



ADVISORY REPORT OF THE SUPERIOR HEALTH COUNCIL no. 9204

Towards a generic framework for the development of quality indicators in mental health care in Belgium

This report aims at providing policy makers, managers, mental health professionals and users with generic recommendations that may be used to choose quality indicators for mental healthcare in Belgium.

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SUMMARY

Background: Every year, mental health problems affect more than a third of the European population. High quality mental health care contributes to a sustainable society. Therefore, the new European Mental Health Action Plan of the World Health Organization (WHO) requests member states to develop a common set of quality indicators for mental health care. In order for Belgium to implement the European Mental Health Action Plan of the WHO, the quality of mental health care in Belgium should be measured. A set of indicators is needed to assess, monitor and measure the quality of mental health care.

In this advice, the Superior Health Council (SHC) aims to provide an overview of recommendations on quality mental health care that can constitute the basis for the development of quality indicators on mental health care in Belgium. The main questions are: "What is quality?" and "What should we measure?".

Methods: A systematic literature study was conducted for the years 2011-2015 to update the previous work of Gaebel et al. (2012). Electronic databases MEDLINE, EMBASE and Web of Science were used. The literature study consisted of three parts. The first search was on the quality of mental hospitals. This search strategy was complemented by a second search on controlled trials and systematic reviews on a variety of mental health service structures. Finally, the last search covered out-patient services. Recommendations that were retrieved from the systematic literature search were discussed and completed by the experts of the SHC and by stakeholder organizations. Recommendations were categorized, based on the seven aims of the Mental Health Action Plan of the World Health Organization.

Results: We identified 2126 articles in the original literature search. A total of 113 studies met our inclusion criteria. In these 113 articles, we found 30 recommendations that were already formulated in the article of Gaebel et al. (2012). Furthermore, 48 additional recommendations and/or indicators emerged from the present literature search.

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The categorization of recommendations, taking into account additional information and suggestions of experts and stakeholders, resulted in 34 recommendations.

Conclusion: These evidence-based recommendations can be used as a general framework for the selection and development of structure and process quality indicators for mental healthcare.

Keywords and MeSH descriptor terms²

MeSH terms*	Keywords	Sleutelwoorden	Mots clés	Schlüsselwörter
Quality standard	Quality standard	Kwaliteitsstandaard	Norme de qualité	Qualitätsstandards
Quality improvement	Quality improvement	Kwaliteitsverbetering	Amélioration de la qualité	Qualitätssteigerung
Quality assurance	Quality assurance	Kwaliteitsgarantie	Assurance de la qualité	Qualitätssicherung
Quality performance	Quality performance	Kwaliteitsvolle prestaties	Performances de qualité	Qualitätsleistung
Quality indicators	Quality indicators	Kwaliteitsindicatoren	Indicateurs de qualité	Qualitätsindikatoren
Psychiatric hospital	Psychiatric hospital	Psychiatrisch ziekenhuis	Hôpital psychiatrique	Psychiatrisches Krankenhaus
Inpatient mental health service	Inpatient mental health service	Residentiële geestelijke gezondheidszorg	Services de santé mentale aux patients hospitalisés	Dienststellen für die stationäre psychische Gesundheitsversorgung
Controlled study	Controlled study	Gecontroleerde studie	Étude contrôlée	Kontrollierte Studie
Outpatient mental health service	Outpatient mental health service	Ambulante geestelijke gezondheidszorg	Services de santé mentale ambulatoires	Dienststellen für die ambulante psychische Gesundheitsversorgung
Integrated care models	Integrated care models	Geïntegreerde zorgmodellen	Modèles de soins intégrés	Integrierte Versorgungsmodelle
Community mental health teams	Community mental health teams	Teams voor Geestelijke gezondheidszorg in de gemeenschap	Les équipes de santé mentale communautaires	Gemeindepsychiatrische Teams
Home treatment	Home treatment	Thuisbehandeling	Le traitement à domicile	Behandlung zu Hause
Mental health	Mental health	Geestelijke gezondheid	Santé mentale	Psychische Gesundheit
Assertive community treatment	Assertive community treatment	Assertive community treatment	Le traitement communautaire dynamique	Assertive community treatment
Case management	Case management	Case management	La gestion de cas	Case-Management
Intensive case management	Intensive case management	Intensive case management	La gestion de cas intensive	Intensives Case-Management
Rehabilitation	Rehabilitation	Rehabilitatie	Réhabilitation	Rehabilitation

