The Wisconsin Quality of Life Index: A Multidimensional Model for Measuring Quality of Life

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The Wisconsin Quality of Life Index (W-QLI) is a multidimensional model for measuring quality of life. This model assumes that quality of life is comprised of 9 dimensions: life satisfaction, occupational activities, psychological well-being, physical health, social relations, economics, activities of daily living, symptoms, and the patient's own goals. The W-QLI takes into account the different perspectives of the patient, the patient's family, and the clinician, both currently and over time. An accompanying taxonomy and patient outcome report can be used in clinical practice to group the patient's goals and to track the attainment of the goals over time, as well as to show the agreements and disagreements between the patient and clinician in terms of how satisfied each is with the patient's progress. The W-QLI, taxonomy, and outcome report can also incorporate the service provider's goals and can be used to examine program results.

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linicians have in the last couple of decades begun to realize that concerns about quality of life motivate patients to seek treatment and ultimately to continue taking medication and participating in rehabilitation programs. Improving quality of life in the patient's eyes has become the major goal of treatment. However, disagreements about the definition and measurement of quality of life abound. This lack of a clear conceptual foundation has hindered comparison of and generalizations between studies.¹

In order to measure quality of life, we have developed the Wisconsin Quality of Life Index (W-QLI), a multidimensional model (Figure 1)¹ based on the definition of quality of life as someone's feeling of well-being according to the satisfaction or dissatisfaction with the dimensions of life that he or she considers the most important.² Thus, any model based on this definition for measuring quality of life must take into account the patient's subjective sense of his or her own quality of life. The W-QLI comprises 9 dimensions that are fairly independent of each other—life satisfaction, occupational activities, psychological well-being, physical health, social relations, economics, activities of daily living, symptoms, and the patient's own goals. These dimensions can each have objective and subjective components. For example, patients

can have more money or more control over their money, which are objective components, or they can feel more satisfied with the amount of control that they have over their money, which is a subjective component. Patients could have more friends, or they could be more satisfied with the friends that they have.

There are also multiple points of view regarding the quality-of-life dimensions. The clinician, the patient, and the patient's family may each have different points of view. For example, patients often report themselves more satisfied with their interpersonal relationships than staff report them to be. It seems that people with schizophrenia adjust their expectation levels and, over a period of time, become somewhat more satisfied with some aspects of their lives. Staff continue to make assessments based on what would be sufficiently satisfying for them, and therefore assess the patient's life negatively in comparison. In other words, people with schizophrenia seem to be more satisfied than staff expect them to be.

The 9 quality-of-life dimensions can also be examined over time. We can find changes between times T1 and T2 and predict, for example, whether concordance between opinions of the clinicians and clients at time T2 will predict improvements that appear in time T3.

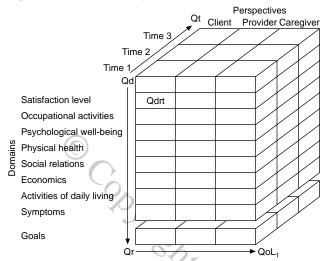
Finally, the W-QLI is preference-weighted. It may be that for one patient, housing is important, but for another patient, housing is less important than occupation. Frequently, patients and their families stress the importance of improving social relations and interpersonal functioning, while clinicians more often stress the importance of reducing symptoms and maintaining medication compliance.³ Rather than assume that each dimension is equally important, the W-QLI allows both patients and staff to preference-weight the dimensions to get a relative ranking.

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Figure 1. Wisconsin Quality of Life Index*



*Reprinted with permission from reference 1. Abbreviations: Qdrt = Evaluation of a particular domain with respect to a particular responder at a certain point in time; Qt = Evaluation of quality of life across time; Qd = Evaluation across domains; Qr = Evaluation across responders; QoL₁ = Evaluation of quality of life as a whole (perceived QoL) at any point in time.

