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Priorities for long-term care resource allocation in England: Actual allocation versus the views of Directors of Service and older citizens

Paul Clarkson, Sue Davies, Jane Hughes, Chengqiu Xie, Karen Stewart, Paul Clifford and David Challis

Abstract

Context: Decisions about resource allocation in long-term care are a perennial issue. The basis for deciding between different needs in prioritising allocation is contested. In England, this debate has crystallised with the advent of self-directed support, where individuals' expressed preferences drive resources.

Objectives: To compare perceptions of the priority given to needs for resource allocation in long-term care of older people by two stakeholder groups, compared with actual resource allocation.

Methods: Survey data, eliciting perspectives of senior service managers and older citizens, were used to rank the perceived importance of eight needs-related outcomes. Actual resource allocation from 17 local authorities was also modelled against these outcomes. A variable importance metric was used to rank the importance of these outcomes in determining actual resource allocation. Findings from each data collection were compared.

Findings: Differences in prioritisation of needs emerged

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between stakeholders compared with actual allocation. Older citizens and actual allocation prioritised basic and instrumental activities of daily living (ADLs). Directors' rankings were more distinct, still prioritising basic ADLs, but ranking psychological well-being higher and instrumental ADLs lower.

Limitations: The model of actual allocation could not account for political and bureaucratic factors influencing resource allocation, nor the complexity of certain needs that might incur greater resources.

Implications: Discretion continues to influence resource allocation, which remains a contested area. Directors must account for overall spend and other extrinsic factors to maintain sustainability, whereas older citizens prioritise instrumental ADLs, despite these being considered lower priority in eligibility decisions. Overall, ADLs remain important drivers of allocation.

Keywords: resource allocation, discretion, citizen's views, social care, preferences, older people.

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Introduction

A perennial issue for countries designing their long-term care systems is which needs should take priority in resource allocation decisions. This issue arises because a wide range of needs could be taken into account when deciding on service responses, but resources are limited (Allen et al., 2004; Fraser & Estabrooks, 2008). Therefore, in order to balance conflicting needs with financial sustainability, prioritisation is inevitable. However, whose priorities should take precedence? The aim of this paper is to explore perceptions of the priority given to different needs for resource allocation in the long-term care of older people in England by different stakeholders.

This imperative to prioritise is more contested than previously, as there appears to be less broad agreement about the aims of long-term care services than there once was (Davies, 1968). Thus, the weight given to meeting particular needs, to fulfil these aims, is itself disputed. Added to this, there has been a sea-change in how needs for care have been conceptualised and so how resources are allocated to meet them. The classic account of Bradshaw (1972) offered four definitions of need that exemplify this change. Traditionally, *normative need*, reflecting professional definitions, prioritised needs in terms of deficits or shortfalls, such as limitations older people experienced in activities of daily living (ADLs). Professionally-led systems, where professionals completed a needs assessment and created a care plan, tended to stress such functional limitations. More recently, *felt need*, or want, has been emphasised, for example needs conceptualised as outcomes, or the pursuit of more positive benefits, such as rewarding relationships or emotional well-being (Knapp et al., 2005). *Expressed need*, as demand, whereby felt need is translated into calls for action, characterises newer, self-directed – or personalised – support systems. Here, support entitlements are decided following a user-directed assessment and resources allocated upfront (ADASS, 2010; Tyson et al., 2010; Asthana, 2012; Audit Commission, 2010; Ridley et al., 2011; SCIE, 2011). Finally, *comparative need* defines need according to the characteristics of populations, often linked to eligibility decisions as to when individuals should receive services or not (Department of Health, 2003, 2006).

Each system, conceptualising needs in these different ways, has generated debate and criticism. The main challenge to professionally-led systems was that resource allocation decisions, controlled by local authorities, could be highly subjective as to which needs were supported (Duffy, 2005). However, self-directed systems have been criticised for lack of clarity, robustness and transparency in their methods for calculating financial support (Clifford et al., 2013; Series & Clements, 2013; Slasberg et al., 2012). These issues mean there is contention around which needs *should* take priority in resource allocation decisions (Tyson et al., 2010; Series & Clements, 2013).

