Unpacking the Care-Related Quality of Life Effect of England's publicly funded Adult Social Care.
A panel data analysis of long-term support users

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Adult Social Care (ASC) in England

- The ASC programme covers a wide range of activities to support older people, people living with disabilities, and physical or mental illness to live independently and stay well.

- 152 local authorities (LAs) in England are responsible for providing ASC services.

- Publicly funded social care in England is not free for all. It is only available to people with the highest needs and lowest assets.

- The 2014 Care Act standardised guidelines for ASC needs assessment and stated national minimum eligibility criteria. However, each LA can establish additional criteria.

Public ASC expenditure in England

- 818,000 people received publicly funded long-term care (LTC) in 2021/22.

- In 2021/22, the total expenditure ASC by LAs was £26.9 billion [1].

- ~50% of this expenditure is on individuals between 18-64 years of age and most of it is used to provide learning disability support, while the other half is spent on people 65+ and to provide physical support.

The effect of ASC expenditure of Care-related quality of life (CRQoL)

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RESEARCH ARTICLE

Health Economics WILEY

Does public long-term care expenditure improve care-related quality of life of service users in England?

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Abstract

Public long-term care (LTC) systems provide services to support people experiencing difficulties with their activities of daily living. This study investigates the marginal effect of changes in public LTC expenditure on care-related quality of life (CRQoL) of existing service users in England. The public LTC program for people aged 18 or older in England is called Adult Social Care (ASC) and it is provided and managed by local authorities. We collect data on the outcomes and characteristics of public ASC users, on public ASC expenditure, and on the characteristics of local authorities across England in 2017/18. We employ an instrumental variable approach using conditionally exogenous elements of the public funding system to estimate the effect of public ASC expenditure on user CRQoL. Our findings show that by increasing public ASC expenditure by £1000 per user, on average, local authorities increase user CRQoL by 0.0030. These results suggest that public ASC is effective in increasing users' quality of life but only to a relatively small extent. When combined with the other potential effects of LTC expenditure (e.g., on informal carers, mortality), this study can inform policy makers in the United Kingdom and internationally about whether social care provides good value for money.

Open access Original research

BMJ Open

Is extending eligibility for adult social care better than investing more in existing users in England? A cross-sectional evidence for multiple financial years

Francesco Longo,[1] Karl Claxton,[1] James Lomas,[2] Stephen Martin[2]

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ABSTRACT

Objectives Publicly funded adult social care (ASC) in England aims to improve quality of life through the provision of services for individuals with care needs due to physical and/or mental impairment or illness. Access to these services, however, is often restricted to contain public expenditure. With a fast-growing care need, information on whether extending eligibility is good value for money becomes policy-relevant.

Primary and secondary outcome measures This study investigates the effect of extending ASC eligibility on user care-related quality of life (CRQoL), a policy-relevant measure of quality of life.

Design We use English cross-sectional survey data from 2017/2018 to 2019/2020 on users receiving publicly funded long-term support including domiciliary and other community-based social care, as well as residential and nursing care from local authorities responsible for ASC. We employ the two-stage least square method to estimate the impact of ASC expenditure on CRQoL at various levels of ASC expenditure in each financial year. This includes the CRQoL effect of increasing expenditure from zero to some level, which captures the effect of extending ASC eligibility to new users.

Results We find that publicly funded ASC improves the CRQoL of both existing and newly eligible users, although the latter are likely to experience greater CRQoL gains. Moreover, from 2017/2018 to 2019/2020, spending as much as an average user for a newly eligible user costs between £54 224 and £77 778 per social care-quality-adjusted life year (SC-QALY) gained. These results are statistically significant at the 5% level. Compared with this finding, increasing expenditure for an existing user has always a higher cost per SC-QALY gained.

Conclusions Extending ASC eligibility to new users is likely to be more cost-effective compared with using the

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ We estimate the causal impact of publicly funded adult social care expenditure on the care-related quality of life (CRQoL) of newly eligible users in addition to existing users.
⇒ Causal inference is made across multiple financial years.
⇒ Our analysis focuses on individuals receiving long-term support who are those with the highest level of need in the population and results might not apply to individuals with lower levels of need.
⇒ The effects of extending ASC eligibility on CRQoL is estimated by extrapolation because our sample mostly includes users receiving publicly funded support.

individuals with care needs due to physical and/or mental impairment or illness. These services range from long-term support (eg, domiciliary care, residential care) to signposting and information services, and they have the goal of improving the quality of life of service users.[1] The financial challenges of the last decades placed ASC under a substantial pressure with expenditure decreasing in real terms in the first half of the 2010s. The cost containment measures implemented by the government in this period exacerbated the gap between demand and supply of ASC services. This meant that 40% fewer individuals aged 65 and over received ASC leaving them with less support.[2 3] In response to these issues, in September 2021, the UK

The effect of ASC expenditure of Care-related quality of life (CRQoL)

- Cross-sectional evidence from 2017/18 found that increasing ASC expenditure by £1,000 per user increased 0.003, on average, LTC users' CRQoL -which was equal to 0.4% of the average user CRQoL [2].

