This report presents additional key metrics which indicate the economic importance of the sector, including:

- Employment (direct employment, indirect and induced employment); and
- Productivity - GVA per worker for the adult social care sector. This is a key metric for the Treasury (HMT) when assessing economic value.

1.2 Purpose of this report

This report presents the estimated economic value of the adult social care sector in Northern Ireland. The economic value of the sector has been calculated using three different approaches: the input approach; the expenditure approach; and the output approach. This was to increase the robustness of the estimates, as there were strengths and weaknesses with the availability and quality of the data required for each of approach.

The methodology used to estimate the economic value of the adult social care sector in Northern Ireland was informed by consultations with the project steering group in Northern Ireland and a review of relevant literature. A detailed mapping of appropriate and available data framed by the agreed methodological framework (see Annex 1) was undertaken. This was followed by the collection of suitable data and the subsequent estimation of the economic value of the sector.

1.3 Structure of this report

The report continues in the following sections:

- Section 2 describes the size and structure of the adult social care sector;
- Section 3 estimates the direct economic value of the adult social care sector using the input approach;
- Section 4 estimates the direct economic value of the adult social care sector using the expenditure approach;
- Section 5 estimates the direct economic value of the adult social care sector using the output approach;
- Section 6 estimates the induced and indirect economic value of the adult social care sector;
- Section 7 presents the conclusions from the research, including the key economic indicators and comparisons to other research and economic sectors.
- Annex 1 provides more details about the methodology used to estimate the economic impact of the adult social care sector in Northern Ireland; and
- Annex 2 shows the results of a sensitivity analysis, where some of the assumptions used in the calculation of the economic value of the sector have been varied.

2 Sector characteristics

This section provides key characteristics for the adult social care sector in Northern Ireland. These characteristics describe the size and structure of the sector in Northern Ireland.

In Northern Ireland, the Department of Health has introduced compulsory registration for all social care workers working with adults and children. This has to a large extent defined the social care sector and workforce regulation aligns with the regulated service sector.

While it is acknowledged that there is a broad range of care-related provision from services which are not regulated (for example befriending schemes or voluntary drop-in centres), the approach taken in this section of the report was to describe the size and structure of the regulated adult social care sector. This approach mirrors the approach taken in a previous study by the Social Care Council (2016) which assessed the economic value of the sector.[5]

In the preparation of both reports, consideration was given to how to define the adult social care sector (either including all businesses in the relevant Standard Industrial Classification (SIC) divisions that deliver care services, or to focus on regulated services). After a detailed analysis of the data for this research it was judged that it was not possible to robustly identify services not regulated by Regulation and Quality Improvement Authority (RQIA) from the data. Therefore, only services regulated by RQIA (and the jobs in these services) are presented here.

It is also important to note that these figures do not capture Personal Assistants (PAs) employed directly by recipients of direct payments or those people who are self-funding their care, as data was not available to support inclusion.

2.1 Number of service providers

Information collected by the RQIA provides data to estimate the number of service providers in Northern Ireland. More details about the methodology are presented in Annex 1.

2.1.1 Service providers

The RQIA collect data of all sites providing regulated care services in Northern Ireland. The types of service provided at these sites is categorised, which means that the number of sites providing each type of regulated adult social care services can be presented. The total number of adult social care services provided was taken from RQIA (2016).[6]

The RQIA also provides a database containing details about the provider, including organisation name, address and postcode. Therefore, it was possible to estimate the number of public, private and voluntary service providers. It was also possible to identify sites that offered multiple adult social care services, and provide estimates

[5] The Social Care Council and Ulster University (2016) Assessing the Economic Value of the Adult Social Care Sector in Northern Ireland.

[6] RQIA (2016) Annual Report and Accounts 2015-2016. The services from the RQIA report used in this analysis were: Adult placements; Day Care; Domiciliary care; Nursing agencies; Nursing homes; and Residential care.

of the number of sites providing adult social care (instead of the number of services).[7]

It is important to note that the primary unit of data collection in the RQIA data is services provided. This is different to the number of sites, as at some sites multiple services are provided (for example, a single site can provide residential and nursing care services). Therefore, the total number of sites does not equal the sum of the services delivered at the sites.

The estimated number of organisations providing adult social care and sites where adult social care is delivered in Northern Ireland is presented in Table 2.1 (this provides 100% coverage of regulated services in Northern Ireland). In summary, it is estimated that there were nearly 900 sites providing regulated adult social care in 2016, which provided nearly 1,000 services. These sites were run by 350 service providers. Most regulated sites were providing domiciliary care (39%). The largest number of sites are run by private sector service providers (440, 51% of regulated providers).

Table 2.1 Number of service providers and sites - regulated employers, 2016

Type of provider	Type of service	Number of service providers	Number of sites providing services[8]

[7] The RQIA register was accessed in November 2017.

Type of provider	Type of service	Number of service providers	Number of sites providing services[8]
Public	Residential care	-	40
	Nursing care	-	-
	Domiciliary care	-	80
	Day care	-	120
	Other services	-	-
	Total	**-**	**220**
Private	Residential care	-	110
	Nursing care	-	250
	Domiciliary care	-	120
	Day care	-	20
	Other services	-	-
	Total	**290**	**440**
Voluntary	Residential care	-	50
	Nursing care	-	10
	Domiciliary care	-	140
	Day care	-	40
	Other services	-	-
	Total	**60**	**210**
Total	Residential care	-	200
	Nursing care	-	260
	Domiciliary care	-	340
	Day care	-	180
	Other services	-	-
	Total	**350**	**870**

Source: RQIA (2016) Annual Reports and Accounts 2015-16; RQIA Register of Services (accessed November 2017); figures rounded to the nearest 10; Figures below five are not reported. Totals may not equal the sum of services due to rounding.

2.1.2 Self-directed care

The number of individuals receiving self-directed care payments is collected by the Health and Social Care Board (HSCB) in Northern Ireland and in 2016 an estimated 3,300 adults received direct payments for their care. Individuals can use the money they receive from direct payments for a variety of purposes, including employing their own staff, residential or day care, or paying subscriptions and memberships to support themselves. In Northern Ireland, there is no information available to support an estimation of the number of individuals who directly employ their own staff (Personal Assistants, PAs).

[8] Some sites offer more than one service, therefore the total number of sites is less than the sum of services. The total number of services provided in 2016 was 980 (RQIA (2016) Annual Reports and Accounts 2015-16)

2.2 Number of jobs

Several data sources have been used to estimate the number of jobs in the adult social care sector in Northern Ireland. These include information collected by the HSCB, the Social Care Council and research by SfC. More details about the methodology are presented in Annex 1.

It is important to note that the analysis of the employment data from the adult social care sector reflects all employment in the sector. This includes managers and support staff and not just those employees involved in the direct delivery of adult social care.

The Social Care Council holds a register of all individuals who provide regulated adult social care in Northern Ireland. This includes individuals who provide services in the public, private and voluntary sectors. The data can be differentiated by type of provider and type of service delivered.

The register is dynamic, which means workers are added and removed regularly. Information was taken from the register in January 2018. This is presented in Annex 1 (section A1.2). As the register is dynamic, it was not possible to extract data showing the workforce in 2016.[9] The employment figures have been adjusted to an estimated 2016 value using information from the HSCB and the Northern Ireland Statistics and Research Agency Quarterly Employment Survey (it is assumed that the adult social care workforce has increased between 2016 and 2018).

The register measures the number of workers in the adult social care sector, however research by SfC estimated that on average, workers in the adult social care sector hold more than one job. This is estimated to be an average of 1.03 jobs in the public sector and 1.06 jobs in the private and voluntary sectors. These values have been multiplied by the estimated number of workers in the adult social care sector to estimate the total number of jobs.

Additionally, some job roles in the adult social care sector are not included on the register. These are the support staff (security, cleaners, administration etc.) and public sector social care workers (for adults) that are not required to be registered. In order to estimate the number of these staff in Northern Ireland, the following steps have been taken:

- Information was collected from the NMDS-SC for the number of these occupations in the adult social care sector in England.
- The number of jobs in these occupations was divided by the number sites providing services in the adult social care workforce in England.
- This proportion was then multiplied by the number of adult social care sites in Northern Ireland, to estimate the total number of jobs in these occupations in the adult social care sector in Northern Ireland.
- Data for the number of social workers for adults was taken from the NI HSC Workforce Census 2016.

Despite the need for these modifications, this data is judged to be more robust than relying on data from the Labour Force Survey (LFS) or APS. This is because this is still administrative data which allows differentiation by type of service and provider, it

[9] It was only possible to identify those still on the register who were on working in 2016. Employment data for 2016 was required to align the employment estimates for Northern Ireland with the expenditure and output data, and the information in the reports for other nations in the UK.

is based on a larger sample than the LFS or APS and it covers the adult social care footprint, rather than including children's services in the data.

The NISCC data does not include any estimate of the number of hours worked, therefore it does not provide an estimate of the number of FTEs in Northern Ireland. To estimate the number of hours worked and FTEs:

- Information was collected from ASHE for the number of workers who are full-time and part-time. It is estimate that 54% of the workers in the residential social care sector work full-time (46% work part-time), and 57% in the non-residential social care sector work full-time (43% work part-time).
- Full-time workers were estimated to work 37 hours per week, part-time workers in residential care work 19.9 hours a week and part-time workers in domiciliary, day care and other services work 18.1 hours a week (ASHE, 2016). This means the average hours worked (per worker) a week are:
  - 29.2 hours per week in residential and nursing care; and
  - 28.9 hours per week in domiciliary, day care and other services.

Table 2.2 presents the estimated number of jobs and the number of FTEs in the adult social care sector in Northern Ireland. It shows that:

There are an estimated 38,500 jobs in the adult social care sector in Northern Ireland in 2016. This equates to an estimated 29,000 FTEs.

- The largest proportion of these are based in private sector service providers (56% of total regulated employment). 27% work in the public and 19% work in the voluntary sector.
- The largest proportion of jobs provide residential and nursing care services (48%). These services are grouped together as they are not differentiated in Social Care Council register. If these two services were separated, domiciliary care would have the largest proportion of the workforce (39%).

Table 2.2 Estimated number of jobs and FTEs in the adult social care sector, 2016

Type of provider	Type of service	Jobs	Average hours[10]	FTE
Public	Residential care	2,100	29.2	1,600
	Nursing care[11]	-	-	-
	Domiciliary care	4,500	28.9	3,400
	Day care	1,900	28.9	1,400
	Other services	2,000	28.9	1,500
	Total	**10,500**		**8,000**
Private	Residential care	13,900	29.2	10,400
	Nursing care[11]	-	-	-
	Domiciliary care	7,200	28.9	5,300
	Day care	500	28.9	400
	Other services	100	28.9	100
	Total	**21,700**		**16,200**
Voluntary	Residential care	2,400	29.2	1,800
	Nursing care[11]	-	-	-
	Domiciliary care	3,500	28.9	2,600
	Day care	400	28.9	300
	Other services	100	28.9	-
	Total	**6,400**		**4,800**
Total	Residential care	18,400	29.2	13,800
	Nursing care[11]	-	-	-
	Domiciliary care	15,200	28.9	11,300
	Day care	2,800	28.9	2,100
	Other services	2,100	28.9	1,600
	Total	**38,500**		**28,900**

Source: The Social Care Council Register of Social Work; Annual Census of Northern Ireland Health and Social Care Workforce; ASHE; SfC NMDS dashboard; Figures rounded to the nearest 100. Totals may not equal the sum of services due to rounding.

[10] This is the average hours worked per worker, rather than average hours worked per job.

