

Self Assessment of Health and Social Care Needs by Older People: A multi-method systematic review of practices, accuracy, effectiveness and experience

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Executive summary

Background

This review considers the evidence base for 'self-assessment' by older people in managing and identifying health and social care needs.

Self-assessment is widely advocated in policy and practice developments for older people.

The National Service Framework for Older People specifically emphasises person centred care, the key themes of which are proper assessment of potentially complex needs, integration of assessment, sharing of information between services and with clients and active involvement of older people in both health promotion and assessments.

The single-assessment process is a key tool to achieve these goals and self-assessment is identified as having an important role.

Despite the widespread discussion there is little agreement on the precise meaning of the term. Although occasionally used to simply refer to self-report self-assessment is defined here as comprising at least self-report, self-completion or direction of the process and self as the potential beneficiary of the assessment.

In addition to these three elements, self-assessment can be self-initiated, self-interpreted and prompt self-care actions.

Self-assessment raises complex questions about accuracy, effectiveness and the experience for users.

This review addresses these complex issues through a number of approaches. These are;

- a survey of the scope of approaches toward self-assessment based upon a comprehensive review of literature and a survey of practice
- a systematic review of studies of accuracy comparing the results of self-assessments with appropriate gold standard assessments
- a systematic review of controlled trials of effectiveness of self-assessment
- a review of qualitative evidence of self-assessment focussing on the experience and acceptability of self-assessment from the perspective of both the older person and professionals.

Scope

Self-assessment has been used across a wide variety of domains and for a number of purposes ranging from targeted screening for specific medical disorders through to approaches designed to help individual decision-making in relation to major life events such as changing accommodation.

Self-assessments can be categorised according to their content in relation to health and social care and according to the extent to which they focussed on single or multiple problems.

In the majority of focussed health related assessments, self-assessment substituted for professional assessment, and in most cases is simply a mode of administering a screening test without having face-to-face contact. Most self-assessments in focussed health are professionally initiated questionnaires, focusing on internal factors. In most cases the questionnaire is professionally interpreted and it is the professional who is prompted to act.

Although fewer in number, there is more variety in the general health assessments identified. Examples include paper and pencil questionnaires, self-assessment algorithms and web-based systems with feedback. There is much more autonomy in the use of the assessments, with some examples being entirely user directed from initiation to action. Frequently the goal is to improve management of healthcare in general and to mediate relationships with professionals.

Despite the limited numbers of examples of self-assessment in the social care / life skills domain there is more variety and many of the examples identified are substantively different from any face-to-face assessment. Self-assessments in this domain are more likely to be user initiated and interpreted and to aid decision making on behalf of the user. One reason for this is that they cover issues that would not routinely be addressed by a professional assessment e.g. driving ability, moving home, life strengths.

Most examples of comprehensive assessment were related to the UK's Single Assessment Process. While there has been considerable innovation in terms of user involvement in development and in modes of delivering comprehensive assessments, few examples of self-assessment were identified.

As with medical screening the value of an assessment lies not simply in its ability to gather information but what happens afterwards. In this regard it is clear that even the most innovative self-assessments require appropriate action by professionals and are not designed to impact upon the person themselves directly.

Although the paper and pencil questionnaire remains ubiquitous there are examples of the use of computers and the Internet in the assessment process and it would seem likely that this will become

increasingly prevalent offering a possible mechanism to disseminate self-assessment questionnaires and increase initiation of assessment by users themselves. However, the development of such methods for older people may be inhibited by a (misguided) perception that they lack the requisite skills.

Accuracy

Twenty-six studies were identified which met the review criteria. The majority of those were in the domain of focussed health and sample sizes were often modest.

This suggests that self-assessment tool development is not well advanced. There were also a small number of general health assessments, however no evaluations of the accuracy of comprehensive or life and social skills were found.

The accuracy of the self-assessment tools was considerably varied with some assessments performing well. The tools that were found to be more accurate tended to be in areas where the reference standard was well developed e.g. mental health, and where there is closer overlap between the content of the self-assessment and the diagnostic criteria.

Several tools have at least modest accuracy in identifying older people with depression. These self-assessments generally have higher sensitivity than specificity, suggesting that their value may be in screening but there is a risk of high numbers of false positives.

Other areas of focussed health care where potentially useful self-assessment tools exist include screening for osteoporosis and screening for mobility problems. In both cases tools exist which have high sensitivity and moderate specificity. This means that although a high proportion of people with problems will be identified, this is at the expense of a high false positive rate. The potential costs of this need to be taken into consideration when developing a screening programme.

Health care areas where the accuracy of self-assessment tools remains unclear include dental health, nutrition and hearing.

Visual self-assessment has been shown in a single large study to have high specificity but low sensitivity, making it unsuitable as a screening tool.

Although the predominant proposed use of most of the self-assessment tools is as a screening tool the majority, including the general health assessments, show modest sensitivity and specificity, and thus the self-assessments will fail to identify many older people who may have problems.

Effectiveness

Nine studies of the effectiveness of self-assessment based programmes were identified. Most of these related to studies of general health approaches with studies examining over 75 health checks, self-care books and a system which gives feedback to both client and care provider (Dartmouth COOP).

There is no direct evidence from which to directly evaluate the effectiveness of focused self-assessment based screening programmes for older people, either related to non screening or other approaches to screening.