There is little work investigating the prioritisation of

needs for resource allocation amongst different stakeholders. Research has examined, more globally, public priorities for different health services (Richardson et al., 1992; Lenaghan et al., 1996). Moreover, work has elicited preferences for different outcome domains in social care for older people (Netten et al., 2012). However, work explicitly examining the priorities given to different needs in long-term care is limited. Exceptions include research in Finland, which examined priorities for resource allocation in health and social care using data from municipalities. This work compared changes in costs of services against their prioritisation by the general public, nurses, doctors and politicians (Kinnunen et al., 1998; Lammintakanen & Kinnunen, 2004). That research is comparable to the present study, in ranking domains by different stakeholders, compared with the actual process of allocation. However, the unit of analysis in those studies was the local authority and categories of service provided, rather than the individual user and their needs. Research at this ‘micro’ level, where decisions about individual care packages are made, is extremely limited. Series and Clements (2013), however, examined needs questionnaires used in English local authorities and found that support with usual activities, personal care, staying safe, and maintaining relationships tended to be overlooked. This raised the question of whether the use of a user-completed questionnaire would leave some needs unmet. Such research highlights the issue of the relative priority given to competing needs in determining resource allocation to individuals and whose priorities should take precedence. There has been limited examination of this issue.

The research reported here explores perceptions of the priority given to different needs in resource allocation for the long-term care of older people in England. Three, central, perspectives are considered. First, that of the allocators of resources at the managerial level (Directors of Adult Social Services in local authorities), second, those of older people with knowledge of social care services (Older Citizens), and third, actual allocation decisions shown by data from local authorities. We studied the views of Directors of Adult Social Care, within local authorities responsible for funding and care provision, as the perspective of managers with financial responsibility and accountability for services. We also sought the views of older people, as services to them represent the largest proportion of recurrent resource expenditure in social care in England. Projections, based on demographic changes and dependency, suggest that future demand for long-term care of older people is likely to increase substantially (Murphy et al., 2012). Coupled with the resulting pressure on expenditure, there is increasing debate concerning how their needs should be met. With a greater focus on helping older people to attain positive benefits rather than prioritising needs in terms of deficits or shortfalls (Knapp et al., 2005), the views of older citizens themselves are increasingly sought as their status as passive consumers is challenged. Lastly, these perceptions are

compared with priorities elicited from actual resource allocation to older people, examined through analysis of routinely collected data across 17 local authorities in England (FACE Recording and Measurement Systems, 2012; Clifford et al., 2013).

To examine these different perspectives, we used a set of needs-based criteria. Conceptually, eight 'needs-related outcomes' were identified, that could be directly attributable to the activities of social care agencies. These criteria were developed to reflect the range of different definitions above, including need as the attainment of objectives (Maslow, 1959; Davies, 1977) and conceptualisations of need as the pursuit of valued outcomes (Challis, 1981), supporting resource allocation mechanisms in England (ADASS, 2010; Tyson et al., 2010). No criterion was prejudiced in favour of another as we wished to have a broad range of criteria to permit differences in priorities to be examined systematically.

This study aimed to answer four research questions:

- What factors are systematically important in terms of the actual allocation of social care resources by local authorities?
- What are the priorities given to different needs by Directors of Adult Social Care in determining the allocation of social care resources?
- What are the priorities given to different needs by older citizens?
- How do these stakeholder priorities compare with those for actual allocation, exemplified by the decisions of local authorities?

Methods

This mixed-methods study compared stakeholder perspectives on prioritisation of needs for resource allocation with the priorities found from empirical data in a sample of English local authorities. Definitions and wording of the needs-related outcomes used for data collection, for each constituent perspective, are shown in table 1. Slightly different descriptions of each domain were used for each stakeholder group. This was necessary because descriptions of local authority data were already defined but may not have been sufficiently intuitively understood by Directors and citizens. A balance between comprehensiveness and data availability influenced the selection of outcome domains. Parsimony was also important, as too many domains would have made the choice as to relative importance too cognitively complex (see Miller, 1956). Data collection and analysis by each stakeholder are discussed below.