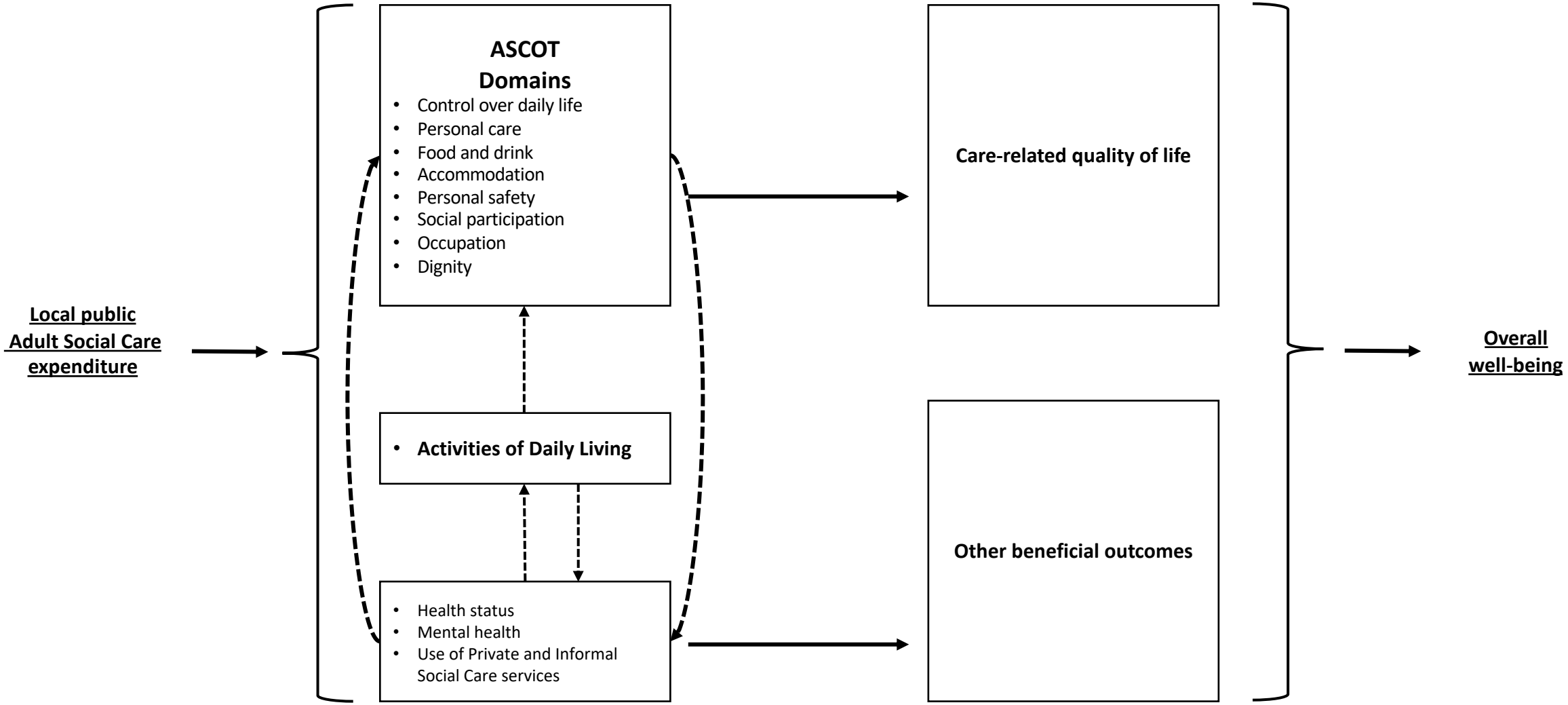
- Another cross-sectional study found diminishing marginal returns of CRQoL w.r.t. ASC expenditure, and by extrapolating some estimates, it found that increasing the number of new eligible users was cost-effective, compared with investing more on existing users: £54,224 per social care quality adjusted life year (SC-QALY) vs £83,784 per SC-QALY [3].

Research Objectives

This study builds on Longo et al., (2021) and Longo et al., (2023) and aims to:

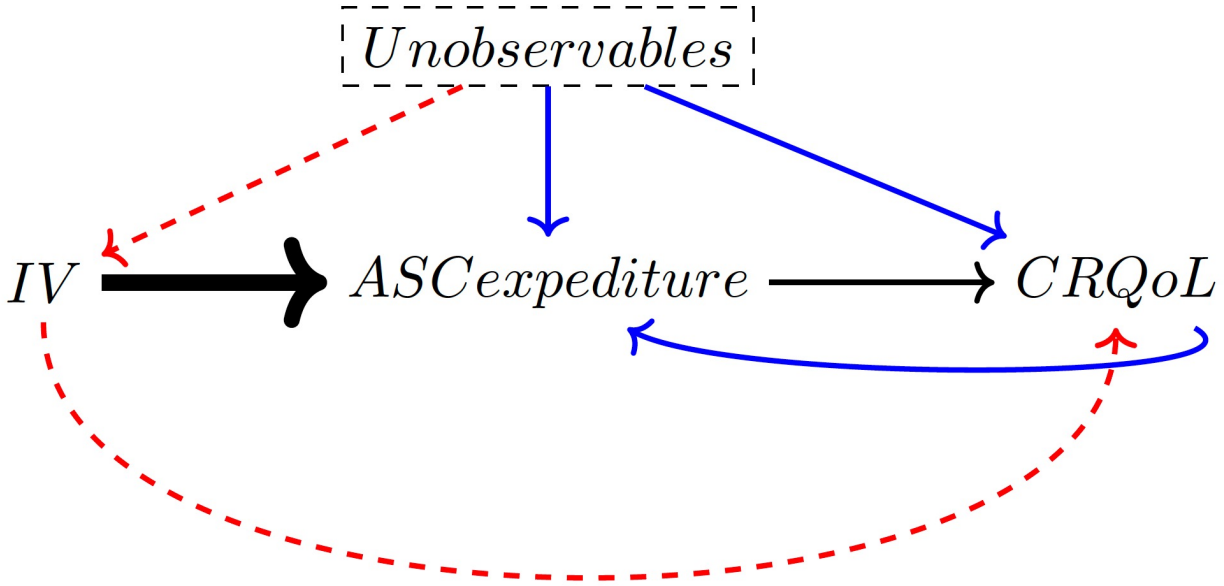
- Re-estimate the effect of ASC expenditure on users' CRQoL using panel data
- Explore which group of LTC users benefit the most from ASC expenditure
  - users with a learning disability
  - users with no learning disability
  - users with no learning disability above 65 years in residential or nursing care
  - users with no learning disability above 65 years using community-based services
- Explore the effect of ASC expenditure effect on CRQoL through several potential channels.

Figure 1. Potential channels between public local ASC expenditure and CRQoL.



Methods (I)

- To causally estimate the effect of ASC expenditure on CRQoL requires overcoming two challenges.
  1. Endogeneity of ASC expenditure coming from potential confounders(user's need) simultaneously affecting expenditure and CRQoL.
  2. Reverse causality (simultaneity) between expenditure and CRQoL



- To address these issues, we employ a panel data-IV approach.
  - Higher statistical power compared to cross-sectional analysis
  - Control for unobserved time-invariant factors at the regional level and for time trends.

