

Assessing Wellbeing: An Evidence Review

An evidence review was conducted to explore the effectiveness of wellbeing tools that assess the needs of patients, clients and service users in times of change. A focus was on the effectiveness of tools which support individual wellbeing and accurately identify change needs. This included measures that provide monitoring information to chart individual progress and those that can be used as a motivational tool. Recommendations will inform community-based health and wellbeing initiatives driven by First for Wellbeing.

To be included in the review, papers had to: a) be related to a wellbeing tool which supports individuals in times of change; and b) be published in a health and/or social care context within the last ten years. This selection process resulted in thirty-three papers being included for review.

Defining Wellbeing

Wellbeing is a complex, multi-faceted construct related to aspects of an individual's physical, social, emotional and psychological health and lifestyle (Dodge, Daly, Huyton & Sanders, 2012).

High levels of wellbeing are associated with positive health outcomes including increased life expectancy, improved employment status, the maintenance of interpersonal relationships and increased prosocial behaviour (e.g. Chida & Steptoe, 2008; Diener, Helliwell & Kahneman, 2010; Dolan, Peasgood & White, 2008; Huppert, 2009). Therefore, improving wellbeing is beneficial for individuals, local communities and the wider society.

Measuring Wellbeing

Due to the complexity of wellbeing, related measures must tap into a number of wellbeing dimensions (Dodge et al., 2012; Stewart-Brown, 2014). This is important because combined approaches, which focus on a number of different wellbeing areas, are often more successful than measures which only target certain aspects of wellbeing (Thompson et al., 2016). However, most tools only address specific aspects of wellbeing, which has led to calls for the development of broader wellbeing approaches (Kinderman, Schwannauer & Pontin, 2011).

Wellbeing tools must also meet certain psychometric properties, such as being reliable and valid. Reliable tools, for example, provide stable and consistent results over time (test-retest reliability), ensure that those using the tool have similar results on different test items (internal consistency) and have agreement with staff assessment ratings (inter-rater reliability). Tools must also be valid, for example, by measuring the construct that they purport to and by corresponding with existing tools which also measure wellbeing (concurrent validity). However, many measures do not meet these



psychometric properties and tool developers rarely assess the responsiveness of the tool in identifying change (Killaspy, White, Taylor, & King, 2011).

A recent systematic review has identified five good-quality wellbeing measures which are broad, psychometrically robust and responsive (Dronavalli & Thompson, 2015). This includes The WHO Quality of Life Brief (WHOQOL-BREF), Health Related Quality of Life instrument (HRQOL), Quality of Life Scale (QOLS), Personal Wellbeing Index (PWI) and Community Wellbeing Index (CWI). As each tool meets recommended quality standards, is brief and can be self-administered, the authors suggest that there is no need to develop further unvalidated tools.

While excellent tools exist and can provide the necessary data for comparison purposes, the need for bespoke wellbeing measures will remain. For example, while the WHOQOL-BREF is often viewed as one of the best holistic wellbeing measures, other tools such as the Warwick-Edinburgh Mental Well-being Scale offer a better insight into domains related to psychological health and relationships (Kinderman et al., 2011; Stewart-Brown et al., 2009). It is also possible that a "one size" approach to wellbeing, or those designed for use in many settings, may be less effective than targeted tools, as they could lead to important factors being missed (Applegate & Brown, 2012).

Measuring Wellbeing: Recommendations

A range of wellbeing tools exist, but psychometric data is often limited. Psychometrically robust, responsive and easy to administer, measures tend to be favoured by staff, patients, clients and service users. Despite calls for broader-reaching wellbeing tools, such measures may be more problematic when determining efficacy. Tool developers should also be aware of missing factors when designing holistic tools for use in many settings with different user groups.

Identifying Change Needs and Monitoring Progress

Research alluded to a number of measures for assessing, monitoring and managing wellbeing at the individual level. However, despite an apparent increased focus on measuring the effectiveness of health and social care services, few approaches reflect the reality of service users and their experiences (Killaspy et al., 2012). In addition to this, few tools appeared to assess and monitor individual wellbeing, as well as identifying needs, motivating and supporting change.

The Outcomes Star

The Outcomes Star is a widely used, multifaceted, 10-item outcomes measure which does holistically detect change needs, plans required actions and charts progress throughout the recovery journey.

Areas addressed by the Star include: physical health, emotional wellbeing, child safety, social networks, education, learning, boundaries, behaviour, family routine, home and money. Through collaboration with service users and workers, outcome areas can be plotted onto the service user's Star in order to demonstrate progress across these dimensions. This then underpins a five-stage 'ladder of change', which reflects the service user's position for each dimension across the change journey, or interaction with the service.