[11] The Social Care Council register does not differentiate between Adult Residential and Nursing Care for workers providing care to service users. Therefore, the total number of jobs (including support staff) in both sectors are presented in the residential care category.

Evidence 1 Employment by nationality in Northern Ireland

The adult social care sector, like many others in the UK employs workers from other nations. The SSSC undertook an analysis of the social care workforce by nationality, using data from the APS, for all nations of the UK. It was not possible to disaggregate adult and children's services for this analysis, therefore percentages were reported.

In Northern Ireland, since 2011 the percentage of workers from the UK in the social care sector has decreased slightly (from 93.9% to 89.8%). The make-up of the non-UK (or migrant) workforce has also altered in this time. Although representing a small proportion of the total workforce, the percentage of non-EU workers has decreased (3.2% in 2011, to 0.6% in 2016). At the same time, the percentage of the workforce made up of EU workers has increased from 3.0% to 9.6%.

The effect of Brexit on EU workers in the adult social care sector is unknown. If Brexit reduces the supply of adult social care workers from other EU countries, employers will have to recruit from other sources. This could lead to an increase in the proportion of the workforce who are born in the UK, or buck the trend of a decreasing proportion of workers being recruited from non-EU countries.

3 Income approach

The first approach used to produce estimates of GVA in the sector is the income method. The total income received by representatives of the sector in the form of wages and other income provides an estimate of the value added by the sector. These types of income are estimated using earnings (for wages) and the Gross Operating Surplus generated in the sector (for other income). In the case of the adult social care sector, the large majority of income in the sector will be earned in wages paid to social care workers.

As discussed in section 2, a detailed analysis of the data was undertaken for this research, and it was judged that it was not possible to robustly identify services not regulated by the RQIA from the data. Therefore, only services regulated by RQIA (and the jobs in these services) are analysed in the income approach, and the estimated GVA is that derived from the provision of regulated services. It is also important to note that the estimates do not capture the income of directly employed PAs.

3.1 Earnings - regulated sector

The main source of information for earnings in Northern Ireland is the Annual survey of Hours and Earnings (ASHE). However, the data from ASHE overestimates actual earnings in the adult social care sector due to how the data is collected[12]. Therefore, data collected by SfC in England (using the NMDS-SC) has been used alongside data from ASHE to estimate the earnings in the adult social care sector in Northern Ireland.

Earnings information provided by SfC has been adjusted using information from ASHE. The average earnings in the adult social care sector in ASHE in Northern Ireland have been divided by the average earnings from the sector in ASHE in England, to obtain the ratio of earnings in the sector between the two nations. This ratio was then multiplied by the value of earnings in England from the NMDS-SC. An additional benefit of using data from SfC is that it allows earnings to be disaggregated by type of provider and service provided.

The average earnings for a FTE in Northern Ireland is presented in Table 3.1. This shows that:

- The average earnings in the sector are £16,400
- The average earnings per FTE in the public sector are estimated to be higher than in the private and voluntary sectors, for all types of service (more than 12% higher for all types of service).
- The total value of earnings in the adult social care sector in Northern Ireland is estimated to be £475 million.
- Although earnings per FTE are higher in the public sector, the highest proportion of total earnings are in the private sector (£246 million, 52%), since this is where most of the workforce is employed.

[12] ASHE estimates do not include self-employed workers, or jobs in businesses which are not required to be PAYE registered (most likely small firms with low levels of pay). Therefore the ASHE estimates exclude many low paying jobs, which can lead to an overestimation of earnings.

Earnings in the adult social care sector in Northern Ireland are lower than average earnings in Northern Ireland. The average earning for a worker in the regulated adult social care sector in Northern Ireland was estimated to be £16,600. Average (mean) earnings for a FTE in Northern Ireland are estimated to be £30,200 (average earnings for a full-time worker) in 2016. Therefore, the earnings in the adult social care sector represent 55% of average earnings.

Table 3.1 Estimated average and total earnings in the adult social care sector, 2016

Type of provider	Type of service	Number of FTEs	Earnings per FTE	Total (£'000)
Public	Residential care	1,600	19,300	30,651
	Nursing care[13]	-	-	-
	Domiciliary care	3,400	17,900	61,311
	Day care	1,400	18,200	26,203
	Other services	1,500	26,000	39,910
	Total	**8,000**	-	**158,076**
Private	Residential care	10,400	15,600	162,899
	Nursing care[13]	-	-	-
	Domiciliary care	5,300	14,300	75,401
	Day care	400	15,900	6,007
	Other services	100	16,700	1,194
	Total	**16,200**	**-**	**245,501**
Voluntary	Residential care	1,800	15,600	28,256
	Nursing care[13]	0	-	0
	Domiciliary care	2,600	14,300	36,926
	Day care	300	15,900	5,244
	Other services	0	16,700	575
	Total	**4,800**	**-**	**71,001**
Total	Residential care	13,800	-	221,806
	Nursing care[13]	-	-	-
	Domiciliary care	11,300	-	173,638
	Day care	2,100	-	37,454
	Other services	1,600	-	41,679
	Total	**28,900**	**-**	**474,577**

Source: Annual Survey of Hours and Earnings; Labour Force Survey: Skills for Care National Minimum dataset – social care; Assumptions verified by NISCC; FTE and earnings rounded to the nearest 100. Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

[13] The Social Care Council register does not differentiate between Adult Residential and Nursing Care for workers providing care to service users. Therefore, the total number of jobs (including support staff) in both sectors are presented in the residential care category.

3.2 Gross Operating Surplus

In addition to earnings / wages, additional economic income is generated by the adult social care sector. This is estimated by the Gross Operating Surplus (GOS). GOS is defined as income minus operating costs. In estimating GOS, it is assumed that only private sector care providers are run 'for profit', and therefore generate a GOS (further details on the calculation of GOS can be found in Annex 1 (A1.1 and A1.3.2).

The estimation of the GOS in the adult social care sector will include the following costs:

- Staff costs;
- Materials required to deliver day to day services;
- Transportation costs; and
- Other day to day costs associated with providing adult social care.

Costs which are excluded from the estimation of GOS are:

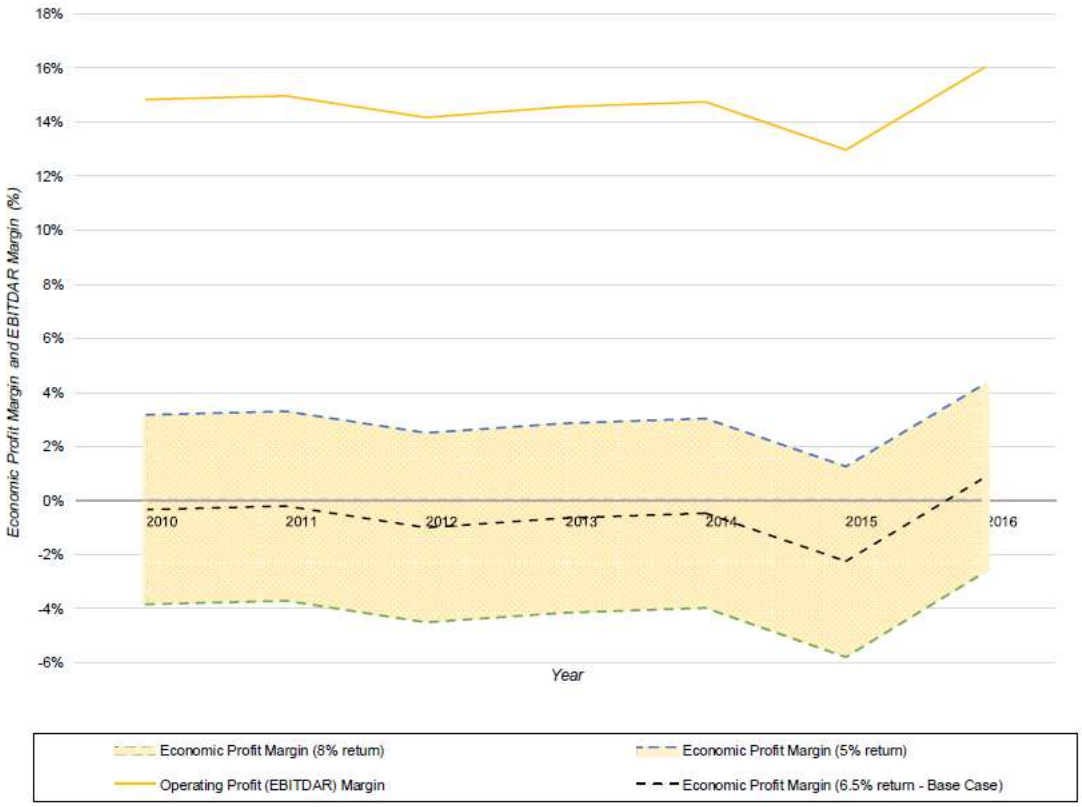
- Rents;
- Exceptional purchases (such as repairing property or capital equipment);
- Depreciation and amortisation of capital assets (the decrease in value of an asset as it is used and aged, for example vehicles or computer systems);
- Interest payments on money owed; and
- Taxation.

It is important to note that the GOS does not equal the profit taken by owners and shareholders. Only a subset of total costs are included in the GOS calculation. The GOS is the equivalent of earnings before interest, taxes, depreciation, amortization and restructuring or rent costs (EBITDAR).[14]

A positive GOS can lead to small or even negative overall profits. This is because the costs which are excluded from the estimated GOS can equal or exceed the value of the GOS. Error! Reference source not found. (taken from Competition and Markets Authority (CMA), 2017) illustrates this. Despite an average GOS of between 14% and 16%, the level of overall economic profit in the adult social care sector (where all costs are included) is estimated to be close to zero.

[14] The EBITDAR value has been used in the analysis as it is the preferred measure in both the LaingBuisson report and the CMA market analysis. The EBITDA measure, where rents and restructuring costs are assumed to be operating costs is used in the sensitivity analysis in **Error! Reference source not found.**

Figure 3.1 Residential care industry operating surplus profile, 2010-2016



Source: CMA (2017) Care Homes Market Study – figure 4.3

Two main studies have provided insights into the GOS in the residential care sector. LaingBuisson (2017) provides detailed information for the accounts of the big six residential care providers. This shows an average GOS (or EBITDAR earnings) of nearly 20%; but this leads to a significant pre-tax loss.

The CMA (2017) provides a more detailed assessment of GOS in the residential care sector. This examined the annual accounts of all residential care operators in the UK that are required to file their accounts at Companies House (CH). This found that in 2015/16 (the most recent year that comprehensive information was available), the GOS in the sector was around 16%, only marginally lower than in the LaingBuisson report.

For this study, a detailed examination of the financial returns of all adult social care providers was not undertaken. To estimate the GOS in residential care, the average GOS (EDITBAR) value from the CMA study has been used as an assumed GOS margin. This is because the CMA estimate includes all adult social care providers in the UK who filed reports at CH, and is assumed to be a reasonable measure of GOS in each nation of the UK.

To estimate the value of GOS, the assumed GOS margin (16%) was multiplied by the total output from the private residential sector. This gave an estimate of £48 million of GOS in the residential adult social care sector in Northern Ireland.

The GOS for domiciliary care providers has been estimated using information taken from the United Kingdom Homecare Association (UKHCA, 2018). This research provided information which was used to estimate an equivalent of the EBITDAR value to represent GOS. It was estimated that the GOS margin in the home care market was 11.3% for private domiciliary providers and 8.3% for voluntary providers.[15] This is a lower estimated value of GOS than for residential care services. This could be because there are lower rental costs and less capital equipment is used (meaning there is less depreciation and exceptional purchases).