Methods (II)

We built from previous work [2,3] and analyse the causal effect of ASC expenditure on CRQoL using the following model:

$$CRQoL_{ijkt} = \alpha_2 + \beta_2 Exp_{jt}^{public} + \beta_3 \left(Exp_{jt}^{public} \right)^2 + \delta_1 LTCusers_j + \\ + \gamma_2 X_{ijt} + \phi_{2k} + \tau_{2t} + \left(\phi_{2k} * \tau_{2t} \right) + \varepsilon_{2ijkt} \quad \text{(Eq.1)}$$

- Where the CRQoL of user *i* (=1,…,*I*) living in LA *j* (=1,…,*J*) within region *k* (=1,…,*K*), and during fiscal years *t* (=2014/15,…,2019/20) is a linear function of the average public ASC expenditure per LTC user (Exp_{jt}^{public}) in LA *j*, proportion of LTC eligible users ($LTCusers_j$), and user's characteristics (X_{ijt}).
- ASC expenditure endogeneity is addressed by:
  - Using an IV approach via 2SLS
  - Adjusting for unobserved LA regional and time-unobserved heterogeneity (ϕ_1 and τ_1).

Methods (III)

$$CRQoL_{ijkt} = \alpha_2 + \beta_2 Exp_{jt}^{public} + \beta_3 \left(Exp_{jt}^{public} \right)^2 + \delta_1 LTCusers_j + \\ + \gamma_2 X_{ijt} + \phi_{2k} + \tau_{2t} + \left(\phi_{2k} * \tau_{2t} \right) + \varepsilon_{2ijkt} \quad \text{(Eq.1)}$$

- Eq.1 has three endogenous variables:
  - Exp_{jt}^{public} → IV: council tax base per LTC user
  - $\left(Exp_{jt}^{public} \right)^2$ → IV: council tax base per LTC user squared
  - $LTCusers$ → IV: type of LA [4]

- When estimating, Eq. (1) observations were weighted for their sample probability, and standard errors were clustered within LAs.

Methods (IV): Exploring potential channels

We examine whether ASC expenditure per user causally impacts ASCOT domains, ADL and other factors ($Channel$) by replacing the LHS of Eq. (1).

$$Channel^{l}_{ijkt} = \alpha_2 + \beta_2 Exp^{public}_{jt} + \beta_3 \left(Exp^{public}_{jt} \right)^2 + \delta_1 LTCusers_j + \quad \text{(Eq.1)}$$
$$+\gamma_2 X_{ijt} + \phi_{2k} + \tau_{2t} + \left(\phi_{2k} * \tau_{2t} \right) + \varepsilon_{2ijkt}$$

- Where $Channel^{l}_{ijkt}$ represents the *C*-th potential channel. In total, we explored 27 potential channel variables.
- When channel variables are categorical or binary variables, we employ control function (CF) models to estimate Eq.2

Methods (VI)

- In summary, we:

  - Explore heterogeneity by user group
  - Investigate potential channels through which ASC expenditure may operate, and
  - Identify some possible additional beneficial outcomes not necessarily captured in the CRQoL measure

- Throughout, we evaluate whether investing in new users is more cost-effective than investing in existing users.

Data

- We use repeated data at the LA-level for six years: from **2014/15 to 2019/20**
- Adult Social Care Survey (ASCS): CRQoL outcomes and characteristics of ASC users receiving LTS came.
  - The survey includes the items needed to create a **preference-weighted** measure of the social care-related quality of life using elicited preference methods.
  - CRQoL is constructed based on the **Adult Social Care Outcomes Toolkit (ASCOT)[a]**
  - Besides the ASCOT domains, the ASCS also includes information about physical and mental health status, ADL done by the users, satisfaction indicators related to the care services received and other QoL-related outcomes, such as health and mental health status.
- Data on total publicly funded ASC expenditure across LAs come from the Adult Social Care-Finance Return

[a]These are: (1) control over daily life, (2) personal cleanliness and comfort, (3) food and drink, (4) personal safety, (5) social participation and involvement, (6) occupation, (7) accommodation cleanliness and comfort, and (8) dignity.

Results

Table 1. Descriptive statistics on main variables

	Mean	SD	Min.	Max	SD Between	SD Within
			Main outcome			
Utility-weighted CRQoL*	0.82	0.19	0.15	1	0.16	0.13
			Endogenous variables			
ASC expenditure per LTS user (£).	24,220	4,550	13,130	46,390	3,740	2,680
Prop. eligible LTS users	2.08	0.48	0.95	6.01	0.46	0.17
			Instrumental variables			
Council tax base per LTS user	25.62	7.39	12.04	56.51	7.03	2.32
County	0.18	0.38	0.00	1.00	0.38	0.03
Metropolitan District	0.24	0.43	0.00	1.00	0.43	0.00
Unitary authority	0.36	0.48	0.00	1.00	0.48	0.03
Inner London borough	0.09	0.29	0.00	1	0.28	0.00
Outer London borough	0.12	0.33	0.00	1	0.34	0.00
N	898					
n	152					
Tbar	6					

Note: Means are estimated using survey weights.

*CRQoL has been designed to range between –0.171 and 1, with "0" being equivalent to *being dead* and "1" being the *ideal SCRQoL state* [6]

Table 2. Effect of ASC expenditure on users' CRQoL

Dependent variable: Care-related Quality of Life	Quadratic and Region-FE Panel Model
ASC expenditure per LTC user	0.031***
ASC expenditure per LTC user squared	-0.00039***
Observations	332,859
Controls: Users' needs	YES
Controls: Carers needs	YES
Controls: Time-variant LA Socioeconomic status	YES
Controls: Time-variant LA Socioeconomic status	YES
Controls: Multiple Deprivation Index	YES
Year FE	YES
Regions FE	YES
Interaction Year and Regions FE	YES
Hansen J p-value	0.227
SW F- statistic on ASC expenditure per LTC user	11.21
SW-F statistic on ASC expenditure per LTC user squared	14.51
Two-step weak IV test estimated distortion coverage level[a]	5%

Notes: Significantly different than zero at 99 (***), 95 (**), and 90 (*) per cent confidence. ASC expenditure has been expressed in thousands (£ 000s Standard errors are clustered within local authorities. Results on other covariates are omitted in this table. The dependent variable is the user care-related quality of life measured at the individual level. The instrumental variables for public ASC expenditure per user are the council tax base per user and its squared terms. The model controls for program eligibility using the proportion of eligible LTC users.

[a] **Andrew's test**. This test is robust to heteroskedastic, clustered, and serially correlated data. The test relies on first estimating and comparing a distortion coverage with a coverage distortion cut-off. An instrument is said to be weak if the estimated distortion coverage is greater than the chosen coverage distortion level of 10%. Weak-instrument-robust confidence intervals were then estimated [7].