The Outcomes Star was developed to involve and empower service users, by supporting them in the construction of their own futures. The Star views service users as active agents of change who work with staff to continually reflect and act on the problem at hand. As service users take on the responsibility for creating change, this makes it more likely that they will complete their journey and fulfil their change needs (Mackeith, 2011; Burns, Mackeith & Graham, 2008).

The Mental Health Recovery Star

Outcome Star development has focused predominantly on the usefulness of the tool for service users and staff, rather than psychometric properties (MacKeith, 2011). Therefore, while there are currently over twenty variations of the Star used in a wide range of support settings, psychometric evidence for the tool can be limited.

One widely used variation in the mental health field is the Mental Health Recovery Star (MHRS), which helps create action plans for meeting recovery goals. Research suggests this tool is effective, engaging and easy to use. It is also responsive enough to detect changes over time in both community service users and clinical populations (Dickens, Weleminsky, Onifade & Sugarman, 2012; Killaspy, White, Taylor & King, 2012; Lloyd et al., 2015). However, measures of convergent validity, which determine if MHRS scores correlate with similar tools, have suggested that the MHRS may tap into social functioning instead of the recovery process (Killaspy, et al., 2012a).

Test-retest reliability and internal consistency of the MHRS is good, suggesting the tool provides stable and consistent results (Dickens et al., 2012). However, collaborative staff and service-user ratings tend to produce higher needs scores than service users' individual needs ratings (Killaspy et al., 2012; Killaspy, et al., 2012a). Further discrepancies in the agreement of scores with different members of staff have been linked to high staff turnover and inadequate training (e.g. Killaspy et al., 2012). Similar issues have also been found with the widely-used Family Star variation (Mackeith, 2014).

Identifying Change Needs and Monitoring Progress: Recommendations

Research related to the Outcomes Star emphasise the importance of developing tools which reflect the service user's reality, by identifying their needs and supporting the change process. Ongoing assessment of the robustness, practical use and relevance of wellbeing tools is also important. While tool descriptions should be clear to both staff and service users, regular and consistent staff training will also ensure consistent implementation.

Utilising Monitoring Information

The review process identified a number of wellbeing interventions which provide monitoring information and feedback.

Self-Monitoring

Based on principles from positive psychology and cognitive-behavioural therapy, self-monitoring techniques and related exercises can lead to positive wellbeing outcomes. Self-monitoring can also prevent unwanted or habitual behaviours such as unhealthy eating (Maas, Hietbrink, Rinck & Keijsers, 2013), smoking (Thompson et al., 2015) and anxiety (Ruini & Fava, 2009).

These exercises allow users to monitor their own behaviour, regain control and rate themselves at various stages of the change process. Measures can include, for example, sleep diaries, activity schedules and exercise logs, but should also be supported with user data (i.e. cigarettes smoked or calories expended).

Real-time prompts or reminders are beneficial, as any time lapse between self-monitoring exercises and recording the experience could lead to inaccurate or distorted information recall (Kahneman & Krueger, 2006). For example, advising service users to keep self-monitoring forms on their pillows improves task engagement (Maas et al., 2013) and structured time diaries allow patients suffering from anxiety to monitor their own barriers to wellbeing (Ruini & Fava, 2009).

While self-monitoring can provide accurate wellbeing assessments in older populations, it may also have less of a motivating influence. For example, research suggests that older individuals tend to be more passive in monitoring or controlling their wellness information and would rather share this information with a healthcare provider (Huh, Le, Reeder, Thompson & Demiris, 2013; Koistinen et al 2013). Efficacy also relies on service users wanting to change the behaviour (Maas et al., 2013).

Wellness Technology

Online, computer or mobile phone based interventions can provide real-time monitoring information and feedback which can improve wellbeing, while tackling dimensions associated with poor wellbeing (Joe, Chaudhuri, Chung, Thompson, & Demiris, 2014).

Internet-based wellness portals utilise expert knowledge, patient information and symptom tracking to provide personalised online wellness plans (Chou, Nagykaldi, Aspy, & Mold, 2010). Service users find these tools useful, particularly if the feedback is immediate, if individual wellbeing scores are compared to benchmarks and if they are signposted to further support services (Jorna, Ball & Salmon, 2006; Green, Oades & Grant, 2006; Mcilpatrick, & Hasson, 2014; Dias et al., 2015).

While technological wellness tools can be used both as prevention and early targeted intervention, older adults and those who are technologically illiterate are less likely to use them because they face barriers in doing so (Joe et al., 2014; Huh et al., 2013). Therefore, during the development phase, service staff need to consider the needs, attitudes of preferences of the user, in order to maximise usability and engagement.

Wellbeing Coaching

Wellbeing coaching programmes also involve the formation of agreed action plans and tailored wellbeing intervention packages for achieving set goals. Progress is mapped using psychological and physical measurement tests, both before and after the intervention, and feedback is provided to the user.