The estimated GOS in the domiciliary sector is calculated by multiplying these values by the output of the private and voluntary domiciliary care sector. This was estimated to be £22 million in Northern Ireland in 2016.

There is no information available for the value of GOS for day care and other services. Therefore, no attempt has been made to estimate the GOS in these services. Finally, it has been assumed that there is no GOS in the employment of PAs – it is assumed that they are directly employed and there is no additional income above their pay.

3.3 Estimated GVA

The estimated level of GVA is calculated by summing the value of total earnings and GOS generated in the income approach. In Northern Ireland in 2016, it was estimated that adult social care GVA was nearly £544 million using this approach. The largest proportion of GVA was estimated to be in the residential and nursing care sectors (50% of the total value of the sector), although the domiciliary care (36%) also has a large proportion of the total GVA (see Table 3.2).

Table 3.2 Earnings estimates of adult social care and related GVA

	Earnings (£'000)	Profit (£'000)	GVA estimates (£'000)
Residential care	221,806	48,114	269,920
Nursing care[16]	-	-	-
Domiciliary care	173,638	21,643	195,281
Day care	37,454	-	37,454
Other services	41,679	-	41,679
Personal Assistants	-	-	-
Total	**474,577**	**69,757**	**544,333**

Source: Inter-departmental Business Register; RQIA: Register of services; The Social Care Council Register of Social Work; Annual Census of Northern Ireland Health and Social Care Workforce; Skills for Care Size and Structure of the Adult Social Care sector in England; Annual Survey of Hours and Earnings; Labour Force Survey: LaingBuisson (2017) Care of Older People; CMA (2017). Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

[15] UKHCA (2018) A Minimum Price for Homecare. Indicators excluded in the estimated GOS were: Net profit / surplus; Premises, utilities and services; and Other Business overheads. Indicators included in the GOS estimate were: care worker costs; staffing, recruitment and training; consumables and professional costs. For voluntary providers, the net profit / surplus was assumed to be zero. These indicators were excluded as it is assumed the costs would be included in the EBITDAR measure.

[16] The Social Care Council register does not differentiate between Adult Residential and Nursing Care for workers providing care to service users. Therefore, the total number of jobs (including support staff) in both sectors are presented in the residential care category.

Evidence 2 Anticipated growth in demand for services in NI

The population of Northern Ireland is estimated to grow by over 135,000 people by 2039, to a total population of 3.0 million (a 7% growth in population). However, the population of individuals aged 65 or over is anticipated to grow by over 200,000 (from 395,000 in 2016). This represents a growth of 51% in the number of people aged 65 or over in Northern Ireland (and a decrease in the number of people aged under 65).

This is expected to drive an increase in demand for adult social care in future years in Northern Ireland. The UK Commission for Employment and Skills (UKCES) produced estimates of future demand for employment in different occupational groups. The research projected future demand until 2024. The adult social care sector was not modelled as a specific sector, and the most appropriate category for the sector would be the occupational group “Caring, Leisure and other service activities”. In Northern Ireland, employment in this group was estimated to grow by an average of 0.7% each year between 2014 and 2024. This provides further evidence that the demand for adult social care is likely to increase in the future in Northern Ireland.

4 Expenditure approach

The second method to estimate the economic value of the adult social care sector is the expenditure approach. This approach involves estimating the total level of expenditure on adult social care in Northern Ireland (public and private funding). This is then converted to GVA (output less purchase of intermediate goods and services) on the basis of turnover (represented by expenditure) to GVA ratios provided in the Annual Business Survey (ABS).

Expenditure flows from funders to the providers of adult social care services. However, there are different sources of funding for adult social care services. These are:

- Public sector funding – individuals using care services who are wholly funded by the state. This includes expenditures made directly between the public sector and the provider of adult social care services to deliver services to individuals, and funding given directly to service users to purchase their own care (direct payments);
- Self-funders – individuals who use care services and pay the full costs themselves; and
- Co-funding – individuals who receive some public sector funding for care services, but who are required to 'top-up' the public funding to pay the full care charges.

It is important to note that the estimates of GVA produced using the expenditure approach include all adult social care activities. This is because it is not possible to differentiate spending on adult social care by regulated and non-regulated services. Therefore, a larger number of services generate the estimated GVA for the adult social care sector in the expenditure approach than in the income approach (section 3).

4.1 Public sector funding and co-funding

The HSCB provided data on the public sector funding of adult social care. The information provided was for gross adult social care expenditure, and it was not possible to disaggregate the level of co-funding from the data. For the data for physically disabled, learning disabled and mental health needs, it was not possible to disaggregate the spending by age. Therefore, the proportion of spending on adults in these service areas from Wales (88%) has been used to estimate the spending on adult social care in Northern Ireland.

The total value of expenditure is presented in Table 4.1, which shows a gross expenditure of nearly £900 million in Northern Ireland. Most of the public sector expenditure is on older people (64% of gross expenditure).

Table 4.1 Public and co-funding of adult social care, 2015-16

Type of service	Public sector funding (£'000)	Co-funding (£'000)	Total (£'000)
Older people (65+)	-	-	563,533
Physically disabled (18+)	-	-	60,894
Learning disabled (18+)	-	-	193,857
Mental health needs (18+)	-	-	59,338
Other	-	-	500
Total	**-**	**-**	**878,122**

Source: Northern Ireland HSC Board Trust Financial Returns (TFR P); Data provided by the HSCB. Totals may not equal the sum of services due to rounding.

4.2 Self-funding

The size and scale of expenditures on adult social care by self-funders is difficult to estimate. This is because there is no relevant data source which estimates either the level of expenditure or the number of individuals who fund their own care.

There are a number of recent studies that have explored self-funding of residential adult social care services. LaingBuisson (2017) estimate the proportion of residential and nursing care residents who are self-funders in Northern Ireland (32%). Previous studies have estimated that in England over 40% of care home places are for self-funders (IPC, 2011, 2015). These estimates are similar to those presented in the LaingBuisson report, therefore the estimate of 11% for Northern Ireland appears to be consistent with other studies.

There is less evidence about the number of self-funders for non-residential adult social care. A review of existing evidence was undertaken to establish the size of the self-funder market for non-residential social care in the UK. A summary of the findings from these studies is presented in Annex 1. From this, it has been estimated that the proportion of older people who fund their own domiciliary, day and other care in Northern Ireland is 7%.

Individuals who self-fund their own care are unlikely to pay the same price for their care as those funded by the state. Several sources suggest that self-funders are likely to pay a higher fee for the same care services. The reasons for these differences could be due to market pressures (local authorities and the NHS buying services in bulk through tendering, and achieving favourable rates), or because providers are having to cross subsidise public sector clients by charging a premium to self-funders.

LaingBuisson (2017) includes an analysis of prices charged to self-funders, and found that on average the price for a self-funder was 46% (41% for nursing care) higher than the price for a funded client. The CMA (2017) have also recently estimated the mark-up for self-funders as being over 40% in residential care. These are higher mark-ups, than previous estimates (which were closer to 20%, LaingBuisson and Joseph Rowntree Foundation, 2008; BUPA, 2011; University of East Anglia, 2011). The 46% mark-up has been used in this analysis, and the mark-up has been applied to unit costs for funded individuals in residential and nursing care. For domiciliary, day care and other services, a 20% mark-up for self-funders has been used. These unit costs are presented in Table 4.2.

The information from the HSCB showing spending by the type of care provided could not be differentiated by the age of the service user in some categories. Where this is the case an adjustment has been made using information on spending on Children's services in Wales.[17]

The analysis of self-funding is presented in Table 4.2, by type of care provision. This suggests that in Northern Ireland, the total value of self-funded adult social care expenditure was nearly £85 million. The largest proportion of self-funding expenditure is for residential and nursing care (51% of the self-funded total). The total estimated value of expenditure on adult social care in Northern Ireland was over £960 million.

Table 4.2 Estimated total expenditure in adult social care sector, 2015-16

	Public and co-funded (£'000)	Unit cost for self-funders (£ per year)	Number of self-funders	Self-funded expenditure (£'000)	Total expenditure (£'000)
Residential care	150,460	34,100	200	8,505	158,966
Nursing care	303,133	36,700	1,000	34,860	337,993
Domiciliary care	176,867	16,200	1,900	25,793	202,661
Day care	87,475	9,300	600	5,413	92,888
Other services	138,000	-	-	10,054	148,053
Direct payments	22,082	-	-	-	22,082
Total	**878,017**			**84,626**	**962,643**

Source: Northern Ireland HSC Board Trust Financial Returns (TFR P); LaingBuisson (2017) Care of Older People; PSSRU Unit Cost of Health and Social Care; HSCB service user data; ICF analysis; Number of self-funders and unit costs rounded to the nearest 100. Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

4.3 Estimated GVA

The expenditures calculated above have been converted into GVA using turnover to GVA ratios for the adult social care sector from the ABS. Turnover to GVA ratios indicate the level of GVA that is expected to result in a particular sector, from a given level of expenditure. Applying these ratios to the estimated expenditures provides an estimate of GVA for the sector of over £600 million in 2015/16 in Northern Ireland (see Table 4.3). The largest proportion of GVA was from the residential and nursing care sub-sectors (£375 million; 62% of total GVA).

[17] The data manipulations undertaken mean that the sum of public expenditure in Table 4.1 and Table 4.2 do not match exactly, but they sum to roughly the same total (£878 million).

Table 4.3 Expenditure estimates of adult social care and related GVA, 2015-16

	Total expenditure (£'000)	Turnover to GVA ratio	GVA (£'000)
Residential care	158,966	74%	117,133
Nursing care	337,993	76%	257,762
Domiciliary care	202,661	43%	86,511
Day care	92,888	43%	39,652
Other services	148,053	61%	90,593
Direct payments	22,082	61%	13,512
Total	**962,643**		**605,163**

Source: Northern Ireland HSC Board Trust Financial Returns (TFR P); LaingBuisson (2017) Care of Older People; PSSRU Unit Cost of Health and Social Care; HSCB service user data; ICF analysis; Number of self-funders and unit costs rounded to the nearest 100. Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

Evidence 3 Effect of public funding on adult social care

There are different types of goods and services in an economy, and the markets for different types of goods and services need to be treated differently to ensure that the market functions efficiently. Examples of different types of goods are:

Private goods – a good or service which can be purchased, and when the good is purchased it prevents other individuals from consuming it. This is the most common type of good.

Public goods – a good or service which when one individual benefits from its use it does not prevent anyone else benefitting from the good, and when it is used it does not reduce the amount available to others.

Quasi-public goods – a good or service which falls between public and private, possessing some of the qualities of a public good.

Merit good – a good which provides wider benefits to the economy when consumed.

Private goods with market failures – goods or services which are private goods but where the market does not function correctly, for example due to a lack of information.

If adult social care was treated as a 'private good' (all individuals have to self-fund their own adult social care) there would be market failure. This is because some individuals do not have the resources to buy the adult social care they require. Other individuals do not have complete information about their need for social care or the cost of the adult social care they require (for example the health conditions they could develop and their life expectancy), and therefore underestimate the quantity of social care they require.

There are also positive externalities (such as the prevention of healthcare, allowing family members and informal carers to remain in work). This means that individuals underestimate the value of adult social care they would need to purchase.

Therefore, a private market for adult social care would not operate efficiently and would be seen as a market failure. Adult social care should be viewed as a quasi-public good (as all individuals in a society can benefit from it) or a merit good (generating further benefits). Rather than crowding out private investment, the public funding supports a better functioning adult social care market.