Table 3. Marginal and non-marginal effects of ASC expenditure

Public adult social care expenditure per user	Value (£s)	Marginal effect	2014/15-2019/20			
			New users		*Existing users*	
			SC-QALY	£ per SC-QALY	SC-QALY	£ per SC-QALY
No expenditure	0.0	0.031***	-	-	-	-
At the minimum value	5,686	0.026***	0.172**	£33, 060	-	-
At the mean	24,178	0.012***	0.540**	£44, 720	0.368**	£50,160

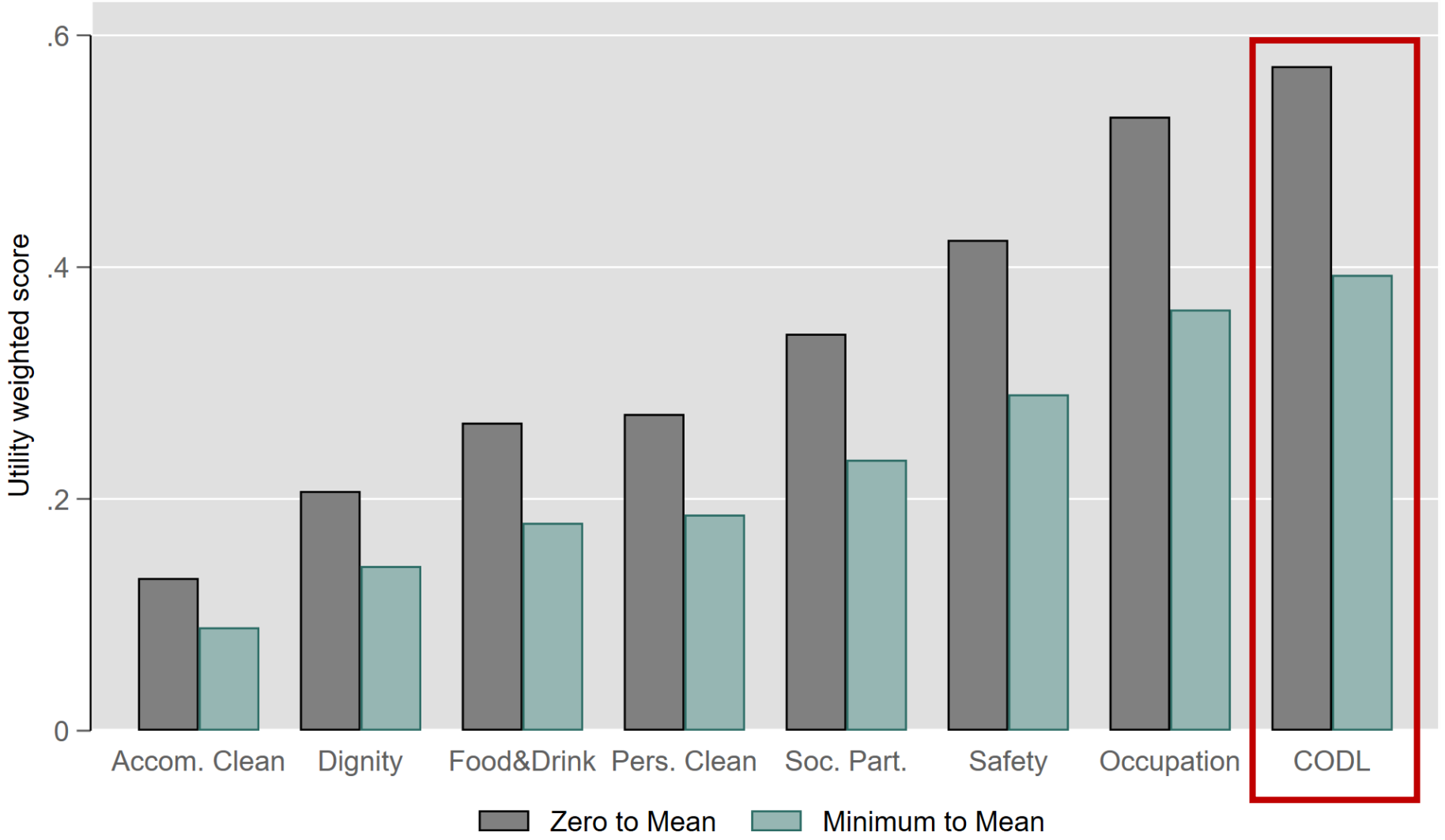
Assuming a change in expenditure from zero to the average level

Assuming a change in expenditure from the minimum to the average level

Table 4. Marginal and non-marginal effects of ASC expenditure for different groups of users

Long-term care group of users		Users with a learning disability		Users with no learning disability		Users with no learning disability aged 65 and over receiving residential or nursing care		Users with no learning disability aged 65 and over receiving community-based social care	
	ASC expenditure per user values	Effect	£ per SC-QALY	Effect	£ per SC-QALY	Effect	£ per SC-QALY	Effect	£ per SC-QALY
Marginal Effects	Zero	0.0115**		0.0496***		0.0084		0.0323***	
	Minimum	0.0078**		0.0324***		0.0055		0.0213***	
	Mean	0.0047**		0.0179**		0.0031		0.0121**	
SC-QALY	New users) (Zero to Mean	0.1957**	**123, 500****	0.8166***	**29,630*****	0.1390	**173,880**	0.5366***	**45,080*****
	Existing users (Minimum to Mean)	0.0690**	**160,020****	0.2782***	**39,770*****	0.0478	**231,000**	0.1850***	**59,810*****