MeSH (Medical Subject Headings) is the NLM (National Library of Medicine) controlled vocabulary thesaurus used for indexing articles for PubMed <http://www.ncbi.nlm.nih.gov/mesh>

² The Council wishes to clarify that the MeSH terms and keywords are used for referencing purposes as well as to provide an easy definition of the scope of the advisory report. For more information, see the section entitled "methodology".

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List of abbreviations used

ADHD	Attention Deficit Hyperactivity Disorder
CAPS	Client Assessment Protocols
cCBT	Computerized Cognitive Behavioral Therapy
CD	Conduct Disorder
EBP	Evidence Based Practice
FTE	Full-time equivalent
GGZ	<i>Geestelijke GezondheidsZorg</i>
ICT	Information and Communication Technology
interRAI MH	interRAI Mental Health
IOM	Institute of Medicine (National Academy of Medicine – NAM)
IPS	Individual Placement and Support
ODD	Oppositional Defiant Disorder
PCRs	Patient-Centered longitudinal Records
QIs	Quality Indicators
SHC	Superior Health Council
WHO	World Health Organization

1. INTRODUCTION

Every year, mental health problems affect more than a third of the European population (WHO, 2014). The World Health Organization (WHO) defines mental health as “as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2014). Mental health disability imposes an enormous cost to patients, families, and society. Across free market countries, the rate of mental health disability is growing and now constitutes about one third of all disability claimants (Drake et al., 2012). Mental health problems have thus become important public health challenges (European Mental Health Action Plan of the WHO, 2013). The promotion of mental health and the prevention and treatment of mental health problems is fundamental to safeguarding and enhancing the quality of life, well-being and productivity of individuals, families, workers and communities, thus increasing the strength and resilience of society as a whole. High quality mental health care contributes to a sustainable society (European Mental Health Action Plan of the WHO, 2013). Therefore, the concept “quality of mental health care” is an important notion in the new European Mental Health Action Plan of the WHO (2013). Member states are requested to develop a common set of indicators in order to monitor a successful implementation of the Action Plan.

In order for Belgium to implement the European Mental Health Action Plan of the WHO, the quality of mental health care in Belgium should be measured. A set of indicators is needed to assess, monitor and measure the quality of mental health care. The main question is the following: which indicators should constitute an indicator set in order to assess the quality of mental health care and to meet the requirements of the European Mental Health Plan?

These indicators should be valid for all patients with mental health problems who are currently being treated or who are in need of treatment. Furthermore, these indicators should also address the particular needs of vulnerable people or people who are at risk of mental health problems (prevention). A set of indicators that monitor the quality of mental health care will help to develop an evidence-based policy in order to develop and/or redirect mental health care in Belgium.

During the meeting of the working group on October 13th, 2014, a consensus was achieved concerning the fact that – in order to respond optimally to the advice application – an adequate general framework is to be defined. The most important questions are the following: ‘What is Quality?’ and ‘What should be measured?’. The theoretical framework has to apply to the complete mental health care sector, in different contexts and in relation to all possible mental health problems.

The experts of the SHC agreed to develop a quality framework. The values that are described in the European Mental Health Action Plan of the WHO (2013) and the ethical principles defined by Thornicroft and Tansella (1999) were important sources of inspiration for the expert group. In addition, the vision statement of the Strategic Advisory Committee of the Flemish Minister of Welfare, Healthcare and Family (2012) was also considered. In order to develop an evidence-based framework, a systematic literature review was carried out. In the following section, a more detailed description of the theoretical framework is provided as well as definitions of the most important concepts that are used in the advice.