5 Output approach

The final approach to measure the GVA of the adult social care sector is the output approach. This measures the output of the sector by estimating the number of units of each type of service provided, and multiplying this by a unit cost for the service. This estimates the total level of output (the equivalent of turnover) in the sector, which can then be converted to GVA (output less purchase of intermediate goods and services).

It is important to note that the estimates of GVA produced using the output approach include all adult social care activities. This is because it is not possible to differentiate spending on adult social care by regulated and non-regulated services. Therefore, a larger number of services generate the estimated GVA for the adult social care sector in the output approach than in the income approach (section 3).

5.1 Output from the residential care

5.1.1 Residential care for older adults

LaingBuisson (2017) provides useful data relating to the provision of care services for older people. This data includes the capacity of nursing and residential care homes in Northern Ireland and the occupancy rate. The HSCB also produce estimates of the capacity of care homes in Northern Ireland, and the figures are very close to those provided in the LaingBuisson report. The figures in LaingBuisson (2017) have been used in this analysis.

The data shows that the private sector is the largest provider of adult social care in Northern Ireland, and represents 84% of the total residential care capacity, and 90% of total nursing care capacity for older people (a total of 10,000 beds across the residential and nursing sector).

The Personal Social Services Research Unit (PSSRU) provide annual estimates for the unit costs of adult social care in England (PSSRU, 2016). These estimates have been used to estimate the output of the residential care in Northern Ireland for 2015/16. These estimates were selected as they provided more differentiation by type of care and provider.

The PSSRU (2016) estimates unit costs for England, and these prices have been adjusted to Northern Irish prices using information from the LaingBuisson (2017).

Table 5.1 presents an estimate of the total output of residential and nursing care for older individuals in Northern Ireland. This was calculated by multiplying the number of occupants by the weekly cost. The total output of the residential and nursing care sector for older people was estimated to be £366 million. The private sector has the largest output (£300 million; 82% of total output).

Table 5.1 Capacity and estimated output of care home sector – older people

		Private	Voluntary	Public	Total
Capacity (total places)	Nursing	8,700	700	300	9,700
	Residential	1,600	800	200	2,600
Occupancy (places)	Nursing	8,400	600	300	9,300
	Residential	1,600	800	200	2,600
Output (£'000)	Nursing	256,893	19,200	15,811	291,904
	Residential	43,820	21,209	8,796	73,825
Unit cost (£ per week)	Nursing	590	590	980	
	Residential	530	530	900	

Source: LaingBuisson (2017) Care of Older People; PSSRU Unit Cost of Health and Social Care (2016). Output totals may be not sum due to rounding.

5.1.2 Residential care for younger adults

The data from LaingBuisson (2017) does not provide full coverage of the adult social care residential sector. It does not provide estimates of the capacity or occupancy of residential and nursing care services provided to younger adults (aged 18 – 64).

The HSCB provides statistics for the number of beds available for individuals with learning disabilities and physical disabilities in residential care facilities in Northern Ireland. The data is differentiated by type of provider (public, private and voluntary). The statistics do not provide information about the average occupancy rate for these care homes. It has been assumed that these residential care home are fully occupied. These statistics have been used to estimate the output for residential care for younger adults requiring adult social care.

A unit cost for residential care for adults with physical and learning disability needs has been calculated using the PSSRU (2016) estimates of the unit cost of social care in England. The unit costs have been weighted based on the number of individuals with physical and learning disabilities in Northern Ireland, and the prices have been adjusted to Northern Irish prices using information from LaingBuisson (2017).

Using the information described above, Table 5.2 presents the estimated output for residential care of younger adults. In 2015/16, it was estimated that the output for residential care of younger adults was £37 million in Northern Ireland.

Table 5.2 Capacity and estimated output of care home sector – younger adults

		Private	Voluntary	Public	Total

		Private	Voluntary	Public	Total
Capacity (total places)	Nursing	-	-	-	-
	Residential	300	300	100	700
Occupancy (places)	Nursing	-	-	-	-
	Residential	300	300	100	700
Output (£'000)	Nursing	-	-	-	-
	Residential	16,392	14,301	6,048	36,741
Unit cost (£ per week)	Nursing	-	-	-	-
	Residential	1,090	1,090	1,090	

Source: PSSRU Unit Cost of Health and Social Care (2016); LaingBuisson (2017); HSCB Care not at Home statistics. Output totals may be not sum due to rounding.

5.2 Output from non-residential adult social care

An approach using data from the HSCB and PSSRU has been used to estimate the output of the non-residential care sector in Northern Ireland.

The HSCB provides data for the number of individuals receiving different types of non-residential care in Northern Ireland. This provides details of the number of people receiving public funding for care (24,000), but not self-funders. The number of self-funders receiving non-residential care was estimated to be 1,900. The number of individuals receiving care is the sum of self-funders and those receiving payment for their care.

The unit costs for non-residential care has been calculated from the PSSRU estimates. The total output is estimated by multiplying the unit cost by the number of users and the volume of care used per year. It was not possible to estimate the usage and unit cost of other services, due to the wide variety of services included in other services and a lack of available data. Therefore, the level of expenditure has been used as the value of output for other services.

Table 5.3 presents the output of the non-residential care sector. This shows that the total output of the sector in Northern Ireland was estimated to be over £500 million in 2015/16. The domiciliary care sector had the largest output in the non-residential care sector in Northern Ireland.

Table 5.3 Estimated output of other adult social care sectors

	Number of users	Unit per person per year	Unit cost (£)	Total output (£'000)

	Number of users	Unit per person per year	Unit cost (£)	Total output (£'000)
Domiciliary care	25,700	588	20	302,601
Day care	8,000	130	61	62,817
Other	-		-	138,000
Direct payments[18]	1,100	884	15	14,383
Total				517,801

Source: HSCB Care not at home statistics and domiciliary care statistics; StatsWales; PSSRU Unit Cost of Health and Social Care (2016); LaingBuisson (2017) Care of Older People; ICF analysis. Output totals may be not sum due to rounding.

5.3 Estimated GVA

The estimated value of GVA in the adult social care sector in Northern Ireland is presented in Table 5.4. The GVA has been calculated using the estimated output in the sector described above, and turnover to GVA ratios from the ABS for relevant industries. Applying these ratios to the estimated expenditures provides an estimate of GVA for the sector of £551 million in 2015/16 in Northern Ireland. The nursing care sectors had the largest estimated GVA (£304 million; 40% of total GVA).

Table 5.4 Output estimates of adult social care and related GVA

	Total output (£'000)	Turnover to GVA ratio	GVA (£'000)
Residential care	110,566	74%	81,470
Nursing care	291,904	76%	222,614
Domiciliary care	302,601	43%	129,174
Day care	62,817	43%	26,815
Other services	138,000	61%	84,441
Direct payments	14,383	43%	6,140
Total	**920,270**		**550,653**

Source: HSCB Care not at home statistics and domiciliary care statistics; StatsWales; PSSRU Unit Cost of Health and Social Care (2016); LaingBuisson (2017) Care of Older People; ICF analysis. Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

[18] Only including an assumed proportion of funding, for individuals who directly employ either Personal Assistants.

Evidence 4 Additional economic benefits of the adult social care sector

In addition to the direct economic value of the adult social care sector, the activities provided also deliver additional benefits and impacts for the wider economy. These additional impacts include:

Health: The provision of high quality adult social care can help to reduce hospital admissions and Accident and Emergency unit attendances among the cared for. It can also help to reduce pressure on the health service by reducing delays for people who are ready to leave hospital. A further benefit of a high quality adult social care sector is that it reduces the stress on unpaid carers. This means that unpaid carers are less likely to need to take absence from their paid employment or have absences from their job (if they are employed) due to the stresses of providing care.

Employment: A high quality adult social care sector can help to support individuals who receive care and unpaid carers remain in employment or (re)-enter the workforce. When an individual receiving care is provided with regular support that meets their needs, both they and any unpaid carers providing them with support can make appropriate arrangements if they want to enter/remain in work. This helps the UK economy by providing a supply of workers who can potentially address skills gaps and Hard to Fill Vacancies in the economy.

6 Indirect and induced effect

6.1 Introduction

The previous sections estimate the direct economic contribution of the adult social care sector in Northern Ireland. This section builds on that analysis to present estimates of the additional contribution of the adult social care sector to the wider economy through:

- **Indirect effects** - resulting from the purchase of intermediate goods and services by the adult social care sector in delivering its services, which support additional employment and GVA within its supply chain; and
- **Induced effects** - resulting from purchases made by those directly and indirectly employed in the adult social care sector, who use their earnings to buy other goods and services.

6.2 Indirect Effects

The adult social care sector purchases a wide range of goods and services from suppliers in other sectors to support the delivery of adult social care services. Common examples of purchases made by the adult social care sector will include cleaning products and services, food and drink, building maintenance services, utilities, financial services, education and training, furniture and household goods, medical supplies, transport services and fuel, etc.

These are known as intermediate purchases, and those made by the adult social care sector will support employment and GVA amongst supply chain businesses. Indirect effects are estimated using Type I multipliers (supply linkage effects). Northern Ireland Statistics and Research Agency (NISRA) produces estimates of Type I multipliers, which can be used to estimate the indirect effects of different products and services on the wider Northern Irish economy.

The latest Northern Irish I-O analytical tables[19] provide estimates of Type I GVA and output multipliers. They do not provide separate employment multiplier effects. The relevant product group for this study is the NISRA-defined 'Human Health and Social Work activities'. This product group covers SIC divisions 87 and 88 and therefore covers all adult social care activities as well as children-related social care activities. It also covers the health sector. However, in the absence of more specific data, this multiplier has been used for the analysis.

The Type I multiplier effect for the sector in Northern Ireland is estimated to be 1.29. The multiplier is not disaggregated by type of provider. This implies that for every £1 of GVA generated by adult social care activities in the private sector, a further £0.29 of GVA is generated in the rest of the economy:

The Type I multipliers were applied to the estimates of the direct economic contribution of the adult social care sector in Table 6.1. The table shows that indirect effects of intermediate purchases made by the adult social care sector contributed an additional 11,100 jobs[20] and £156 million to £173 million of GVA in Northern Ireland.

[19] ONS, Detailed United Kingdom Input-Output Analytical Tables, 2013 *(consistent with UK National Accounts Blue Book & UK Balance of Payments Pink Book)*

[20] These are jobs, not FTEs.

The additional GVA experienced by supply chain businesses represents 29% the direct contribution of the sector. Indirect effects are largest in the private sector, reflecting their relative importance in the sector. The additional jobs generated in supply chain businesses because of adult social care activities represent 29% of the total employment in the sector.

Table 6.1 Direct and indirect economic value of the adult social care sector

	Income approach	Expenditure approach	Output approach
GVA			
GVA (public sector) (£'000)	158,076	171,339	163,170
GVA (private sector) (£'000)	309,538	353,558	313,548
GVA (voluntary sector) (£'000)	76,719	80,266	73,935
Total GVA (£'000)	544,333	605,163	550,653
Type I multiplier		1.29	
Indirect GVA (public sector) (£'000)	45,210	49,003	46,667
Indirect GVA (private sector) (£'000)	88,528	101,118	89,675
Indirect GVA (voluntary sector) (£'000)	21,942	22,956	21,145
Total indirect GVA (£'000)	**155,679**	**173,077**	**157,487**
Total direct and indirect GVA (£'000)	**700,013**	**778,240**	**708,140**
Employment			
Direct employment (public sector)		10,500	
Direct employment (private sector)		21,700	
Direct employment (voluntary sector)		6,400	
Total direct employment		38,500	
Type I multiplier		1.29	
Indirect employment (public sector)		3,000	
Indirect employment (private sector)		6,300	
Indirect employment (voluntary sector)		1,900	
Total indirect employment		**11,100**	
Total direct and indirect employment		**49,600**	

ICF analysis; Employment data rounded to the nearest 100. Totals may not equal the sum of services due to rounding.