Unless self-assessment introduces additional action on behalf of the client it would seem unlikely to lead to different outcomes from non-self-assessment based approaches, since professional interpretation and action is the norm.

Thus self-assessment is probably effective under the same circumstances as other screening programmes: where it is accurate and resources exist to follow up and deliver effective treatment.

The results of studies to evaluate the effectiveness of self-assessment on reducing drug reactions or interactions are positive but there is no evidence of clients' actual behaviour change.

Approaches such as those based on the Dartmouth COOP system, which provide feedback to both client and practitioner, seem most beneficial.

It is likely that benefits will be maximised if this information is used explicitly during face-to-face consultations.

Where assessments are targeted at those over 75, a strategy that regards non-response as an adverse assessment may maximise benefit.

There is a large evidence base for self-care approaches including algorithms but it is weak and inconclusive.

Although the evidence is promising, self-care does not necessarily lessen the demand for health care.

No evidence was found that related to the effectiveness of comprehensive assessment.

Experience of self-assessment

Evidence of how older people experience self-assessment is weak due to the small number of studies that address this issue.

Although generally willing to complete self-assessment screening questionnaires, there is little evidence on whether or not older people perceive the activity to be useful or will initiate any action in response to the self-assessment.

Older people express a preference for professional assessment for some issues e.g. hearing, however for other more sensitive issues there is tentative evidence of a preference for self-assessment.

The limited evidence suggests that the more general the assessment and less focussed on a specific problem requiring diagnosis, the more acceptable self-assessment is.

The perception of the purpose of self-assessment is important.

Self-assessments that emanate from respected and known sources, such as family practitioners, seem to result in high participation

An opportunity to complete the assessment with the potential for professional input as needed/wanted is important, rather than being 'left to get on with it'. Supported self-assessment can be a positive experience for older people.

The length and complexity of a questionnaire does not necessarily have a negative impact on the experience of self-assessment if it is easy to use and the items correspond to issues considered by older people as being important to them.

There is some evidence that older people are satisfied with a user-initiated and user-interpreted self-assessment.

There is a large gap in current knowledge on how older people experience comprehensive assessment, within which self-assessment is increasingly incorporated.

Recommendations for further research

Although there is evidence for the accuracy of self-assessments, particularly in the field of focussed health, this area is under researched.

In terms of focussed health, more studies on the accuracy of self-assessments of functional status in practice as opposed to for research purposes are required.

Where self-assessment is intended to impact upon health behaviour more evidence is required to determine actual behavioural change.

Self-care approaches seem promising but again further research is required particularly in the UK context and, specifically in relation to developments such as NHS direct

With the widespread implementation of the Single Assessment Process there is a need to explore older people's experiences of the self-assessed component of comprehensive assessment as a matter of urgency.

Further research should directly investigate the experience of self-assessment rather than resort to making inferences based on assumptions from indirect sources, notably response rates.

Evidence of how the process and content of assessment affects the experience of self-assessment would be of value in the design and implementation of self-assessment with older people.

Exploring other factors that may impact on older people's experience of self-assessment e.g. the characteristics of the person completing the self-assessment and the timing of the assessment is also important.

Exploration of the extent to which, and in what circumstances older people are comfortable with self-assessment as a substitution for professional assessment, in part or as a whole, would be beneficial.

Recommendations for practice

Wherever self-assessment is employed as part of an interaction with services, professionals need to demonstrate that they value the information provided

Systems that incorporate both feedback and self care information for users as well as delivering assessment information to professionals are best supported by evidence

Where initiated by professionals the use of self-assessment in practice demands professional expertise and involvement in order to maximise benefits and avoid a perception of neglect.

Results of self-assessments for health conditions are not definitive: they can serve to provide focus in an individual's assessment but cannot fully replace it.

From the weak evidence available it appears that older people are comfortable with self-assessment, including user-initiated and user-interpreted assessments,

Many people may prefer to have a degree of professional support with the process.

The use of self-assessment for identifying health and social needs may be a more positive and helpful exercise for older people if directly supported by a known health professional.

The use of computer-based questionnaires may be a positive development for older people but format, ease of use and access is crucial.

The design content and layout of self-assessment material is crucial and active involvement of potential users in the process may be beneficial.

Recommendations for policy

Knowledge about the use of self-assessment among older people is underdeveloped despite long standing guidance reinforcing the

importance of user's views in assessment, patient involvement in care and person centred care.

The varieties of practices identified indicates that there is considerable scope to advance policy directives regarding self-assessment further within the confines of patient acceptability.

Benefits should not be assumed and in particular the use of self-assessment should not be equated with user involvement and partnership. Generally more clarity is required when advocating self-assessment

The majority of self-assessments that have been developed are designed to be initiated, interpreted and acted upon by professionals, not the older people themselves.

These are potentially useful but the partnership is embedded in how the assessment is used, not the assessment itself.

The small number of self-assessments included in this review that were directed by older people were considered to be useful and acceptable.

User involvement in the development of assessments is potentially valuable but professional expertise in terms of the performance of specific test should not be neglected

Disclaimer

This report presents independent research commissioned by the National Institute for Health Research (NIHR). The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the NHS, the NIHR, the SDO programme or the Department of Health

Addendum

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