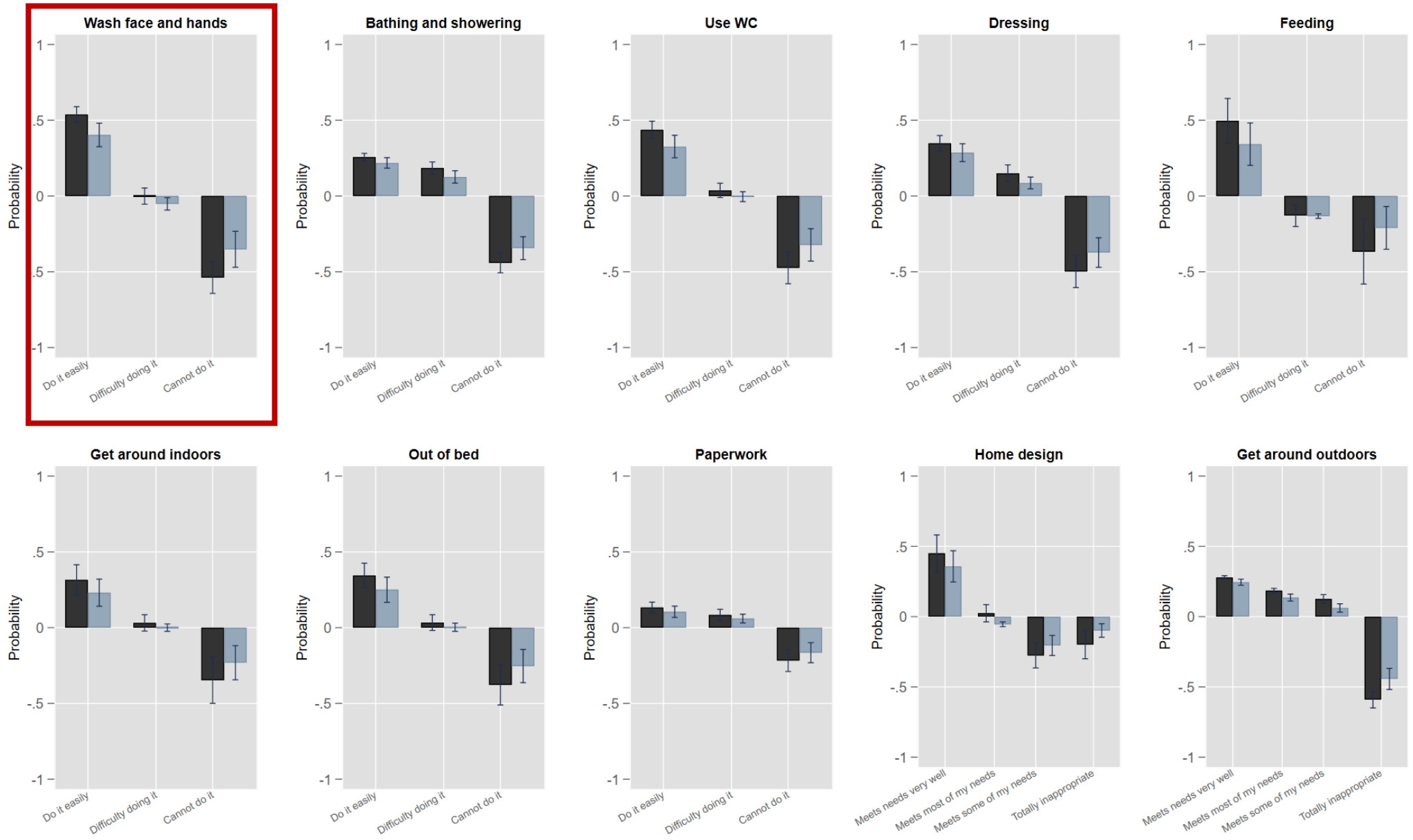
Figure 2. Non-marginal effects of ASC expenditure on new and existing users' CRQoL across ASCOT domains.



Notes: All coeficients are significantly different than zero at, at least, the 90 per cent confidence.
Pers. Clean=Personal cleanliness, Accom. Clean=Accommodation cleanliness, Soc. Part.=Social participation
CODL=Control over daily life.

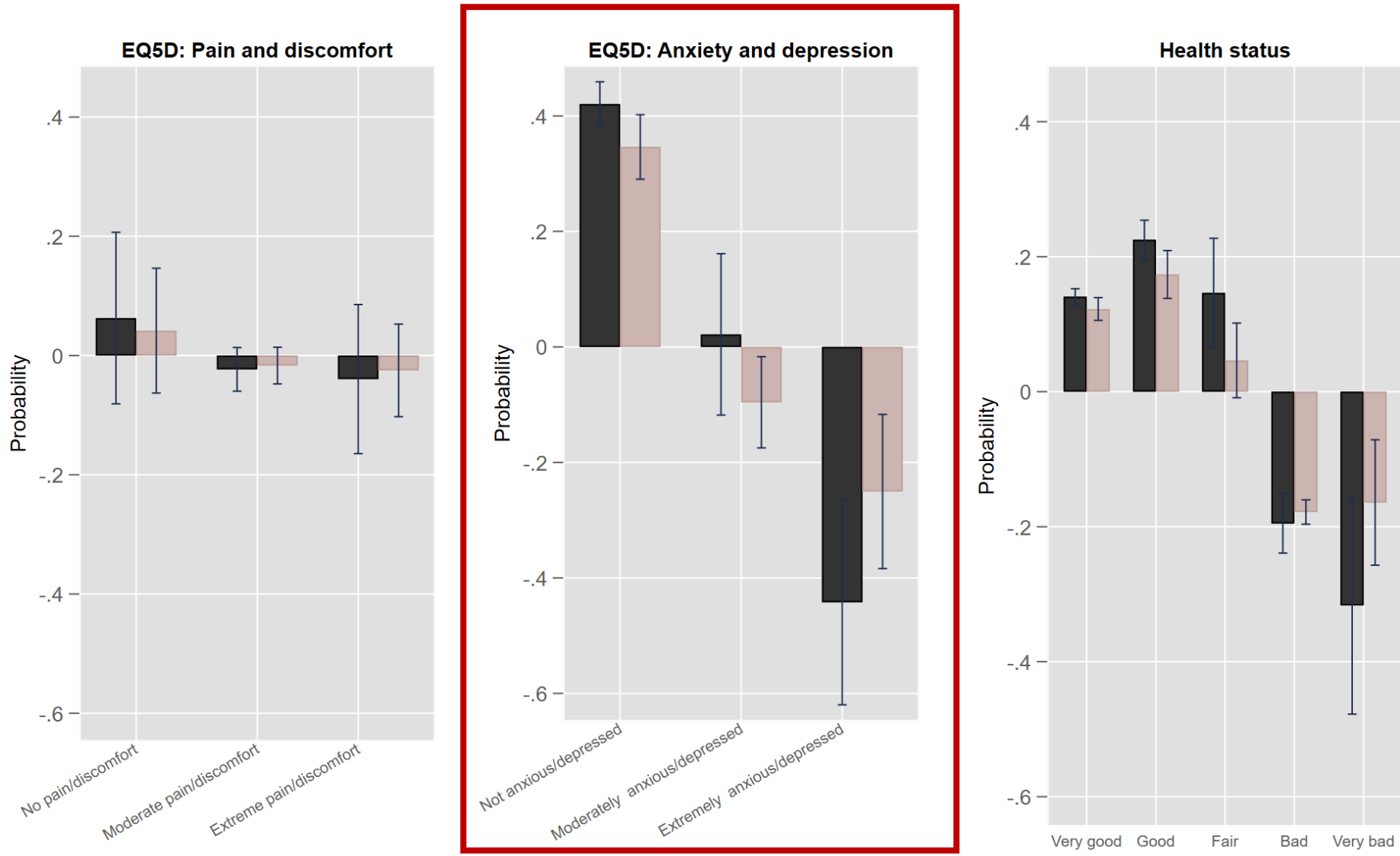
Zero to mean: effects for potentially new users
Minimum to mean: effects for existing users