Evidence-based approaches such as the Quality of Life Therapy and Coaching tend to be comprehensive, psychometrically robust and have a positive impact on wellbeing, by promoting active collaboration between coaches and service users (Frisch, 2013; Henning et al., 2007; Frisch, 1992). Other ten-week workplace wellness programmes also show wellbeing gains, with high programme adherence rates and engagement. Based on the Disconnected Values Model (e.g. Anshel, Brinthead, & Kang, 2010), these programmes allow users to identify inconsistencies between negative habits and lifestyle values.

Peer-coaching techniques, whereby two or more individuals work together, have also been successful in enhancing wellbeing, self-regulation and motivation to achieve goals (Green et al., 2006). Although more research is required in this area, peer-to-peer elements of wellness coaching appear to enable participants to maintain positive changes, with long term implications for wellbeing.

Utilising Monitoring Information: Recommendations

A range of wellbeing measures for monitoring user data and providing feedback exist. Self-monitoring approaches, such as the use of structured diaries, increase resilience, self-management and individual goal reflection. Popular wellness technologies utilise immediate feedback and real-time monitoring processes, which encourages active participation. Mental health coaching, particularly in a peer-to-peer context, appears to increase overall wellbeing, adherence and long-term intervention effectiveness.



Concluding Recommendations

The Need for Integrated Wellbeing Tools

This evidence review supports the need for integrated and multidimensional wellbeing tools which more accurately reflect the full complexity of wellbeing. These tools should identify the needs of patients, clients and service users in real-world contexts, while charting the user's progress during times of change. Tool developers should also be aware of issues related to efficacy and the potential to overlook factors when using the same measures across different user groups and contexts.

The Value of Psychometric Assessment

There is a need to develop wellbeing tools that are psychometrically robust and testing must take place before, during and after tool development. If this information is unavailable, case studies or focus groups can support usefulness evaluations. It is recommended staff engage in ongoing training for both tool delivery and evaluation.

Understanding the Reality of the Service Users

Prior to deployment, wellbeing tools must be developed in collaboration with patients, clients or service users and reflect their realities by accounting for their needs, attitudes and preferences. Service users must be viewed as active mediators of their own change journey and as continued, valid informants on the efficacy of the approach being used. Tailoring wellbeing approaches to ongoing needs is also highly recommended.

The Value of Self-Monitoring

Wellbeing approaches must allow for individual goal setting and self-monitoring from real-time, immediate feedback. This can be achieved through measures such as online wellness platforms or structured time diaries. Tool developers should also be aware that the efficacy of self-monitoring as a motivation tool may differ based on the user population.

Collaborative Wellbeing Approaches

Tool developers should build in opportunities for peer-to-peer and service user-staff collaboration as a motivating function for improving wellbeing. Further research is required to assess the effectiveness of collaborative coaching models.