2 THEORETICAL FRAMEWORK

Quality of care can be considered as “a complex and multidimensional construct which is defined according to several inter-related dimensions: access to service, relevance to need, effectiveness, equity, social acceptability, efficiency, and economy” (Maxwell, 1992). The Institute of Medicine (IOM – National Academy of Medicine, NAM) has defined quality of care as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.” A subsequent Institute of Medicine report stated that high quality care is safe, effective, patient-centered, timely, efficient and equitable (IOM, 2001).

Indicators are described as “defined and measurable items which act as building blocks in the assessment of health care” (Gaebel et al., 2012). An indicator is “an observable and measurable entity that serves to define a concept in a practical way. The concept itself is not measurable” (Passchier et al., 2002; The Question Bank, 2013). A *quality indicator* is defined as “a measurable element or practice performance for which there is evidence or consensus that it can be used to assess the quality and hence change the quality of care provided” (Legido-Quigley et al., 2008). *Quality indicators* may take the form of a statement about the structure, process or outcomes of care (McGlynn and Asch, 1998; Donabedian 1988). *Structure* refers to “the attributes of care settings like facilities, equipment, human resources and organizational structures.” *Process* stands for “the activities in giving and receiving care which includes the activities of health care providers”. Finally, *Outcome* refers to “the effects of care” (Donabedian, 1988).

The European Mental Health Action Plan (WHO, 2013, p3-15) formulates 4 core objectives and 3 so-called cross-cutting objectives concerning the quality of mental health care in European countries.

The 4 core objectives are:

1. ‘Everyone has an equal opportunity to realize mental well-being throughout their lifespan, particularly those who are most vulnerable or at risk.’
2. ‘People with mental health problems are citizens whose human rights are fully valued, respected and promoted.’
3. ‘Mental health services are accessible, competent and affordable, available in the community according to needs.’
4. ‘People are entitled to respectful, safe and effective treatment.’

The 3 cross-cutting objectives are:

1. ‘Health systems provide good physical and mental health care for all.’
 2. ‘Mental health systems work in well-coordinated partnership with other sectors.’
 3. ‘Mental health governance and delivery are driven by good information and knowledge.’
- (WHO, 2013, p3-15)

The WHO asks European governments to develop a common set of indicators in order to implement the European Mental Health Action Plan (2013). In this advice, the SHC aims to provide an overview of recommendations on quality mental health care that can constitute the basis for the development of quality indicators on mental health care in Belgium.

The expert group decided to start with defining a comprehensive, elaborated framework, before deciding which concrete indicators and instruments should be used. The question to be answered in this advice is the following: “What should we measure?” Future steps would be to determine how this can be measured and what can be done with the results.

The theoretical framework had to apply to the complete mental health care sector, in different contexts and in relation to several diseases. Furthermore, elements of the framework had to relate to the micro-, meso- and macro-level. The development of the covering quality framework was based on the issues described in previous or ongoing work such as: the ethical principles for mental health care described by Thornicroft and Tansella (1999), the vision note of the Strategic Advisory Committee of the Flemish Minister of Welfare, Healthcare and Family (2012) and the Quality indicators of the Flemish Government indicator project on the quality of mental health care.

Thornicroft and Tansella (1999, p500-503) stated that it is necessary to select and define a set of principles that can be operationalized and validated as measures to provide a wider balance of information for health policy and clinical service decisions. Based on a five-stage procedure, nine principles, the so-called 3 ACE's, were selected and defined:

1. **Autonomy:** 'a patient's ability to make independent decisions and choices, despite the presence of symptoms or disabilities. Autonomy should be promoted by effective treatment and care.'
2. **Continuity:** 'the ability of relevant services to offer interventions that are either coherent over the short term both within and among teams (cross-sectional continuity), or uninterrupted series of contacts over the long term (longitudinal continuity)'.
3. **Effectiveness:** at the individual patient level, effectiveness is defined as 'the ability to provide the proven, intended benefits of treatments provided in real life situations'. At the treatment program level, effectiveness is defined as 'the ability to provide the proven, intended benefits of services provided in real life situations'.
4. **Accessibility:** 'a service characteristic, experienced by patients and their caregivers, which enables them to receive care where and when it is needed'.
5. **Comprehensiveness:** 'a service characteristic with two dimensions'. Horizontal comprehensiveness means 'how far a service extends across the entire range of severity of mental diseases and across a wide range of patient characteristics'. Vertical comprehensiveness means 'the availability of the basic components of care and their use by prioritized groups of patients'.
6. **Equity:** 'the fair distribution of resources'. Both the rationale used to prioritize competing needs and the methods used to allocate resources should be explicit.
7. **Accountability:** 'The answerability of a mental health service to patients, their families and the wider public, all of whom have legitimate expectations of how the service should carry out its responsibilities'.
8. **Coordination:** 'a service characteristic that is manifested by coherent treatment plans for individual patients. Each plan should have clear goals and include interventions that are needed and effective, no more and no less'. Cross-sectional coordination means the coordination of information and services within an episode of care. Longitudinal coordination means the interlinkages among staff members and agencies over a longer period of treatment.
9. **Efficiency:** 'minimizing the inputs needed to achieve a given level of outcomes, or maximizing the outcomes for a given level of inputs'.

In Flanders, the Advisory Committee for the minister of Welfare, Healthcare and Family (2012) formulated a vision note called "Socially responsible care" (<http://www.sarwgg.be/sarwgg/nieuws/sar-wgg-presenteert-visienota-maatschappelijk-verantwoorde-zorg>, 2011) on social responsible care. This vision note provides a common basis consisting of five principles.

- First, every user is entitled to quality care and every care provider is obliged to provide quality care.
- Second, care should be effective, which means that it contributes to an increasing quality of life and social wellbeing.

- The third principle concerns horizontal and vertical social justice in care. The horizontal dimension refers to an equal treatment of people with equal needs. The vertical dimension refers to an unequal treatment of unequal needs.
- Fourth, the relevancy of care refers to the accordance of care with basic conditions of individual needs and public affordability.
- And last but not least, the accessibility of care means the absence of formal, financial, social and geographical limitations to make care accessible for those who need it.

Based on international recommendations and increasing societal expectations, “the Flemish Government indicator project on the quality of mental health care” was started up in 2012. This project is funded by the Flemish Government. Five working groups were set up in 2015: 1) Continuity and coordination, 2) Patient safety, 3) Patient Participation, 4) Depression, 5) Behavior disorders. These working groups organized regular meetings, involved patient representatives and conducted literature searches. They developed the following indicators:

- Timely follow-up after discharge
 - o Indicator: Number of patients that have been contacted by a doctor or a psychiatrist within 30 days after discharge
- Completeness of medication prescription
 - o Indicator: Number of complete medication prescriptions
- Implementation of suicide prevention policy
 - o Indicator: Number of elements of a suicide prevention policy that are present in the organizations
- Involvement of experienced experts
 - o Indicator: Number of experienced experts (Full-time equivalents/FTE) in the organization
- Shared decision making
 - o Indicator: not defined yet
- Patient perspective
 - o Indicator: Vlaamse Patiëntenpeiling Geestelijke Gezondheidszorg (GGZ) is a questionnaire which evaluates the experiences of patients as regards the quality of mental health care they have received.
- Involvement of the context (working group: depression)
 - o Indicator: Not yet defined
- The use of treatment guidelines in children and young adults with Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) (working group: behavior disorders)
 - o Indicator: Not yet defined

In 2016, these preliminary indicators will be measured in mental health services.

Given the presence of a large amount of publications and activities in the field, the expert group of the SHC agreed to conduct a systematic literature review in order to provide an overview of all evidence-based recommendations and criteria on the quality of mental health care. This systematic review was conducted by LUCAS, the Centre for Care Research and Consultancy of the University of Leuven. The aim is to offer a generic vision for the development and use of quality indicators in Belgium, as demanded by the WHO European Mental Health Action Plan of 2013. In the next section, the methodology and results will be described.