Figure 3. Non-marginal effects of ASC expenditure across Activities of Daily Living.



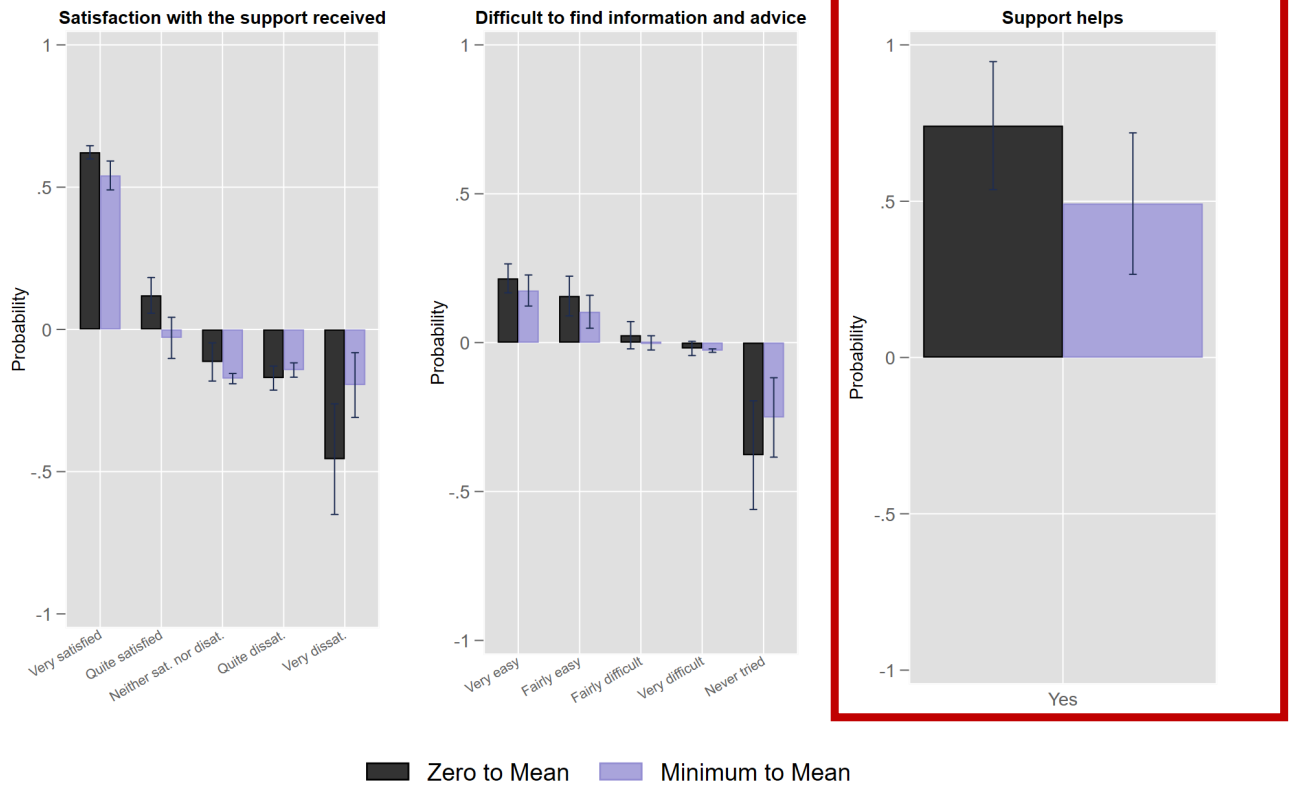
Notes: 95% CI shown in all graphs
Zero to mean: effects for potentially new users
Minimum to mean: effects for existing users

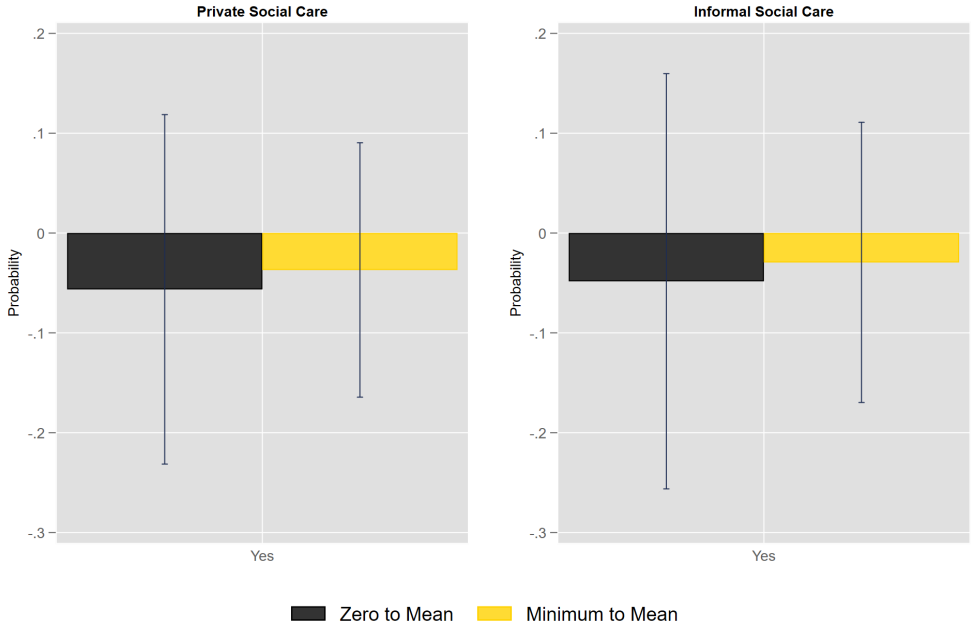
Figure 4. Non-marginal effects of ASC expenditure across QoL-related outcomes (I).