6.3 Induced Effects[21]

Induced effects are assessed using Type II multipliers that capture both indirect and induced effects. The I-O tables provide information which can be used to estimate the Type II multipliers in Northern Ireland. For a detailed description of the method used to estimate the Type II multipliers, see Annex 1. The estimated Type II multiplier is 1.85.

The Type II multipliers are divided by the Type I multipliers to provide the give multiplier value (1.44). The induced multipliers have been multiplied by the direct and indirect employment and GVA values to estimate the induced GVA and employment. The results are presented in Table 6.2.

The results suggest that induced effects (associated with the purchases of goods and services by individuals directly or indirectly employed by the sector) were larger than the indirect effects. The induced effects were estimated to support a further 22,000 jobs and over between £308 million and £342 million of GVA in the wider economy.

[21] ICF believes it can be misleading to attribute all induced effects to the economic contribution of a particular sector at the national level. Indirect effects related to purchases of intermediate goods and services can clearly be attributed to the adult social care sector as they would not take place if the adult social care sector did not exist. The same is not true for induced effects. If the adult social care sector did not exist, it is unlikely that the purchases of goods and services made by the majority of workers in the sector would change significantly. Workers who in the absence of the adult social care sector would be unemployed (and receiving benefits) would provide induced effects (net of the value of state benefit payments). However, many of those directly or indirectly employed by the adult social care sector would be employed in other jobs in other sectors if the adult social care sector did not exist. This is the case for all sectors and industries. Therefore, it can be misleading to represent these induced effects as being attributable to the sector and would cease to exist in the absence of the sector.

Table 6.2 Induced and total economic value of the adult social care sector

	Income approach	Expenditure approach	Output approach
GVA			
GVA (public sector) (£'000)	158,076	171,339	163,170
GVA (private sector) (£'000)	309,538	353,558	313,548
GVA (voluntary sector) (£'000)	76,719	80,266	73,935
Total GVA (£'000)	544,333	605,163	550,653
Type II multiplier		1.85	
Induced multiplier		1.44	
Induced GVA (public sector) (£'000)	89,445	96,950	92,328
Induced GVA (private sector) (£'000)	175,149	200,057	177,418
Induced GVA (voluntary sector) (£'000)	43,411	45,418	41,835
Total induced GVA (£'000)	308,006	342,425	311,581
Total direct, indirect and induced GVA (£'000)	**1,008,018**	**1,120,665**	**1,019,721**
Employment			
Direct employment (public sector)		10,500	
Direct employment (private sector)		21,700	
Direct employment (voluntary sector)		6,400	
Total direct employment		38,500	
Type II multiplier		1.85	
Induced multiplier		1.44	
Induced employment (public sector)		5,900	
Induced employment (private sector)		12,300	
Induced employment (independent sector)		3,600	
Total induced employment		21,800	
Total direct, indirect and induced employment		**71,400**	

ICF analysis; Employment figures rounded to the nearest 100. Totals may not equal the sum of services due to rounding.

6.4 The total economic contribution of adult social care sector in Northern Ireland

The adult social care sector is estimated to support a total of 71,400 jobs and £1.0 billion to £1.1 billion of GVA in the Northern Ireland. This includes all direct, indirect and induced effects. The indirect and induced effects are smaller than the direct economic effects of the adult social care sector. The indirect and induced effects account for around 46% the GVA generated, and nearly half of total employment 46%).

Public sector providers of adult social care services and their associated expenditures support 22% of the total jobs and between 17% and 23% of GVA generated by the sector (including indirect and induced effects).

The overall sector and the indirect and induced effects of associated expenditures are estimated to represent 2.6% to 3.0% of all GVA and 9% of all jobs in Northern Ireland.

Evidence 5 Value of informal care in Northern Ireland

This research provides evidence of the economic value of the formal adult social care sector in NI. However, the work of the sector is supported by unpaid individuals providing informal care to family members or friends. CarersUK have estimated the value of the informal care provided in Northern Ireland.

The research uses data from the 2011 Census and population estimates to calculate that over 220,000 individuals were providing 270 million hours of informal care to adults in Northern Ireland in 2015. Using an estimate of £17 per hour of care provided, the value of informal care in Northern Ireland was estimated to be nearly £5 billion in 2015 – larger than the value of the formal adult social care sector in NI.

7 Conclusion

This section provides a summary of the key findings of the economic analysis, including the five key indicators specified in the research aims. The economic indicators are then compared to other sectors within Northern Ireland, so that the size and scale of the adult social care sector can be identified.

7.1 Summary of findings

The key findings from the research are presented in Table 7.1. This shows that in 2016, it was estimated that there were 38,500 jobs in the adult social care sector, and there were 28,900 FTEs. These jobs generated between £544 million and £605 million in GVA, and the level of productivity (GVA per worker) was estimated to be £18,800 to £20,900 per FTE.

The indirect effect of the adult social care sector was estimated to be 11,100 jobs (or 8,400 FTEs) and between £156 million and £173 million in GVA. The indirect effect is due to the purchase of intermediate goods and services by the adult social care sector.

The induced effect of the adult social care sector (additional spending by those directly and indirectly employed through the adult social care sector) was estimated to be 20,300 jobs (16,400 FTEs) and between £308 million and £342 million of GVA.

The total direct, indirect and induced value of the adult social care sector in Northern Ireland was estimated to be over 71,000 jobs, nearly 54,000 FTE and £1.0 billion to £1.1 billion in GVA.

Table 7.1 Summary of findings

	Income approach	Expenditure approach	Output approach
Total direct employment		38,500	
Total FTE employment		28,900	
Total direct GVA (£'000)	544,333	605,163	550,653
Estimated productivity per person	14,200	15,700	14,300
Estimated productivity per FTE	18,800	20,900	19,100
Indirect employment (jobs)		11,100	
Indirect employment (FTE)		8,400	
Induced employment (jobs)		20,300	
Induced employment (FTE)		16,400	
Total employment as a result of adult social care activity (people)		71,400	
Total employment as a result of adult social care activity (FTE)		53,700	
Indirect GVA (£'000)	155,679	173,077	157,487
Induced GVA (£'000)	308,006	342,425	311,581
Total GVA as a result of adult social care activity (£'000)	**1,008,018**	**1,120,665**	**1,019,721**

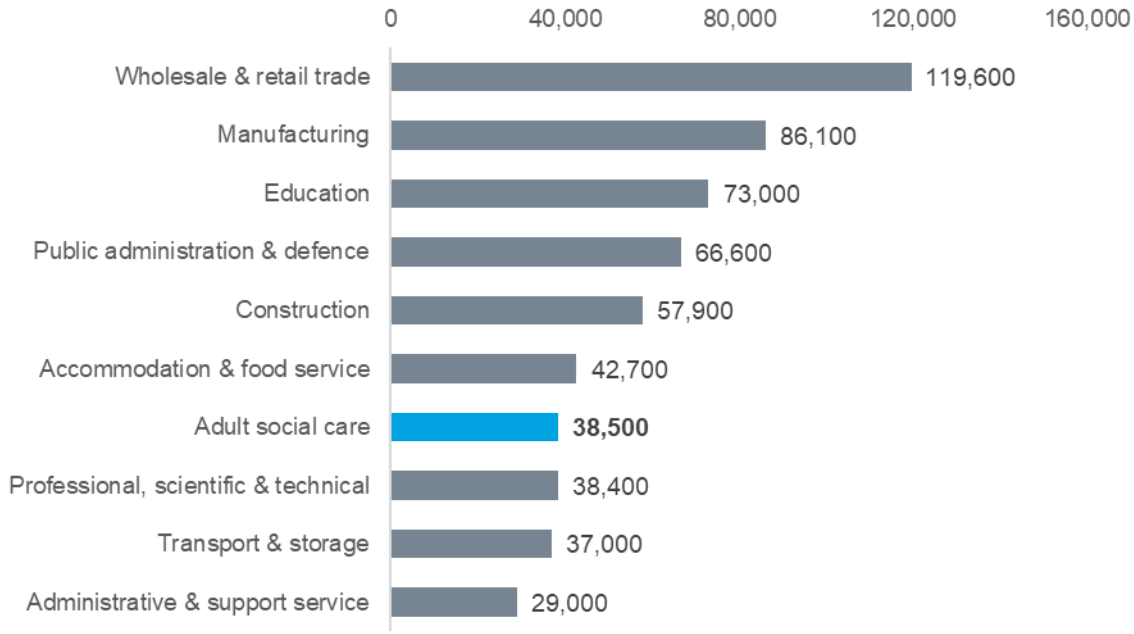
ICF analysis; Employment and productivity values rounded to the nearest 100. Totals may not equal the sum of services due to rounding.

7.2 Benchmarking

The Annual Population Survey (APS) provides estimates of the number of individuals working in each broad sector in Northern Ireland. This allows the scale of employment in the adult social care sector to be compared to other sectors.

Figure 7.1 presents the employment by sector analysis, combining the findings from this research with data from the APS. This shows that the adult social care sector employs more workers than the administrative and support services, transport and storage and professional, scientific and technical sectors. Direct employment in the adult social care represents 5% of total employment in Northern Ireland. This shows that adult social care is an important sector in terms of current employment in Northern Ireland.

Figure 7.1 Employment by sector in Northern Ireland (sectors with highest employment), 2016

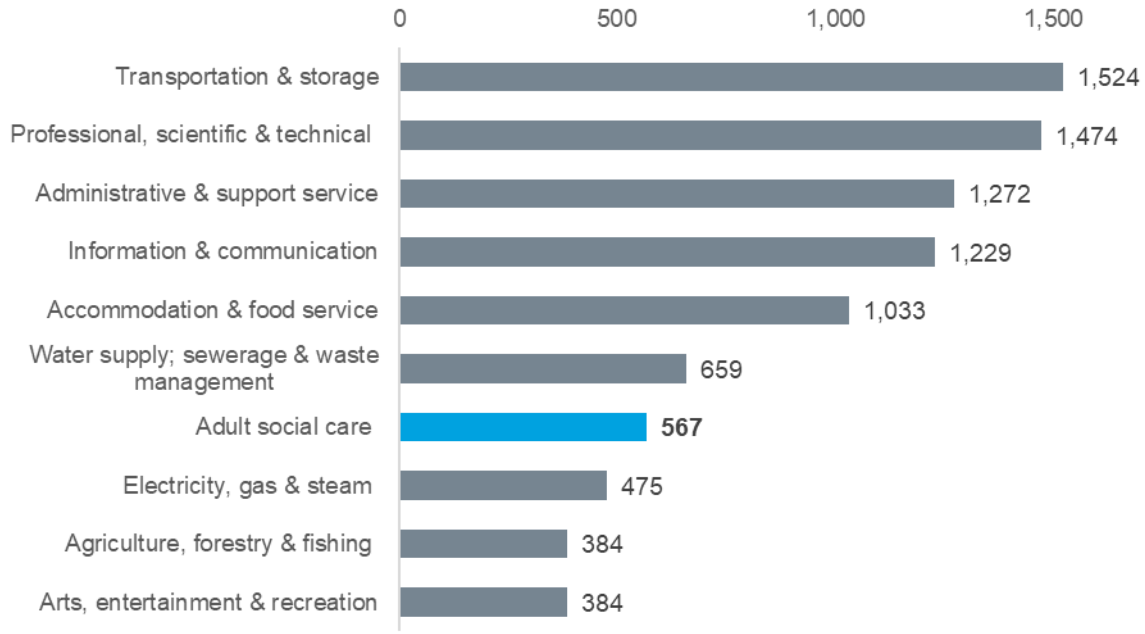


Source: Annual Population Survey; ICF analysis. Employment rounded to nearest 100. Human health and social work activities excluded from analysis

The estimated value of GVA by industry in Northern Ireland is presented in the Regional Gross Value Added statistical series. This presents GVA by broad industrial group. The total value of GVA in Northern Ireland in 2016 was estimated to be over £38 billion. Direct GVA from the adult social care sector (£567 million – arithmetic average of the three estimates) is estimated represent 2% of total Northern Irish GVA.