Analysis of actual resource allocation

Data collection

Routinely collected data were provided by FACE Recording and Measurement Systems Limited. These data pertained to the resources allocated across 17 local authorities to older

service users in response to a needs questionnaire (FACE Recording and Measurement Systems, 2012). Items from the questionnaire were aggregated to create variables expressing each of the eight needs-related outcomes (table 1 describes the outcome domains from the assessment tool used to generate the data).

Analysis

A statistical model was used to explain the individual influences of each of these domains on allocated resources (measured as weekly costs per person, in £ Sterling). Appropriately, a Generalized Linear Model (McCullagh & Nelder, 1990) was fitted to the data, as the dependent variable (costs) was not normally distributed (Thompson & Barber, 2000). Prioritisation of needs-related outcomes, according to their importance for resource allocation, was elicited using a variable importance metric, that of *relative weights* (Johnson & Lebreton, 2004; Lebreton & Tonidandel, 2008). This metric, calculated from the model outputs, was used to express the percentage contribution of each individual needs-related outcome to the overall variance in cost (R^2), while allowing for collinearity (when two or more domains are highly correlated). The domains were then ranked in order of relative weight to express their importance in explaining actual resource allocation across the sample of local authorities. The influence of other factors, at both the user-level (demographics) and area-level (local authority characteristics) were also considered for inclusion in the model as controls. These included: % of older people aged 75 and over living alone; % of population aged 75 and over; % of population aged 75 and over with limiting long-term illness; pensioners receiving income support (per 1,000 of pensionable age); personal social services budget allocated to older people per capita aged 65 and over; standardised mortality rates; average of super output area deprivation ranks (Office for National Statistics, 2012); proportion of older people living in detached or semi-detached housing; and % rural population.

Views of Directors of Adult Social Services

Data collection

An online survey was conducted to ascertain the views of Directors about resource allocation across the eight needs-related outcomes (table 1). It was piloted in a paper version. Respondents were asked to apportion resources across the eight domains by stating the percentage of budget that should be attributed to each. When the sum of percentage points assigned across the eight domains did not total 100%, due to respondent completion error, points were converted into percentages during data cleaning, reflecting the proportion of the total points distributed. The ordering of domains, as displayed in the survey, was randomly assigned by the survey software to minimise the effects of respondent bias through prioritisation by order in which the domains appeared (Preston & Coleman 2000).

Table 1. Descriptions of needs-related outcome domains by stakeholder group

Domain label	Directors	Older citizens	Actual allocation – item from assessment tool
ADLs	Fulfil basic necessities for daily living (e.g. washing, dressing, toileting)	Helping me to look after myself (e.g. washing, dressing, using the toilet)	ADL items (eating, dressing, washing, toilet/continence, transfers)
IADLs	Live independently through continuing household tasks (e.g. preparing meals, cleaning, doing paperwork)	Helping me with day-to-day activities in the home (e.g. preparing meals, cleaning, laundry, shopping)	IADL items ('personal health' – i.e. medication management, preparing meals, housework, shopping, doing paperwork)
Social relationships	Maintain social relationships (e.g. spending time with friends or family)	Helping me to keep in touch with and spend time with family and friends (e.g. visiting them)	'Spending time with family or friends'
Active citizen	Participate actively as a citizen (e.g. through work, training, cultural or leisure activities)	Helping me to get out and about in my local community (e.g. going to a local café, pub or community centre; being involved in local organisations; engage in work or training)	'Cultural or spiritual activities'; 'leisure activities'; 'work (including vocational)'; 'education'; 'training'
Care for others	Care for others (e.g. partners, other family members)	Helping me to care for others (e.g. husband, wife)	'Looking after partner, parent or other family members'; 'looking after children'
Safety	Stay safe and secure (e.g. free from substantial risk, danger or harassment)	Helping me to stay safe (e.g. reducing the risks I feel and providing reassurance when I need it)	'The support you need to ensure that you and those around you are safe'
Carer burden	Ensure that their family carer, if they have one, can continue caring for them	Helping my carer to look after me (e.g. husband, wife, children or friend who helps on a regular basis)	'Impact of caring upon main carer's independence'
Psychological well-being	Maximise their psychological well-being, including a feeling of choice and control over their own life	Helping me to make decisions about my life (e.g. what I do each day; my longer term plans)	'Planning and decision making'; 'Mood'