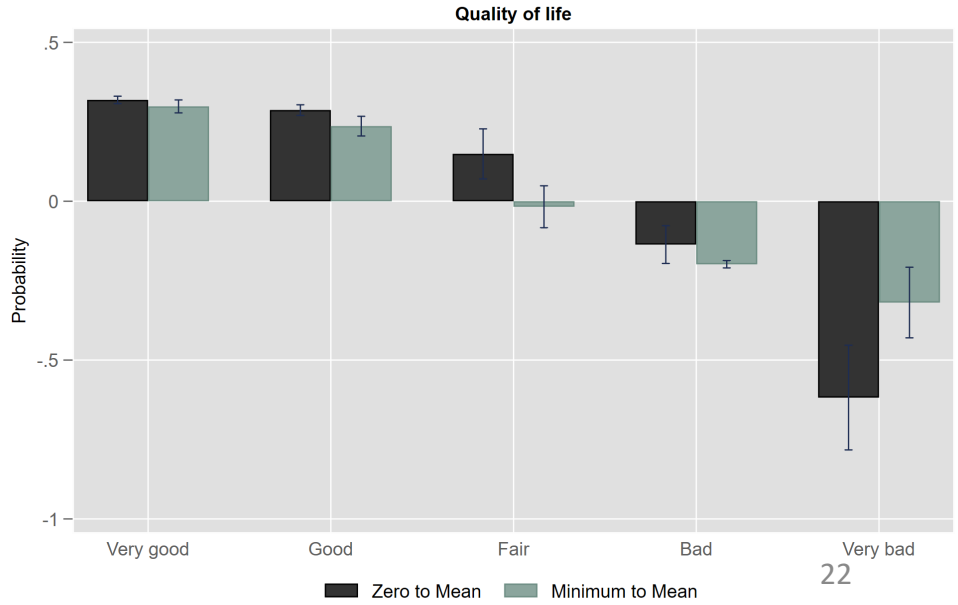


Notes: 95% CI shown in all graphs
Zero to mean: effects for potentially new users
Minimum to mean: effects for existing users

Figure 4. Non-marginal effects of ASC expenditure across QoL-related outcomes (II).







Notes: 95% CI shown in all graphs
Zero to mean: effects for potentially new users
Minimum to mean: effects for existing users

Discussion (I)

- By using data on ASC expenditure, LTC users' characteristics and QoL-related outcomes across English LAs over six fiscal years, and controlling for confounders based on region, LAs and time-fixed effects a better identification of causal effects has been achieved concerning previous.

- **We found strong evidence that ASC expenditure had a positive effect on CRQoL**.

- **Higher value for money** can be achieved **if ASC expenditure is used to expand** social care eligibility, rather than to intensify expenditure on existing users.

- Users with no learning disability aged 18-64 in any support setting are the ones with the highest SC-QALYs.

Discussion (II)

- **Control over daily life** is one of the ASCOT-based domains most relevant for the CRQoL effect of England's publicly funded ASC program.

- **Activities of daily living** carried out by the users are also relevant channels through which ASC expenditure impacts CRQoL.

- Surprisingly, some aspects of **mental health**, specifically, not feeling depressed or anxious **are channels driving the ASC expenditure on CRQoL.**

Discussion (III)

Limitations:

- Cost-effectiveness results came from **extrapolating the effects** of changing due to the lack of information in the survey about individuals not receiving ASC.

- The **channels** explored were **restricted by data** contained in the ASCS.

- There are some concerns about the **ASCS not covering all users** that are of interest to local authorities and short-term users, despite being identified as eligible populations [8].

Thanks!

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APPENDIX

Need

Individual-level

Users

Female

Aged 65 years old and older

White ethnicity

Questionnaire in English language

No help with the questionnaire

The questionnaire was read by someone else

The questionnaire's questions were translated by someone else

The questionnaire's answers were written by someone else

The questionnaire's questions were talked through with someone else

The questionnaire's questions were answered by someone else without asking

Easy-read questionnaire

Sensory support

Support with memory and cognition

Learning disability support

Mental health support

Social support

Carers

Prop. carers who are male

Prop. carers who are female

Prop. carers aged 18-64

Prop. Carers aged 65 and above

Prop. carers who are white

Prop. carers who are non-white

Prop. carers who are retired

Prop. carers who are employed full-time

Prop. carers who are employed part-time

Prop. carers who are self-employed full-time

Prop. carers who are self-employed part-time

Prop. carers who are not in paid work

Prop. carers who are doing voluntary work

Prop. carers who are doing other

Prop. carers with physical impairment or disability

Prop. carers with sight or hearing loss

Prop. Carers with mental health problems

Prop. carers with a learning disability

Prop. carers with long-standing illness

Prop. carers with other health conditions

Prop. carers with no particular health condition

LA-level

SES

Population density (per 10,0000 individuals)

Prop. People aged 18-64 entitled to a Disability Living Allowance

Prop. People aged 65 and older entitled to a Disability Living Allowance

Prop. People aged 65 and older claiming Attendance Allowance

Prop. People receiving income support or pension credit

Prop. People aged 18-64 are entitled to employment and support allowance

Prop. People aged 18+ entitled to Personal Independence Payment

Index of Multiple Deprivation

Index of deprivation 2010: quartile 1 (least deprived)
Index of deprivation 2010: quartile 2
Index of deprivation 2010: quartile 3
Index of deprivation 2010: quartile 4 (most deprived)
Index of education deprivation 2010: quartile 1 (least deprived)
Index of education deprivation 2010: quartile 2
Index of education deprivation 2010: quartile 3
Index of education deprivation 2010: quartile 4 (most deprived)
Index of income deprivation 2010: quartile 1 (least deprived)
Index of income deprivation 2010: quartile 2
Index of income deprivation 2010: quartile 3
Index of income Deprivation 2010: quartile 4 (most deprived)
Index of employment deprivation 2010: quartile 1 (least deprived)
Index of employment deprivation 2010: quartile 2
Index of employment deprivation 2010: quartile 3
Index of employment deprivation 2010: quartile 4 (most deprived)
Index of health/disability deprivation 2010: quartile 1 (least deprived)