Figure 7.2 presents GVA estimates by sector, for a selection of economic sectors. This shows that adult social care generates lower values of GVA than the sectors with similar levels of employment (for example transport and storage and accommodation and food service). However, it still generates a significant proportion of Northern Irish GVA, and the value of GVA in the sector can be expected to rise in the future as demand for adult social care services grows.

Figure 7.2 GVA by broad sector (selected sectors), £millions, 2016



Source: Regional GVA statistical series; ICF analysis. Human health and social work activities excluded from analysis

The estimated value of productivity (GVA per FTE) in Northern Ireland has been estimated using data from the ONS Labour Productivity data series. The estimated value of productivity in Northern Ireland was £54,000. Productivity in the adult social care sector was estimated to be between 34% and 39% of the average productivity in Northern Ireland. The estimated level of productivity in the adult social care sector in Northern Ireland was lower than any specified sector in the Labour Productivity data series.

The results from the analysis can be compared to the previous study which estimated the economic value of the adult social care sector in Northern Ireland (The Social Care Council and Ulster University, 2016). This study examined the economic value of the regulated adult social care sector. However, there are some key differences to note when comparing the results from these reports:

- The studies use different data sources to estimate the number of individuals employed in the adult social care sector. This study uses the Social Care Council register and supplementary data to estimate the workforce, whereas the previous study uses the MINT database (which includes annual reports and accounts information). The Social Care Register did not cover all the regulated adult social care sector when the previous study was undertaken, and is therefore a new source of information. The data from the register was supplemented with estimates of the number of support staff working in the adult social care sector. The MINT database collects information from organisations annual reports. However, some organisations with low levels of turnover do not have to file complete annual reports, and the MINT database can be used to create estimates for these organisations. The use of different data sources, and the estimates involved in using each data source help to explain the difference in the two estimates.

- The average earnings used in this research are also lower than the earnings used in the previous research, therefore the total earnings in this research are lower than the previous research.
- The estimates of GVA from the expenditure and output approaches in this research include estimates of all public and private spending on adult social care, rather than just services regulated by RQIA. Therefore, the estimated levels of expenditure (or turnover) in this study are slightly higher than in the previous research (£920 to £962 million in this research; £809 million in the previous study).
- Additionally, the turnover to GVA ratios used in this study differ from those used in the previous study. This study differentiates turnover to GVA ratios by type of service and uses the most recent data available from the ABS in Northern Ireland and the UK; whereas the previous study uses an average value for all social care services over the 2010 to 2014 period. This average is lower than the values used in this study.

The comparison between the two studies show that:

- The results from the analysis in this study show a slightly lower number of direct jobs than the previous study (38,500; compared to 41,200 in the previous study), and in combination with the lower estimated earnings in this study, the value of total earnings is lower (£475 million compared to the previous estimate of £555 million);
- The results from this study show higher values of directly generated GVA than the previous study (£544 million to £605 million, compared to £330 million in the previous study), which is due to the levels of expenditure included in the analysis and the turnover to GVA ratios;
- The indirect and induced effects in this study are smaller than those in the previous study. This is because different multiplier values have been calculated from the NISRA I-O tables. The induced and indirect effects contributed 60,700 jobs and £489 million in GVA (147% of the direct effects). The induced and indirect effects in this research contribute between £463 million and £515 million, and 32,900 additional jobs (85% of the direct effects).

Despite some differences in the methodology of the two studies as outlined above, both studies estimate that the economic contribution of the adult social care sector in Northern Ireland amounts to almost 1 billion pounds.

7.3 National comparisons

This research involved estimating the value of the adult social care sector in all the nations of the UK. The key findings from all nations are summarised in **Error! Reference source not found.**. This shows that the adult social care sector in Northern Ireland is lower than in England, Scotland and Wales. This is expected given the population of Northern Ireland. The estimates show that:

- The level of productivity in the workforce is lower in Northern Ireland than in England and Scotland, but slightly higher than Wales;
- The estimated GVA per capita in Northern Ireland is lower than all other nations, but the estimated GVA per person aged over 65 is similar to Wales (but still lower than in England and Scotland);

- The estimated values from the income approach are lower than the estimates for the expenditure and output approaches in all nations; and
- The value of adult social care GVA is broadly comparable across all the nations of the UK. Scotland has the highest values of GVA per capita in each approach.

Some of the reasons behind the differences in GVA per capita in each nation are:

- In the income approach, earnings are higher in Scotland than the other UK nations. One reason for this is the introduction of the living wage in the adult social care sector in Scotland. Despite the higher earnings, there are a comparable number of FTEs (per capita) in Scotland and the other UK nations.
- In Northern Ireland, the estimated number of jobs and FTEs in the adult social care sector does not cover non-regulated services or PAs, and the earnings from these jobs (and subsequent GVA) are not estimated. This helps to explain why the estimate of GVA per capita using the income approach is lower in Northern Ireland than in the other nations, and why the productivity values for Northern Ireland are much higher in the expenditure and output approaches in Northern Ireland than in the income estimate.
- The amount of public spending per capita on adult social care is higher in Scotland than in the other nations. There are also a comparable number of FTEs (per capita) in Scotland and the other UK nations. The higher level of public expenditure and higher average wages in the adult social care sector in Scotland helps to explain why the estimated value of GVA per capita is higher in Scotland.

Table 7.2 Comparison of the value of the adult social care sector across the UK

	England	Northern Ireland	Scotland	Wales	UK
Direct economic value					
Income approach (£'000)	20,277,218	544,333	2,278,427	1,153,549	24,253,526
Expenditure approach (£'000)	20,420,586	605,163	2,558,174	1,202,959	24,786,883
Output approach (£'000)	21,651,931	550,653	2,511,150	1,184,262	25,897,996
Jobs	1,488,000	38,500	147,800	83,400	1,756,100
FTEs	1,027,900	28,900	109,600	61,600	1,228,000
Productivity per FTE					
Income approach (£)	19,700	18,800	20,800	18,700	19,700
Expenditure approach (£)	19,900	20,900	23,300	19,500	20,200
Output approach (£)	21,100	19,100	22,900	19,200	21,100
GVA per capita					
Income approach (£)	370	290	420	370	370
Expenditure approach (£)	370	320	470	390	380
Output approach (£)	390	300	460	380	390
GVA per capita 65+					
Income approach (£)	2,050	1,830	2,280	1,820	2,050
Expenditure approach (£)	2,070	2,030	2,560	1,900	2,100
Output approach (£)	2,190	1,850	2,510	1,870	2,190

ICF analysis

Part A: ANNEXES

Annex 1 Methodology

This annex presents more details about the assumptions and calculations used to estimate the size, structure and economic value of the adult social care sector in Northern Ireland. It aims to provide more technical detail about the methodology used to establish the estimates.

A1.1 Introduction to the three approaches to measure GVA

The economic value of the sector has been calculated using three different approaches: the input approach; the expenditure approach; and the output approach. This was to increase the robustness of the estimates, as there were strengths and weaknesses with the availability and quality of the data required for each of approach. A brief overview of the methodologies is presented here.

The income approach to measuring GVA attempts to measure the total income generated by the sector. There are two main components of income: the earnings / wages generated by workers in the sector; and additional income generated by the sector (for example profits and rents). The approaches to measuring these two components of income are:

- **Earnings / wages.** The number of jobs and FTEs in different adult social care services and in different types of provider was estimated. This was then multiplied by the estimated average earnings for a FTE for each type of service / provider. This gave an estimate of the total earnings in the sector.
- **GOS.** The other income generated by the sector has been estimated using the GOS. The GOS is income minus operating costs (for example the income received for providing an hour of domiciliary care minus staff, transport and material costs). It is not just the profit in the sector, as it does not include costs such as rent, interest payments, the depreciation of capital goods and exceptional purchases. Therefore, it is possible for a provider to generate a GOS and still make an economic loss. The average EDITBAR value for the care home sector (CMA, 2017) and the average value of surplus for the domiciliary care sector in the UK (UKHCA, 2018) have been multiplied by the total value of output for these services to estimate the GOS.
- These two types of income were summed together to estimate the GVA in the adult social care sector.

The expenditure approach to measuring GVA involves estimating the total level of expenditure on adult social care (public and private funding). The level of expenditure is used as a measure of spending in the sector, which is the equivalent of business turnover (value of goods and services sold). This is then converted to GVA on the basis of turnover to GVA ratios provided in the Annual Business Survey (ABS). This represents the removing of intermediate purchases. The expenditure approach for the adult social care sector requires estimates of two types of expenditure:

- Public and co-financing expenditure – the level of expenditure by the state. Data for this was collected from national statistics; and
- Self-funding. This is more difficult to estimate as there is no data available that shows the number of self-funders. The number of self-funders was estimated using findings from a rapid evidence review. The number of self-funders was multiplied by an average unit cost for self-funders and their demand for services (the number of hours of adult social care they needed) to estimate the total value of self-funded expenditure.
- These two types of expenditure were summed together to estimate the GVA in the adult social care sector. The total expenditure was then converted to GVA by multiplying the expenditure by the turnover to GVA ratios.

The output approach to measuring GVA involves multiplying the number of hours of adult social care that was provided by the average cost of adult social care. This provided an estimate of spending in the sector, which is the equivalent of business turnover (value of goods and services sold). This is then converted to GVA on the basis of turnover to GVA ratios provided in the Annual Business Survey (ABS). This represents the removing of intermediate purchases. The expenditure approach for the adult social care sector involved three main steps estimates:

- Identifying the hours of adult social care provided. For the care homes sector, this was estimated using capacity and average occupancy information for care homes. For the non-residential sector, and the number of service users receiving non-residential care was collected and this was multiplied by the average number of hours a service user needs the service.
- The number of hours used of each service is multiplied by the average cost of the service to estimate the total value of the services used (business turnover).
- The total value of output was then converted to GVA by multiplying the expenditure by the turnover to GVA ratios.

A1.2 The size and structure of the adult social care sector in Northern Ireland

A1.2.1 Number of adult social care sites

The number of sites providing regulated adult social care services in Northern Ireland has been taken directly from the RQIA Annual Report and Accounts 2015-16 (2016). This provided the total number of sites providing each type of care. The RQIA register of service was accessed in November 2017. This was then used to estimate the number of sites which were run by public / private / voluntary organisations. The database also provided information about the organisation which ran each site, such as organisation name, address and postcode. The post code, address and organisation name were used to identify sites where multiple adult social care services were provided. Sites where multiple services were provided were only counted once in the calculation of the total sites providing adult social care. It was estimated that 890 sites delivered 980 services.[22]

It is important to note that the primary unit of data collection in the RQIA data is services provided. This is different to the number of sites, as at some sites multiple services are provided (for example, a single site can provide residential and day care services). Therefore, the total number of sites for each type of service will not necessarily equal the overall total number of sites.