Invitations to participate were sent via email to Directors in all 152 local authorities in England early in 2014. It was not possible to contact 15 of them (10% of the total). The reasons for this included the imminent departure of Directors, vacant posts and non-delivery of emails. Data were collected electronically via SelectSurvey.net software. Participants accessed the survey via a secure link included in the recruitment email, allowing the responses of individuals to remain anonymous. To further ensure anonymity, no information was collected that may have potentially identified the respondent or the local authority in which they were located. After an initial low response rate a series of email reminders were issued. From the 135 local authorities contacted, 46 Directors completed the survey, resulting in a response rate of 34%.

Analysis

After collating the responses to the survey, the domains were ranked in order of the percentage of budget attributed to each.

Views of older citizens

Data collection

To elicit views of interested citizens, two survey designs were piloted with groups of potential respondents. Both asked participants to consider the proportion of resources each of the needs-related outcomes should receive: one tool asked for this as a percentage of total resources available and the other as a proportion of resources from a predetermined set of responses. The feedback received highlighted difficulties in completing the survey: specifically, the distribution of resources was found to be challenging and the needs-related outcomes were not readily understood. Informed by these comments, a second survey tool was created in which participants were asked to rank the three most important needs-related outcomes. The domain descriptions were also reworded to make them more relevant and understandable (table 1). Descriptive data from participants, including gender, living situation and age band were also collected.

Data collection was undertaken through a postal survey. Potential participants were identified through a local voluntary organisation for older people. Members of an established group, 'a free membership scheme for people who are

interested in the work of [the group] and the issues affecting older people in the local area' (Age UK Cheshire 2012), were invited to participate in the research. The group comprised adults (with the majority aged 60 or above) resident in defined geographical areas who had a particular interest in issues affecting older people. The survey was sent to all members of the group ($N=1,974$), coordinated as part of the mail-out of a routine newsletter in March 2014. A notification of non-response was received from, or on behalf of, a total of 71 respondents. These included both those declining to complete the survey and also those with whom contact could not be made as they were no longer resident at the given address, were seriously ill or were deceased. In total, 506 surveys were returned (a response rate of 23%); of these, 436 contained fully completed and useable responses.

Analysis

The domains were ranked in order of participants' views as to the three most important needs-related outcomes. The Borda count method (Borda, 1871) was used to transform individual rankings to a consensus group ranking. Rankings given by each individual were transformed into a numerical value; the first choice received n points, the second choice $n-1$ points and so on until the final selection received zero points. In data analysis, points were allocated as follows: first = three points; second = two points; third = one point; unranked domains = zero points. These points were then totalled for each domain, which were then ranked. When needs-related outcomes domains had equal scores, the domain with the greater number of first choice selections was ranked higher.

Findings

Actual allocation

Estimates from the statistical model

Table 2 shows the results from the statistical model of actual allocation. The model of the eight needs-related outcomes as predictors explained 64% of the variance in costs. The domains of 'active citizen', 'psychological well-being' and 'safety' had significant positive model estimates, indicating that older people with higher needs in these areas were expected to be allocated greater resources, after controlling for other domains in the model. The domain of 'carer burden' had a significant negative estimate, indicating that, after accounting for the other needs-related outcomes, those older people reporting a higher level of reliance on their carers were expected to be allocated fewer resources. The remaining needs-related outcomes (ADL, Instrumental Activities of Daily Living (IADLs), social relationships and care for others) did not emerge as statistically significant predictors in the model. The domains 'ADLs' and 'IADLs' showed significant relationships between them (multicollinearity), which may have reduced their statistical significance.