References

- Anshel, M.H., Brinthead, T.M., & Kang, M. (2010). The disconnected values model improves mental well-being and fitness in an employee wellness program. *Behavioral medicine (Washington, D.C.)*, 36(4), pp.113–122.
- Applegate, B., & Brown, C. (2012). Holistic Wellness Assessment for Young Adults. *Journal of Holistic Nursing*, 30(4), pp.235–243.
- Burns, S., Mackeith, J., & Graham, K. (2008). *Using the Outcomes Star: Impact and Good Practice*. Homeless Link, London.
- Chida, Y., & Steptoe, A. (2008). Positive psychological well-being and mortality: A quantitative review of prospective observational studies. *Psychosomatic Medicine*, 70, pp.741–756.
- Chou, A.F., Nagykaldi, Z., Aspy, C.B., & Mold, J.W. (2010). Promoting Patient-Centered Preventive Care Using a Wellness Portal: Preliminary Findings. *Journal of Primary Care and Community Health*, 1(2), pp.88–92.
- Dias, L. et al., (2015). Using an Interactive Self-Assessment Tool to Strengthen Your Employee Assistance Service. *Journal of Workplace Behavioral Health*, 30(1-2), pp.46–65.
- Dickens, G., Weleminsky, J., Onifade Y., & Sugarman, P. (2012). Recovery Star: validating user recovery. *The Psychiatrist*, 36, pp.45–50.
- Diener, E., Helliwell, J.F., & Kahneman, D. (Eds.). (2010). *International differences in well-being*. New York: Oxford University Press.
- Dodge, R., Daly, A., Huyton, J., & Sanders, L. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing*, 2(3), pp.222-235.
- Dolan, P., Peasgood, T., & White, M.P. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective wellbeing. *Journal of Economic Psychology*, 29, pp.94–122.
- Dronavalli, M. & Thompson, S.C. (2015). A systematic review of measurement tools of health and well-being for evaluating community-based interventions. *Journal of Epidemiology and Community Health*, 69, pp.805–815.
- Frisch, M.B. et al., (1992). Clinical Validation of the Quality of Life Inventory: A Measure of Life Satisfaction for Use in Treatment Planning and Outcome Assessment, 4(1), pp.92–101.
- Frisch, M.B. (2013). Evidence-Based Well-Being/Positive Psychology Assessment and Intervention with Quality of Life Therapy and Coaching and the Quality of Life Inventory (QOLI). *Social Indicators Research*, 114, pp.193–227.
- Green, L.S., Oades, L.G. & Grant, A.M. (2006). Cognitive-behavioral, solution-focused life coaching: Enhancing goal striving, well-being, and hope. *The Journal of Positive Psychology*, 1(3), pp.142–149.
- Henning, E. et al. (2007). Depression with anger attacks. *Journal of Clinical Psychiatry*, 59(SUPPL. 18), pp.18–22.
- Huh, J., Le, T., Reeder, B., Thompson, H.J. & Demiris, G. (2013). Perspectives on wellness self-monitoring tools for older adults. *International Journal of Medical Informatics*, 82(11), pp.1092–1103.
- Huppert, F.A. (2009). Psychological well-being: Evidence regarding its causes and consequences. *Applied Psychology: Health and Well-being*, 1, pp.137–164.
- Joe, J., Chaudhuri, S., Chung, J., Thompson, H., Demiris, G. (2014). Older adults' attitudes and preferences regarding a multifunctional wellness tool: a pilot study. *Informatics for Health and Social Care*, 41(2), pp.1–16.
- Jorna, M., Ball, K. & Salmon, J. (2006). Effects of a holistic health program on women's physical activity and mental and spiritual health. *Journal of Science and Medicine in Sport*, 9, pp.395–401.
- Kahneman, D. & Krueger, A.B. (2006). Developments in the Measurement of Subjective Well-Being. *Journal of Economic Perspectives*, 20(1), pp.3–24.
- Killaspy, H., White, S., Taylor, T.L. & King, M. (2012). Psychometric properties of the Mental Health Recovery Star. *British Journal of Psychiatry*, 201, pp.65–70.
- Killaspy, H.T. et al., (2012a). The Mental Health Recovery Star: great for care planning but not as a routine outcome measure. *The Psychiatrist*, 36, pp.194–194.
- Kinderman, P., Schwannauer, M., Pontin, E., & Tai, S. (2011). The development and validation of a general measure of well-being: the BBC well-being scale. *The Quality of Life Research*, 20(7), pp.1035–1042.
- Koistinen, P.O.I. et al., (2013). OLDWELLACTIVE - A self-rated wellness profile for the assessment of wellbeing and wellness activity in older people. *European Geriatric Medicine*, 4(2), pp.82–85.
- Lloyd, C., Williams, P.L., Machingura, T., Tse, S. (2015). A focus on recovery: using the Mental Health Recovery Star as an outcome measure. *Advances in Mental Health*, 7357(February), pp.1–8.
- Mackeith, J., (2011). The development of the Outcomes Star: A participatory approach to assessment and outcome measurement. *Housing, Care and Support*, 14(3), pp. 98–106.
- Mackeith, J., (2014). Assessing the reliability of the Outcomes Star in research and practice. *Housing, Care and Support*, 17(4), pp.188–197.
- Maas, J., Hietbrink, L., Rinck, M., & Keijsers, G.P.J (2013). Changing automatic behavior through self-monitoring: Does overt change also imply implicit change? *Journal of Behavior Therapy and Experimental Psychiatry*, 44(3), pp.279–284.
- McIlpatrick, S. & Hasson, F. (2014). Evaluating a holistic assessment tool for palliative care practice. *Journal of Clinical Nursing*, 23, pp.1064–1075.
- Ruini, C. & Fava, G. (2009). Well-Being Therapy for Generalized Anxiety Disorders. *Journal of Clinical Psychology*, 65(5), pp.510–519.
- Stewart-Brown, S. et al., (2009). Internal construct validity of the Warwick-Edinburgh Mental Well-being Scale (WEMWBS): a Rasch analysis using data from the Scottish Health Education Population Survey. *Health and quality of life outcomes*, 7(1), pp.15–23.
- Stewart-Brown, S. (2014). Measuring wellbeing: What does the Warwick-Edinburgh Mental Well-being Scale have to offer integrated care? *European Journal of Integrative Medicine*, 7(4), pp.384–388.
- Thompson, T.P. et al., (2015). An Exploratory Analysis of the Smoking and Physical Activity Outcomes From a Pilot Randomized Controlled Trial of an Exercise Assisted Reduction to Stop Smoking Intervention in Disadvantaged Groups. *Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco*, 18(3), pp.289–297.