No data was collected on the number of sites providing non-regulated adult social care. Non-regulated activities could include community care and non-personal social care. The number of non-regulated adult social care sites in Northern Ireland was explored using data from the IDBR, RQIA and SfC in England. However, it was judged that the quality of the data did not support a robust assessment of the number of sites, jobs and earnings in the non-residential sector, as it was not clear how many sites provided these services, what the services were or how many jobs were involved with the service delivery. Therefore, no analysis of the non-regulated adult social care sector was attempted.

[22] The RQIA register was accessed in November 2017.

A1.2.2 The size and structure of the adult social care workforce

The number of regulated workers in the adult social care sector is collected by the Social Care Council. This data disaggregates staff by the type of service they provide and the type of provider they work for. However, as the data is collected on a dynamic register, it was not possible to collect data for the number of individuals working in 2016.[23] Therefore, data accessed in January 2018 was adjusted to 2016 values using information from the HSCB. This indicated that the workforce had increased in size by 2% since 2016. Therefore, the number of workers for 2017 has been reduced (multiplied by 98%) in all types of service. This data manipulation is presented in Table A1.2.

The register measures the number of workers in the adult social care sector, however research by SfC estimated that on average, workers in the adult social care sector hold more than one job. This is estimated to be an average of 1.03 jobs in the public sector and 1.06 jobs in the private and voluntary sectors. These values have been multiplied by the estimated number of workers in the adult social care sector to estimate the total number of jobs.

Table A1.1 Estimated number of workers on the adult social care register, 2016

Type of provider	Type of service	Workers in 2018	Estimated proportion of workers in 2016	Workers in 2016	Jobs per worker	Number of jobs

[23] It was only possible to identify those still on the register who were on working in 2016. Employment data for 2016 was required to align the employment estimates for Northern Ireland with the expenditure and output data, and the information in the reports for other nations in the UK.

Type of provider	Type of service	Workers in 2018	Estimated proportion of workers in 2016	Workers in 2016	Jobs per worker	Number of jobs
Public	Residential care	1,800	98%	1,700	1.03	1,800
	Nursing care[24]	-	-			0
	Domiciliary care	4,100	98%	4,000	1.03	4,200
	Day care	1,300	98%	1,200	1.03	1,300
	Other services	200	98%	200	1.03	200
	Total	**7,400**		**7,200**		**7,400**
Private	Residential care	10,700	98%	10,500	1.06	11,100
	Nursing care[19]	-	-			0
	Domiciliary care	6,600	98%	6,400	1.06	6,800
	Day care	500	98%	500	1.06	500
	Other services	100	98%	100	1.06	100
	Total	**17,900**		**17,500**		**18,500**
Voluntary	Residential care	1,900	98%	1,900	1.06	2,000
	Nursing care[19]	-	-			0
	Domiciliary care	3,000	98%	3,000	1.06	3,100
	Day care	400	98%	400	1.06	400
	Other services	-	98%		1.06	0
	Total	**5,300**		**5,200**		**5,500**
Total	Residential care	14,400	98%	14,100		14,900
	Nursing care[19]	-	-			0
	Domiciliary care	13,700	98%	13,400		14,100
	Day care	2,100	98%	2,100		2,200
	Other services	300	98%	300		400
	Total	**30,600**		**29,900**		**31,500**

Source: The Social Care Council Register of Social Work; Annual Census of Northern Ireland Health and Social Care Workforce; Figures rounded to the nearest 100. Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

Some staff who work in the adult social care sector are not included on the register. These are the support staff (security, cleaners, administration etc) that are not required to be registered, and social workers. To estimate the number of these staff in Northern Ireland, information from SfC and the HSCB has been used. The following steps were taken to estimate the number of jobs in these occupations:

- Information was collected from the NMDS-SC for the number of these occupations in the adult social care sector in England.
- The number of jobs in these occupations was divided by the number sites providing services in the adult social care workforce in England.
- This proportion was then multiplied by the number of adult social care sites in Northern Ireland, to estimate the total number of jobs in these occupations in the adult social care sector in Northern Ireland.

[24] The Social Care Council register does not differentiate between Adult Residential and Nursing Care, therefore jobs for both residential and nursing care are presented in the residential care category.

- Data for the number of social workers for adults was taken from the NI HSC Workforce Census 2016.

Table A1.2 Proportion of support staff to staff delivering adult social care in England and estimated number of support staff in Northern Ireland, 2016

Type of service	Support staff per site providing adult social care	Estimated support staff (Northern Ireland)	Adult social workers (Northern Ireland)
Public sector			
Residential care	6.2	300	
Nursing care			
Domiciliary care	4.2	300	
Day care	5.1	600	
Other services	10.4	0	1,700
Total		1,300	1,700
Private and voluntary sector			
Residential care	7.8	3,200	
Nursing care			
Domiciliary care	2.6	700	
Day care	1.3	100	
Other services	1.4	0	
Total		3,900	
Total			
Residential care	7.8	3,500	
Nursing care			
Domiciliary care	2.6	1,000	
Day care	1.3	700	
Other services	1.4	0	1,700
Total		**5,200**	**1,700**

Skills for Care, NMDS-SC; Annual Census of Northern Ireland Health and Social Care Workforce; The Social Care Council Register of Social Work. Totals may not equal the sum of services due to rounding.

The data does not provide an estimate of the number of hours worked. To estimate the number of hours worked and FTEs:

- Information was collected from ASHE for the number of workers who are full-time and part-time. It is estimate that 54% of the workers in the residential social care sector work full-time (46% work part-time), and 57% in the social work sector work full-time (43% work part-time).
- Full-time workers were estimated to work 37 hours per week, part-time workers in residential care work 19.9 hours a week and part-time workers in domiciliary, day care and other services work 18.1 hours a week (ASHE, 2016). This means the average hours worked a week are:
  - 29.2 hours per week in residential and nursing care (0.79 FTE); and
  - 28.9 hours per week in domiciliary, day care and other services (0.78 FTE).

The above describes the workforce in the regulated adult social care sector in Northern Ireland. The size of the non-regulated workforce (those not subject to RQIA inspections) was

explored. It was judged that the quality of the data did not support a robust assessment of the number of jobs and earnings in the non-residential sector, as it was not clear what the services were or how many jobs were involved with the service delivery. Therefore, no analysis of the non-regulated adult social care sector was attempted.

A1.3 The income approach to economic value

A1.3.1 Earnings

The earnings information provided in ASHE, according to adult social care experts[25], overestimated the earnings in the sector in all UK nations. No other information is collected in Northern Ireland which presents earnings in the adult social care sector. Therefore, the value of earnings in Northern Ireland was estimated using SfC estimates of earnings in England and information from ASHE showing the relative value of earnings in Northern Ireland and England.[26]

The value of hourly earnings[27] in the adult social care sector in Northern Ireland was divided by the average hourly earnings in the sector in England to establish the ratio of earnings between the two countries. The ratio was then multiplied by the values collected by SfC.

Table A1.3 shows the estimated earnings in Northern Ireland in 2016 by sector. The earnings are separated by type of service and type of provider (public and private / voluntary sectors).

These values have been used to estimate the total value of earnings by multiplying the earnings by the number of FTEs in the adult social care sector.

Table A1.3 Estimated earnings in Northern Ireland 2016

Sector	Earnings in England (FTE)	ASHE ratio	Earnings in Northern Ireland
Public sector			

[25] ASHE estimates do not include self-employed workers, or jobs in businesses which are not required to be PAYE registered (most likely small firms with low levels of pay). Therefore the ASHE estimates exclude many low paying jobs, which can lead to an overestimation of earnings.

[26] Data was collected from both ASHE and the LFS on earnings in the adult social care sector, based on appropriate SIC codes. The ratios between earnings in each nation was similar in both ASHE and the LFS. ASHE data was selected as the values are based on a larger sample.

[27] Hourly earnings were selected as the number of responses for hourly earnings was larger and it does not include any other potential differences in hours worked or employee benefits.

Sector	Earnings in England (FTE)	ASHE ratio	Earnings in Northern Ireland
Residential care	£19,500	99%	£19,300
Nursing care	£18,900	99%	£18,600
Domiciliary care	£20,300	88%	£17,900
Day care	£20,700	88%	£18,200
Other	£29,700	88%	£26,000
Private and voluntary sectors			
Residential care	£15,900	99%	£15,600
Nursing care	£16,900	99%	£16,600
Domiciliary care	£16,200	88%	£14,300
Day care	£18,100	88%	£15,900
Other	£19,000	88%	£16,700

Source: SfC data; ASHE; ICF calculations; Figures rounded to the nearest 100

A1.3.2 Gross Operating Surplus

GOS is defined as income minus operating costs (for example the income received for providing an hour of domiciliary care minus staff, transport and material costs). In estimating GOS, it is assumed that only private sector care providers are run 'for profit', and therefore generate a GOS.

It is important to note that the GOS does not equal the profit taken by owners and shareholders. Only a subset of total costs are included in the GOS calculation. Long term costs such as the use of fixed capital (depreciation and amortisation), exceptional purchases, the payment of interest and taxation and rents are not removed. It is the equivalent of earnings before interest, taxes, depreciation, amortization and restructuring or rent costs (EBITDAR).[28]

The Competition and Markets Authority (CMA, 2017) provides a more detailed assessment of GOS in the residential care sector. This examined the annual accounts of all residential care operators in the UK that are required to file their accounts at Companies House. This found that in 2015/16 (the most recent year that comprehensive information was available), the GOS in the sector was around 16%. The 16% has been used in the analysis. It should be noted that this is a simplifying assumption for the calculation, rather than conducting primary research (examining all adult social care providers annual accounts) to estimate the level of GOS. 16% has been multiplied by the output of the residential and nursing care sectors.

The GOS for domiciliary care providers has been estimated using information taken from the United Kingdom Homecare Association (UKHCA, 2017). This research provided information which was used to estimate an equivalent of the EBITDAR value to represent GOS. It was estimated that the GOS margin in the home care market was 11.3% for private domiciliary providers and 8.3% for voluntary providers. The estimation of GOS included the following cost indicators to calculate the GOS (attempting to be the equivalent of EBITDAR):

- Care worker costs;
- Staffing, recruitment and training;

[28] The EBITDAR value has been used in the analysis as it is the preferred measure in both the LaingBuisson report and the CMA market analysis. The EBITDA measure, where rents and restructuring costs are assumed to be operating costs is used in the sensitivity analysis in Annex 2

- Consumables; and
- Professional costs.

The cost indicators which were excluded from the estimation of the GOS in the domiciliary care were:

- Net profit / surplus (3%) – included for the estimation of GOS in the private sector, but assumed to be zero in the estimation of GOS in the voluntary sector;
- Premises, utilities and services (5.8%); and
- Other business overheads (3%).

There is no information available for the value of GOS for day care and other services. Therefore, no attempt has been made to estimate the GOS in these services.

A1.4 The expenditure approach to economic value

Data which presents the value of public sector spending and co-funding in the adult social care sector was provided by HSCB. The data is disaggregated by type of user and type of service.

However, this data does not cover the expenditure by self-funders. There is no data which provides statistics on the number of self-funders or the value of their expenditure. Therefore, information was taken from existing literature to estimate the number and value of self-funding in Northern Ireland.

LaingBuisson (2017) estimate the proportion of individuals in residential care who are self-funders. In Northern Ireland, 11% of residents are estimated to be self-funders. The report also produces estimates of the total capacity of the sector and occupancy rates. Using these figures, it was possible to estimate the number of self-funders (see Table A1.4).