A range of user-level and area-level characteristics was considered for inclusion in the model as controls. The independent variables not included in the final results were either ones that were not significant, or that showed associations with cost but either did not improve model fit or were significantly related to each other (multicollinearity). Adding a user control variable of 'living situation' (lives alone/does not live alone) to the base model alongside the

Table 2. Statistical models of resource allocation, by needs-related outcomes and with supplementary control variables

	Model 1: Need domains only (n=556)			Model 2: Need domains plus controls (n=424)		
	Estimate	Standard error of coefficient	P	Estimate	Standard error of coefficient	P
Intercept	3.91e+00	5.38e-02	<0.001*	3.36e+00	1.52e-01	<0.001*
ADLs	3.27e-03	1.89e-03	0.08	4.50e-03	2.54e-03	0.08
IADLs	6.34e-05	8.97e-05	0.48	1.81e-05	1.21e-04	0.88
Social relationships	5.66e-02	2.53e-02	0.82	-3.08e-03	3.57e-02	0.93
Active citizen	2.07e-03	6.01e-04	0.00*	2.14e-03	8.01e-04	0.01*
Care for others	-5.82e-03	7.59e-03	0.44	-1.19e-03	9.95e-03	0.91
Safety	5.47e-02	1.64e-02	0.00*	5.22e-02	1.87e-02	0.01**
Carer burden	-1.03e-01	2.06e-02	<0.001*	-6.17e-02	2.78e-02	0.03*
Psychological well-being	6.04e-04	2.66e-04	0.02*	1.03e-03	3.28e-04	0.00**
Lives alone	-	-	-	2.52e-01	7.47e-02	0.00***
Area level deprivation (average rank of SOA)	-	-	-	1.51e-05	6.27e-06	0.02*

Notes: $R^2 = 0.64$ (older people with needs only); $R^2 = 0.68$ (with controls); * $p < 0.05$; Post hoc Variance Inflation Factor (VIF) indicated multicollinearity with the domains, 'ADLs', 'IADLs' and 'care for others' as outside acceptable limits (<10), which may have reduced their statistical significance. Model is Generalised Linear Model with a logarithmic link function and a Gamma variance function. Dependent variable (weekly costs per person, £ Sterling) is locally standardised, controlling for variability in price (cost) due to factors exogenous to the needs of the older person. Examples include differences in unit costs between two suppliers of home care or differences between rural and urban home care.

need domains increased the variance in cost explained to 68%. In this model, the variable 'living situation' was the single significant individual level measure.

The contribution of area-level characteristics to the predictive power of the model was relatively minor, only two of these variables being significant when included. Some general measures of local authority level deprivation were significant predictors of cost (indices of deprivation average of ranks and of scores); however, all other measures were not (including indices of deprivation averages of concentration scores and of extent scores). A measure of the proportion of older people living in detached or semi-detached housing within a local authority provided some contribution to the amount of variance explained, though this was less so than the variables measuring general deprivation levels. The inclusion of significant deprivation variables raised the degree of cost variance explained only slightly.

Priority ranking of needs

Table 3 shows the ranking of the needs-related outcomes employing the relative weights metric from the model outputs. Over 75% of the variation in costs explained by the model was accounted for by two needs-related outcomes: 'ADLs' (46%) and 'IADLs' (31%). 'Care for others' was the third highest ranked item, accounting for 7% of the variation in cost explained by the model. This resulted in the priority ranking as expressed in table 3 (model 1): first 'ADLs'; second 'IADLs'; third 'care for others'; fourth 'safety'; fifth 'social relationships'; sixth 'carer burden'; seventh 'active citizen'; and eighth 'psychological well-being'.

Views of Directors

Priority ranking of needs

Table 3 shows the findings from the consultation with Directors regarding the allocation of resources for older people. This table lists the rankings according to the average percentage of budget that Directors thought should be attributed to each of the needs-related outcomes.

The domain that received the highest average response was that of 'ADLs', receiving almost 30% of the distribution of resources. This was followed by the domains of 'safety' with 19% and 'carer burden' with almost 14% of distributed resources. Importantly, these three domains together received over 60% of all resources distributed by the Directors. There was little difference between the responses for the domains 'psychological well-being' and 'IADLs', both being around 10%. The domains 'social relationships' and 'active citizen' also had comparable response averages (around 6%). This resulted in a priority ranking by Directors being: first 'ADLs' and eighth 'care for others'.