3. METHODOLOGY

After analyzing the request, the Board and the Chair of the working group of the SHC identified the necessary fields of expertise. An ad hoc working group was then set up, which included experts in criminology, health psychology, occupational therapy, psychiatry, psychology and sociology. The experts of this working group provided a general and ad hoc declaration of interests and the committee on Deontology assessed the potential risk of conflicts of interest.

The systematic literature study entitled: “EPA guidance on the quality of mental health services” of Gaebel and colleagues (2012) was taken as the point of departure. The aim of this study was to provide evidence-based recommendations on the quality of mental health care. Principles of the European Mental Health Action Plan (WHO, 2005) and outcome measures for mental health care research (Thornicroft and Tansella, 1999) were also taken into account in the study of Gaebel and colleagues (2012). Thirty recommendations were found, covering structure, process and outcome quality, both on a generic and a setting-specific level.

Once the advisory report was endorsed by the working group, it was ultimately validated by the Board.

3.1 Search Strategy

The systematic literature search consisted of three parts. The first search was on the quality of mental hospitals. This search strategy was supplemented in a second search on controlled trials and systematic reviews on a variety of mental health service structures. Finally, the last search also covered out-patient services. Table 1 shows an overview of the three search strategies.

3.2 Results of the systematic review

A total of 2126 articles were identified in the original literature search (Figure 1). An additional 16 articles were identified through a combination of hand searching of journals and snowball searching on the references cited in the papers that were identified by the search. We removed 345 duplicates, which resulted in 1797 articles that were screened for inclusion. Subsequently, 351 full-text articles were assessed for eligibility and 113 articles met the inclusion criteria (Table 1).

In these 113 articles, we found 30 recommendations that were already formulated in the article of Gaebel et al. (2012). Furthermore, 48 additional recommendations and/or indicators emerged from the present literature search. Every recommendation and/or indicator was accompanied by a description which was either an explanation of the recommendation, a possible operationalization, or a possible way to measure this recommendation and/or indicator. Table 2 shows an overview of all 78 recommendations. Every recommendation was accompanied by an indicator, a description of the recommendation, or an example of the recommendation (see Appendix 1).

Table 1. Overview search strategies

	Part I	Part II	Part III
Time span	05/06/2011-05/01/2015	05/06/2011-05/01/2015	05/06/2011-05/01/2015
Inclusion criteria	Articles with focus on mental health care services Articles refer to quality improvement tools Articles dealing with quality indicators or quality assurance in mental health care	Controlled trials or reviews of original controlled trials dealing with interventions in the respective mental health service Inpatient mental health service AND (controlled study OR controlled trial) Outpatient mental health service AND (controlled study OR controlled trial) Integrated care models AND mental health retrieved Community mental health teams AND (study OR trial) Home treatment AND mental health AND (controlled study OR controlled trial) Assertive community treatment AND (controlled study OR controlled trial) last 2 years Case management AND mental health AND (controlled study OR controlled trial) Intensive case management AND (controlled study OR controlled trial) Rehabilitation AND mental health AND (controlled study OR controlled trial) last 2 years	Articles with focus on mental health care services Articles refer to quality improvement tools Articles dealing with quality indicators or quality assurance in mental health care (Quality standard* or Quality improvement* or Quality assurance* or Quality performance* or Quality indicators*) AND (psychiatr* outpatient)
Search Terms (based on EPA Guidance)	(Quality standard* or Quality improvement* or Quality assurance* or Quality performance* or Quality indicators*) AND (psychiatr* hospital)	English MEDLINE 1078 281 95	English MEDLINE
Language	English		English
Databases	MEDLINE, Embase, WOS		MEDLINE
	682		37