HSCB produce statistics which show the number of people receiving funding for domiciliary care, day cases and other social care services. However, there are no statistics available to show the number of individuals who fund their own care. An evidence review was conducted to find evidence of the number of people who fund their own non-residential social care. This found a wide range of estimates, including:

- 20% of individuals in the UK fund their own homecare;[29]
- 21% of individuals receiving homecare;[30]
- Between 20% and 25% of individuals receiving homecare, based on studies between 2004 and 2011;[31]
- 30% of individuals receiving homecare in England;[32] and
- 35% of expenditure on home care in England.[33]

These were used to help to estimate the number of individuals who self-fund their care. In the analysis in the main report, it has been assumed that 7% of individuals self-fund their domiciliary and day care in Northern Ireland. This is based on the analysis that 30% of individuals in England self-fund their non-residential care – however, in England 43% of individuals self-fund their residential care (compared to 11% in Northern Ireland). Adjusting

[29] HM Government (2012) Caring for our future: reforming care and support; Institute of Public Care, Oxford Brookes (2015) Understanding the self-funding market in social care A toolkit for commissioners

[30] UK Care Homes Association (2016) An overview of the Domiciliary Care Market in the UK

[31] National Institute for Health research (2014) People who fund their own social care

[32] Personal Social Services Research Unit (2015) Projections of Demand for and Costs of Social Care for Older People and Younger Adults, 2015 to 2035

[33] LaingBuisson

the 30% figure in line with this leads to an estimate that 7% of individuals in Northern Ireland self-fund their non-residential care.

For other services, it is not possible to disentangle the number of individuals who pay for their own care, due to the diverse nature of services and prices for services. Therefore, it has been assumed that 7% of the total output for other services in Northern Ireland is self-funded.

Table A1.4 Estimates of the number of self-funders, Northern Ireland

Type of provision	Total number of individuals receiving support	Proportion of individuals who are self-funders	Number of self-funders
Residential care	2,400	11%	200
Residential care with nursing	9,000	11%	1,000
Domiciliary care	25,700	7%	1,900
Day cases	8,000	7%	600

LaingBuisson; HSCB; LaingBuisson (2017) Care of Older People; ICF calculations; Figures rounded to the nearest 100

The usage of services by self-funders is assumed to be the same as the usage of services by funded individuals. This means that:

- Residential care users require 52 weeks of care a year;
- Domiciliary care users require 11 hours of care a week (572 hours per year); and
- Day care users require 2.5 sessions of day care a week (130 hours per year).

The unit cost for self-funders is assumed to be higher than for those for funded individuals. Previous research estimated that this mark-up was 20%, but the more recent study by LaingBuisson estimates that the mark-up is 46%. This mark-up has been added to the value of funded care. The unit cost of social care for self-funders in Northern Ireland is presented in Table A1.5.

The number of self-funders is multiplied by the unit cost of care for self-funders and the volume of care they require. This gives the total value of the self-funded market in Northern Ireland. This is then added to the value of public and co-funded expenditure to estimate the total expenditure in the adult social care sector.

Table A1.5 Unit costs for care in Northern Ireland

	Unit cost for funded individuals	Unit cost for self-funders
Residential care	£450 / week	£660 / week
Residential care with nursing	£500 / week	£710 / week
Domiciliary care	£20 / hour	£23 / hour
Day cases	£60 / session	£72 / session

PSSRU, Unit Cost of Health and Social Care, 2016; LaingBuisson; ICF calculations

A1.5 The output approach economic value

The output approach to estimating the economic value of adult social care multiplies the quantity of services used by individuals in Northern Ireland by the unit cost of each type of provision.

The number of individuals using each type of service is presented in Table 5.1, Table 5.2 and Table 5.3 in the main report. This includes individuals who receive funding for their care and individuals who self-fund their care. The unit costs used in the calculations taken from the PSSRU (2016) report. The cost of adult social care in Northern Ireland (taken from LaingBuisson, 2017) was divided by the costs in England, to establish the ratio of earnings between the two countries. The ratio was then multiplied by the unit costs from the PSSRU research to estimate the costs in Northern Ireland.

A1.6 Indirect and induced effects

In order to attribute output / expenditure to public sector providers, workforce and care home capacity data was used. The Northern Irish I-O tables produce estimates of Type I multiplier effects, and provide data which allows the Type II multipliers and induced effects to be calculated. The method used is described below:

- The Blue Book suggests a marginal propensity to consume of 70.5% (estimated as household consumption as a percentage of total income), which has been used in these calculations.
- The marginal propensity to consume was applied to the total direct and indirect income/GVA for the care sector from the UK I-O tables, to estimate the spending of wages of those directly and indirectly employed by the care sector.
- The UK I-O tables include household consumption by sector and this was used to disaggregate the re-spent wages by sector.
- Metrics were calculated to estimate the GVA and employment supported by this household expenditure in each of the 127 sectors included in the UK I-O tables. This used data from the ABS, which enables metrics to be produced for sectors at a disaggregated level. These can then be mapped onto the UK I-O tables.
- The final step was to sum the GVA and employment supported in each sector from the household spending of wages received, and this was then used to produce estimates of induced multipliers for the spending of wages earned in the care sector.

In order to estimate the indirect and induced effect disaggregated by sector, the output / expenditure generated by public, private and voluntary sector providers needed to be calculated. This has been done using information about the output of public, private and voluntary sector providers in the residential and nursing care sectors, and the percentage of total employment which is public / private / voluntary sector from the workforce data.

Annex 2 Sensitivity analysis

This annex provides a sensitivity analysis of the estimates of the size, structure and economic value of the adult social care sector in Northern Ireland. Some of the calculations used to estimate the size, structure and economic value of the sector involve assumptions and data manipulation. In the sensitivity analysis, some of these assumptions are varied, to show how sensitive the overall results are to these assumptions. The sensitivity analysis presents a range of values (a high and a low estimate) of the value of the adult social care sector in Northern Ireland.

The sections below show the assumptions which have been varied, and the values used in the calculations. Other than these changes, the calculations undertaken are exactly as set out in the main report and Annex 1. The final results of the sensitivity analysis (Employment, expenditure / output and GVA) are presented, but the intermediary tables (included in the main report) are not recreated.

A2.1 The income approach to economic value

Table A2.1 presents the assumptions which have been varied for the income approach estimates. These include the average estimated earnings and the level of GOS generated by the sector. These have been varied as they all include assumptions and calculations, rather than being taken directly from data sources.

Table A2.1 Assumptions varied in the sensitivity analysis of the income approach

	Low	Central	High	Calculation
Average earnings – public sector				+/- 5% to reflect uncertainty
Residential care (£)	18,300	19,300	20,200	
Nursing care (£)	18,300	18,600	19,600	
Domiciliary care (£)	17,000	17,900	18,800	
Day care (£)	17,300	18,200	19,100	
Other services (£)	24,700	26,000	27,300	
Average earnings – private and voluntary sectors				
Residential care (£)	15,300	15,600	16,400	
Nursing care (£)	15,300	16,600	17,400	
Domiciliary care (£)	14,300	14,300	15,000	
Day care (£)	15,100	15,900	16,700	
Other services (£)	15,900	16,700	17,600	
GOS – residential care	7.5%	16.0%	19.5%	EDITBA; EDITBAR and higher LaingBuisson value for EDITBAR
GOS – private domiciliary care	8.3%	11.3%	15.3%	UKHCA report
GOS – voluntary domiciliary care	6.3%	8.3%	10.3%	UKHCA report

The results of the sensitivity analysis are presented in Table A2.2. This shows that when the assumptions for the calculations are varied, the total value of GVA generated in the adult social care sector varies by £106 million. This represents 22% of the low estimate of the adult social care sector. The largest differences are seen in the residential and nursing care sectors, as more elements of GVA have been altered (earnings, workers and GOS).

Table A2.2 Results of the sensitivity analysis of the income approach

GVA estimate	Low (£'000)	Central (£'000)	High (£'000)
Residential care	232,140	269,920	294,672
Nursing care			
Domiciliary care	179,093	195,281	214,334
Day care	35,581	37,454	39,326
Other services	39,595	41,679	43,763
Direct payments	-	-	-
Total	**486,409**	**544,333**	**592,095**

Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

A2.2 The expenditure approach to economic value

The assumptions which have been varied for the sensitivity analysis of the expenditure approach to measuring the value of the sector are presented in Table A2.3. Where data was taken directly from official statistics and did not require further estimation or manipulation, no sensitivity analysis has been undertaken. Therefore, the only areas where sensitivity analysis has been conducted is for self-funders – the proportion of service users who self-fund, and the unit cost for self-funded care.

Table A2.3 Assumptions varied in the sensitivity analysis of the expenditure approach

	Low	Central	High	Calculation
Proportion of individuals who are self-funders				+/- 5% to reflect uncertainty; Assumed 25% of non-residential care services in England are self-funders (low); 32% are self-funders (high)
Residential care	10.0%	10.5%	13.0%	
Nursing care	10.0%	10.5%	13.0%	
Domiciliary care	5.5%	7.3%	8.6%	
Day care	5.5%	7.3%	8.6%	
Proportion of 'other services' which are self-funded	5.5%	7.3%	8.6%	
Unit cost of self-funded care				+/- 5% to reflect uncertainty
Residential care	£620 / week	£670 / week	£690/ week	
Nursing care	£670 / week	£710 / week	£740 / week	
Domiciliary care	£22 / hour	£23 / hour	£24 / hour	
Day care	£68 / hour	£72 / session	£75 / hour	

The results from the sensitivity analysis are presented in Table A2.4. This shows a range in the estimates of £17 million due to the changes in the assumptions. This represents 3% of the low estimate of total GVA of the adult social care sector. The variation is lower in the

expenditure method than the other methods because the number of individuals self-funding their care in Northern Ireland is low.

Table A2.4 Results of the sensitivity analysis of the expenditure approach

GVA estimate	Low (£'000)	Central (£'000)	High (£'000)
Residential care	116,482	117,133	118,991
Nursing care	255,118	257,762	265,552
Domiciliary care	83,168	86,511	89,023
Day care	38,964	39,652	40,235
Other services	89,085	90,593	91,703
Direct payments	13,512	13,512	13,512
Total	**596,329**	**605,163**	**619,016**

Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

A2.3 The output approach economic value

As with the sensitivity analysis for the expenditure approach, the only values that have been altered are those which required estimation and data manipulation. For the output approach, this meant the unit cost of adult social care and the number of care users. The values used in the sensitivity analysis are presented in Table A2.5.

Table A2.5 Assumptions varied in the sensitivity analysis of the output approach

	Low	Central	High	Calculation
Residential care – public provision	£850 / week	£900 / week	£940/ week	+/- 5% to reflect uncertainty
Residential care – private provision	£500 / week	£530 / week	£560 / week	
Nursing care	£560 / week	£590 / week	£620 / week	
Domiciliary care	£18 / hour	£20 / hour	£22 / hour	
Day care	£57 / session	£61 / session	£64 / session	
Residential care for younger adults	£1,030 / week	£1,090 / week	£1,140 / week	
Number of self-funded care users	See Table A2.3			

The results of the sensitivity analysis are presented in Table A2.6. This shows that by varying the assumptions for the unit cost of care and the number of individuals who self-fund their care, the results for the value of adult social care varies from £518 million to £584 million. This represents a £66 million difference between the high and low estimates, or 13% of the low value of the sector.

Table A2.6 Results of the sensitivity analysis of the output approach

GVA estimate	Low (£'000)	Central (£'000)	High (£'000)
Residential care	77,097	81,470	85,924
Nursing care	211,653	222,614	234,330
Domiciliary care	114,060	129,174	144,135
Day care	24,736	26,815	28,716
Other services	84,441	84,441	84,441
Direct payments	6,140	6,140	6,140
Total	**518,127**	**550,654**	**583,686**

Individual row totals may be not sum due to rounding. Totals may not equal the sum of services due to rounding.

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