There was considerable variation in how Directors decided to apportion resources across domains. This variation was most apparent for those domains deemed to be, on average, of higher importance. For example, the domain of 'ADLs' (considered to be of highest priority by the group) had a minimum response of 0%, a maximum response of 60% and a standard deviation of 15.06. Thus, some individual Directors expressed that this domain should not receive any or only a small amount of their budget (9% of respondents assigned less than 10% of their budget to this domain). The minimum individual response for all domains was 0% and the smallest range in individual response (20 percentage points) was evident in 'social relationships' and 'care for others' – those considered to be of lesser priority.

Views of older citizens

Descriptive data on respondents

Respondents constituted a relatively vulnerable section of citizens (table 4). More than half of all respondents were aged 80 and over and only 16% were under the age of 70. Of the total population aged 60 and over in these areas, 21% were aged 80 or above (ONS, 2011) meaning that within our data, citizens at the higher end of the age-range were over-represented. Males were under-represented in the data set: 62% of respondents were female, compared with 55% of the older population in the locality (ONS, 2012). The majority of

Table 3. Priority ranking of needs-related outcomes – stakeholder perspectives and actual allocation of resources

Domain	Directors (Response average, %)	Older citizens (Response average, %)	Actual allocation (Relative importance ^a)
ADLs	1 (29.47)	2 (27.4)	1 (45.86)
IADLs	5 (9.47)	1 (28.9)	2 (30.53)
Care for others	8 (5.08)	6 (5.6)	3 (7.44)
Safety	2 (19.16)	3 (11.7)	4 (6.52)
Social relationships	6 (6.48)	8 (4.9)	5 (3.98)
Carer burden	3 (13.74)	5 (7.4)	6 (2.35)
Active citizen	7 (6.22)	4 (9.2)	7 (1.85)
Psychological well-being	4 (10.95)	7 (5)	8 (1.47)

Note: ^a Based on the relative weights metric, the contribution (%) to overall R² (variation in costs explained) of the model, performed in the statistical environment 'R' (R Development Core Team, 2005).

Table 4. Respondent characteristics, older citizens completing the survey on priorities for resource allocation (n=436)

Characteristic	Number (%)
Gender	
Male	152 (34.9)
Female	269 (61.7)
Missing	15 (3.4)
Age	
60 and under	8 (1.8)
61–69	64 (14.7)
70–79	118 (27.1)
80 and over	234 (53.7)
Missing	12 (2.8)
Living situation	
Lives alone	232 (53.2)
Lives with other	191 (43.8)
Missing	13 (3)

respondents lived alone (53%), a contrast to the population of over 65s living in the local authorities where only 30% live alone (ONS, 2011).

Priority ranking of needs

Table 3 shows the findings regarding resource allocation from the perspective of older citizens. These data list the rankings according to the average percentage of total points awarded in terms of the resources older people thought should be attributed to each need domain.

The domain with the highest proportion of points received, and therefore ranked as the most important, was that of 'IADLs' (29%). Despite receiving the most first choice selections, the domain of 'ADLs' received marginally fewer points in total (27%) than 'IADLs' and was therefore ranked as second most important. These two domains received 56% of the total points distributed across the eight domains. The remaining six domains received a comparable share of the points distributed (ranging from 5% to 12%). This resulted in the priority ranking in table 3: first 'IADLs' and eighth 'social relationships'.

Comparison of priority rankings: stakeholder views versus actual allocation

Results from the three data collections permitted comparisons between how resources had been allocated and how stakeholder groups believed they should be. These rankings demonstrated both differences and consistencies in how needs were prioritised by Directors and by citizens, as against actual resource allocation.

While the domains of 'ADLs' and 'Safety' were relatively highly prioritised by Directors, older citizens and in actual allocation, there was greater contention around other domains. Prioritisation of needs by older citizens was consistent with actual allocation in the areas of 'IADLs' (rated relatively high); 'carer burden' (rated moderately) and

'psychological well-being' (rated relatively low). However, for these domains, citizens' prioritisations did not agree with those of Directors, who rated these needs relatively moderately, low and moderately respectively. Directors' judgements differed from those of older citizens and the model of actual resource allocation, with the greatest discrepancy in the domain of 'psychological well-being': ranked moderately high by Directors but relatively low by both citizens and in actual resource allocation.