Table 1. Taxonomy of Treatment Goals for Persons With Schizophrenia*

Control	of	disease
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Features/symptoms of disease

Compliance

Control of side effects of treatments

Control of personal status

Independence

Occupation

Self-care

Quality of life

Interpersonal status

Family relationships

Relationships with others

Social functioning

Caregiver relief

Reduce family burden

Miscellaneous

*Data from reference 5.

In quality-of-life studies in this country, women have rated interpersonal relationships as more important than occupation for achieving a high overall quality of life, but men rated occupational attainment as relatively more important for overall quality of life.⁴ This has been true among people with cancer, people with AIDS, and people with schizophrenia. Therefore, if a female case manager is setting treatment target goals for a man with schizophrenia, the patient and case manager may be approaching treatment with different inherent values about the roles of work and interpersonal relationships. When the W-QLI is used, systematic biases among patients, clinicians, and family members can be examined on the basis of gender, ethnic, or other differences. Clinically, personal goals of

Figure 2. Sample W-QLI Client Outcomes Report

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Client ID: Client Date: 8/12/98 Client Location: Access House Provider Date: 8/13/98 Provider Location: Access House		
	Client	Provider
Occupational Activities (Occ) Activities of Daily Living (ADL) Relationships (Rel) Symptoms (Sympt) Physical Health (Hlth) Money Psychological Health (Psycho) Quality of Life W-Quality of Life	2.67 1.33 0.83 1.20 -1.50 -3.00 -1.65 0.05 0.13	-0.50 1.64 0.67 0.79 1.50 -3.00 0.00 0.16 0.08
Client	Pro	vider
3 2 2 - 1 - 0 0 - 1 - 1 - 2 - 3 0 0 0 W H H H H H H H H H H H H H H H H	Occ ADL Rel	Sympt Hith Psycho
Client	Importance	e Achieved
Take better care of myself— mentally and physically	10	5
"Make sure I do not drink alcohol anymore"	10	6
I would like to stick with and accomplish small goals instead of try to do too much at once.		6
Provider Goals	Importance	e Achieved
Client will take steps to stay out of hospital	10	7
Client will take steps to move out of his current living situation	10	8
Client will take steps to get social security/medicare benefits	10	8

the patient are critically important. By orienting treatment around the patient's personal goals, the physician and patient can achieve a collaborative relationship and can target treatment toward the goals most important to the patient. This in turn can improve compliance because the patient will get a sense of attaining the goals that he or she had set for treatment.

If clinicians are going to start paying attention to quality of life in treatment goals, they need an inexpensive, efficient way of doing this in non-research settings. For data analysis, a taxonomy (Table 1)⁵ can be used to organize a

variety of different goals into groups: goals that decrease symptoms, goals that increase personal control, and goals that increase life options. Outcome information from the W-QLI Client Outcomes Report (Figure 2) can be used to track the attainment of the goals over time. Clinicians can query patients and their families every 6 months or yearly. This instrument can be used on the individual level, the program level, and the system level. The example in Figure 2 shows that, in terms of activities of daily living and control of money, the particular client and the provider are in agreement, but in terms of physical and psychological health, there is a substantial disagreement between the client and provider. In terms of occupational activities, the client is more satisfied than the provider. This report is a way of rapidly articulating and focusing on areas of agreement and disagreement, and it can be used to remind the health care provider of the patient's goals. This report can also be used at the program or system level to pinpoint where the programs are or are not working in consonance with patients' goals, and track these data over time.

Thus, this overview explains what we propose as a definition of "quality of life." By defining quality of life specifically as comprising certain dimensions, the concept can be broken down and measured consistently across studies so that results can be compared. If studies use the same dimensions to examine quality of life, the outcomes will be comparable, and we may be able to find that one medication or rehabilitation program improves one dimension of quality of life and not another, while a different medication or rehabilitation program produces the opposite result. If the quality-of-life studies improve in terms of defining the concept and using the same model as well as a consistent tool to measure its dimensions, then the treatment goals of patients and their families, clinicians, and even service providers can more easily be met.

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