Index of health/disability deprivation 2010: quartile 2

Index of health/disability deprivation 2010: quartile 3

Index of health/disability deprivation 2010: quartile 4 (most deprived)

SES

Day-to-day activities are limited by a lot
Day-to-day activities are limited a little

Day-to-day activities not limited

Up to 0.5 persons per bedroom

Over 0.5 and up to 1.0 persons per bedroom
Over 1.0 and up to 1.5 persons per bedroom

Over 1.5 persons per bedroom

Prop. households with multiple persons (all ages)
Prop. households with a single person (all ages)
Prop. households with single persons aged 0-64
Prop. households with a single person aged 65 and older
Prop. people who are students or in a non-routine occupation
Prop. people who are in routine occupation
Prop. people who never worked and are long-term unemployed
People who are not house owners
People who are house owners

English regions

East Midlands
East of England
South: London, Southeast and Southwest
Northeast
Northwest
West Midlands
Yorkshire and the Humber

Dimension	Variable Name	ASC questionnaire	Type of variable
	CRQoL	Care-related quality of life is constructed by adding up all ASCOT domains and using social preference-utility weights.	Continuous
Adult Social Care Outcomes Toolkit	**ASCOT: Control over daily life**	Which of the following statements best describes how much control you have over your daily life? By 'control over daily life' we mean having the choice to do things or have things done for you as you like and when you want. -I have as much control over my daily life as I want -I have adequate control over my daily life -I have some control over my daily life but not enough -I have no control over my daily life	Continuous
	ASCOT: Personal cleanliness and comfort	Thinking about keeping clean and presentable in appearance, which of the following statements best describes your situation? -I feel clean and can present myself the way I like -I feel adequately clean and presentable -I feel less than adequately clean or presentable -I don't feel at all clean or presentable	Continuous
	ASCOT: Food and drink	Thinking about the food and drink you get, which of the following statements best describes your situation? -I get all the food and drink I like when I want -I get adequate food and drink at OK times -I don't always get adequate or timely food and drink -I don't always get adequate or timely food and drink, and I think there is a risk to my health	Continuous
	ASCOT: Accommodation cleanliness and comfort	Which of the following statements best describes how clean and comfortable your home is? -My home is as clean and comfortable as I want -My home is adequately clean and comfortable -My home is not quite clean or comfortable enough -My home is not at all clean or comfortable	Continuous
	ASCOT: Safety	Which of the following statements best describes how safe you feel? By feeling safe we mean how safe you feel both inside and outside the home. This includes fear of abuse, falling or other physical harm. -I feel as safe as I want -Generally, I feel adequately safe, but not as safe as I would like -I feel less than adequately safe -I don't feel at all safe	Continuous
	ASCOT: Social participation and involvement	Thinking about how much contact you've had with people you like, which of the following statements best describes your social situation? -I have as much social contact as I want with people I like -I have adequate social contact with people -I have some social contact with people, but not enough -I have little social contact with people and feel socially isolated	Continuous
	ASCOT: Occupation	Which of the following statements best describes how you spend your time? When you are thinking about how you spend your time, please include anything you value or enjoy including leisure activities, formal employment, voluntary or unpaid work and caring for others. -I'm able to spend my time as I want, doing things I value or enjoy -I'm able to do enough of the things I value or enjoy with my time -I do some of the things I value or enjoy with my time but not enough -I don't do anything I value or enjoy with my time	Continuous
	ASCOT: Dignity	Which of these statements best describes how the way you are helped and treated makes you think and feel about yourself? -The way I'm helped and treated makes me think and feel better about myself -The way I'm helped and treated does not affect the way I think or feel about myself -The way I'm helped and treated sometimes undermines the way I think and feel about myself -The way I'm helped and treated completely undermines the way I think and feel about myself	Continuous

Dimension	Variable name	ASC Questionnaire	Type of variable
Activities of Daily Living	**Wash face and hands**	I can do easily	Categorical (3)
		I have difficulty doing it	
		I cannot do it	
	Bathing and showering	I can do easily	Categorical (3)
		I have difficulty doing it	
		I cannot do it	
	Use WC	I can do easily	Categorical (3)
		I have difficulty doing it	
		I cannot do it	
	Dressing	I can do easily	Categorical (3)
		I have difficulty doing it	
		I cannot do it	
	Feeding	I can do easily	Categorical (3)
		I have difficulty doing it	
		I cannot do it	
	Get around indoors	I can do easily	Categorical (3)
		I have difficulty doing it	
		I cannot do it	
	Out of bed	I can do easily	Categorical (3)
		I have difficulty doing it	
		I cannot do it	
	Paperwork	I can do easily	Categorical (3)
		I have difficulty doing it	
		I cannot do it	
	Home design	Meets needs very well	Categorical (4)
		Meets most of my needs	
		Meets some of my needs	
		Totally inappropriate	
	Get around outdoors	I can get all places	Categorical (4)
		At times I find it difficult	
		I am unable to get to all places	
		I do not leave my home	

Dimension	Variable name	ASC Questionnaire	Type of variable
Quality of life (general)	Quality of life	Very good	Categorical (5)
		Good	
		Alright	
		Bad	
		Very bad	
Health	Health status	Very good	Categorical (5)
		Good	
		Fair	
		Bad	
		Very bad	
	EQ5D: Pain and discomfort	No pain/discomfort	Categorical (3)
		Moderate pain/discomfort	
		Extreme pain/discomfort	
	EQ5D: Anxiety and depression	Not anxious/depressed	Categorical (3)
		Moderately anxious/depressed	
		Extremely anxious/depressed	
Satisfaction with public social care services	Satisfaction with support received	Very satisfied	Categorical (5)
		Quite satisfied	
		Neither satisfied nor dissatisfied	
		Quite dissatisfied	
		Very dissatisfied	
	Support helps	Yes	Binary
	Difficult find information and advice	Very easy	Categorical (5)
		Fairly easy	
		Fairly difficult	
		Very difficult	
		Never tried	
Use of other care services	Private Social Care	Yes	Binary
	Informal Social Care	Yes	Binary

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