Discussion

This study was undertaken against the backdrop of debate concerning which needs *should* take priority in resource allocation to older users of long-term social care. This issue – particularly concerning users' definitions of their needs – has been expressed recently in England, with the development of resource allocation mechanisms that prioritise the user's perceptions and wishes (Department of Health, 2010, 2016). However, these mechanisms are only a small part of the whole process of managing the perennial problem of how to allocate finite resources. This study focused on one part of this process; the relative priorities given to different needs, by allocators, older citizens, and by the routine decisions made by professional assessors as shown by data on actual allocation.

In summary, we found divergent views, but also some consistencies, between Directors and citizens concerning which needs should take priority. A complex pattern therefore emerged, but with differences in the relative rankings of domains in terms of their importance to resource allocation evident across stakeholders.

Limitations

The study had some limitations. The analysis of actual allocation assumed that the linear model could explain variation in resources with reference to needs-related outcomes, supplemented by control variables of user and local authority characteristics. However, other factors reflecting the political process in local authorities and organisational processes may also account for allocation. Data were unavailable with which to measure such factors and their possible influence will be contained within the error term of the model. They are, nevertheless, important in understanding resource allocation. In the absence of such routinely collected data, a fuller understanding of the basis behind prioritisations would require more detailed qualitative data from participants, for example Directors and frontline allocators.

A further limitation of the modelling may be the cost issues associated with particular need domains. Some domains, for example those contributing to being 'active citizens' or enhanced 'psychological well-being' are more complex to account for in actual allocation, necessitating a wide range of service responses, so demanding greater resources. Such domains may, however, not be prioritised as highly by some stakeholders, due partly perhaps to the way they are

described. Arguably, for example the description of 'psychological well-being' provided to Directors could cover a broader spectrum of needs than that provided to citizens, which was more limited to decision-making.

Eliciting prioritisation of need domains from stakeholders may also have presented problems at a conceptual level. Some domains may not necessarily be seen as conceptually distinct by some participants; rather, they might be seen as more dynamic or linked. For example, meeting ADL or IADL difficulties might lead to improved psychological well-being. Thus, isolating distinct domains for priority judgements may not control for this fact. This is an interesting issue for further research.

Finally, the sample of older citizens was drawn from just one local organisation compared with actual allocation data, which related to several local authorities. Therefore, it could be argued that comparing judgements from the datasets may not be valid. However, against this, the sample of older citizens was large and representative of a more dependent population (older and living alone), characteristic of those likely to receive or have had experience of long-term care. Thus, it may be reasonably argued that the comparisons are valid. However, without collecting personally identifiable data from participants, we do not know what proportion of the sample were actual users of long-term care services.

Implications

Notwithstanding the fact that more qualitative data are necessary to fully unpack the process of *how* different needs are prioritised in practice, some tentative inferences can be made. Implications for research, practice and policy are highlighted below.

For research

This study examined an important area, stakeholders' priorities for resource allocation and which needs should take precedence. This is an area that has hitherto been neglected and methods for examining prioritisation could be developed further. The strength of this study lies in the exploration of the issue, using an innovative analysis technique (relative weights), signalling prioritisation from actual resource allocation. Surveys undertaken with Directors and older citizens were also used to obtain rankings. Such approaches could usefully be extended. Deliberative methods (Abelson et al., 2003) using polls, surveys, citizens' juries and panels could be used to examine the relative weight of people's preferences for allocation, based on different factors. This would allow citizens to take a more active role and be more informed about decisions that affect them. The way these different preferences are elicited is also an issue for future research. Simple rankings, drawn from the data, were used in this study. However, other, more systematic, techniques to obtain preferences, and their weightings, such as discrete choice experiments (Farrar et al., 2000; Tinelli, 2016) and best-worst scaling (Franco et al., 2015) could also be used. However, such techniques can

be cognitively complex for participants to undertake and so the benefits of these must be balanced with the ease by which data can be obtained.

Resource allocation priorities for older people were examined in this study. Different priorities may be assigned by other groups receiving long-term care and the patterns established here may not be generalisable to, for example, younger adult groups. For example, work we have undertaken has already examined resource allocation priorities for adults with a learning disability (Davies et al., 2000) using similar methods. In that study, Directors' perspectives mirrored those of actual allocation in prioritising ADLs and carer burden, whereas adults with a learning difficulty prioritised psychological well-being. Thus, these findings are at variance with those of the present study. It would be informative to explore research with other user groups, such as adults with long-term mental health problems, to explore whether patterns of prioritisation are different.

For practice

For resource allocation, discretion will always be both necessary and desirable and the priority ordering of needs from our model of actual allocation reflects this. Actual allocation reflects the professional discretion of assessors and managers (Evans & Harris, 2012). The outcome of this, although used as a comparator in our findings, is not necessarily a 'gold standard' judgement and is open to a range of values and interests. Guidance supporting discretion was always part of professionally-led systems of resource allocation (SSI/SSWG 1991). In this sense, practitioners, assessing and undertaking care planning, were 'street-level bureaucrats', i.e. public service workers with substantial discretion in the execution of their work (Lipsky, 1980). However, the newer user-directed resource allocation systems (Department of Health, 2008) do not dispose of this discretionary element. Rather, they offer a 'ballpark' figure to guide decision-making, with the scope for budgets to be above or below this figure to reflect individual circumstances (Series & Clements, 2013). Thus, in administering resource allocation, this discretion continues to be central (ADASS, 2010).

The discrepancies arising from comparing actual allocation with the judgements of stakeholders also have important implications for the roles they occupy in the process. Actual allocation priorities did not mirror precisely the priorities of Directors, those with strategic responsibility for allocation; they agreed in only two domains, 'ADLs' and 'Safety'. In contrast, older citizens tended to agree with actual allocation priorities, particularly the high importance given to 'ADLs', 'IADLs', and 'Safety' and the low importance given to 'psychological well-being'. Directors therefore emerged as distinct in terms of their prioritisation of certain needs over others. This is not surprising considering that Directors tend to focus on overall expenditure rather than care packages. To them, spend is limited and needs to be accounted for, dependent on a host of other, broadly political factors.

The divergent viewpoints are also important in the context of newer self-directed support arrangements that tend to stress some outcomes over others (Series & Clements, 2013). From our data, psychological well-being, for example, was seen as a low priority by older citizens and in actual allocation but was relatively highly prioritised by Directors. Directors may have responded to the general climate of opinion around the newer self-directed systems, that such positive needs should be stressed. Other domains, such as help with ADLs, for example, continue to be viewed as important by citizens and this may be because they have been so much a part of traditional allocation systems. For allocators, this domain also continued to be viewed as a priority, perhaps in response to real pressures on budgets arising from the important role played by ADLs in generating demand for long-term care. That such basic needs are considered vital in securing support for older citizens is reinforced by the fact that over 75% of the variation in costs explained by our actual allocation model was accounted for by the two domains 'ADLs' and 'IADLs'. We note, however, that Directors tended to place less value on IADLs in contrast to older citizens. IADL assistance, in respect of help with mainly household tasks, has tended to be withdrawn from social care provision as eligibility criteria tighten, yet it remains highly valued by older people (Clough et al., 2007).

For policy

For future planning of long-term care systems, the resource allocation issue remains central. Balancing divergent needs with requirements for financial sustainability means that some needs always have to be prioritised over others. Different actors' views will be important in this decision; depending on whether the balance in the allocation system leans towards entitlement, centred on user preferences and wishes, or whether it is needs based, shaped by professional discretion (Ellis, 2011). Therefore, one immediate implication of our findings is that there will always be debate over the prioritisation of needs in resource allocation. Arguably, under newer, personalised systems, the priorities of older citizens requiring support should be the main driver of allocation. However, even under such a system, other stakeholders, with other responsibilities, must also decide whether there are some priorities that simply cannot be met if the long-term care system is to be sustainable. Long-term care resource allocation therefore remains a contested area.

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