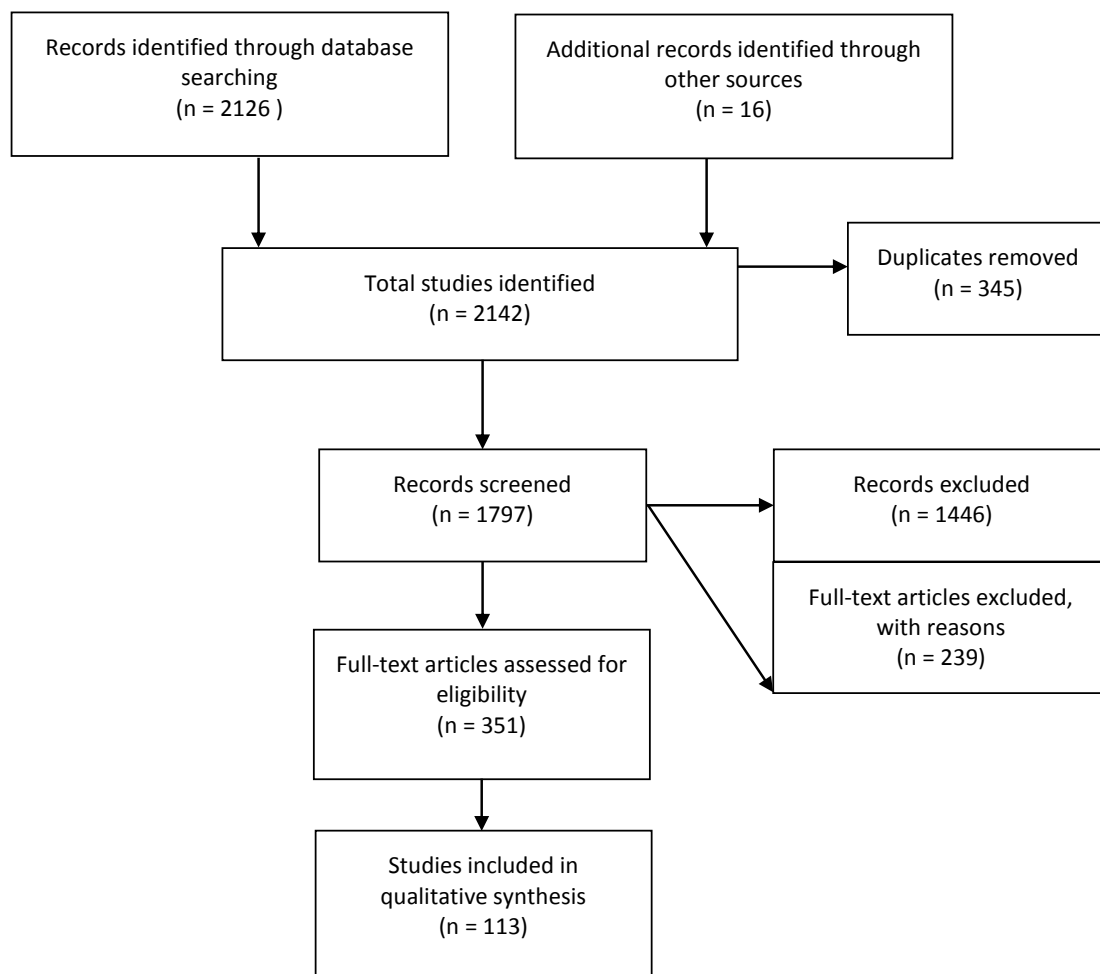


Figure 1. Prisma flow diagram of the literature search

Table 2. Recommendations retrieved from the systematic review – Update of the systematic literature study of Gaebel et al. (2012) for the years 2012 to 2015.

Recommendations

*A = recommendations retrieved from the EPA Guidance (Gaebel et al., 2012)

*B = recommendations retrieved from the current systematic review

- A1. Mental health education
- A2. Mental health reporting and monitoring
- A3. Structural requirements to ascertain patient's dignity and basic needs
- A4. Multi-professionality of services
- A5. Access to good primary healthcare and specialized psychiatric care
- A6. Availability of technological equipment for assessment and treatment
- A7. Psychiatric workforce
- A8. Catchment areas
- A9. Day hospital for people with acute mental disorders
- A10. Psychiatric care for members of minority groups
- A11. Essential in-patient services structural requirements
- A12. Essential out-patient services structural requirements
- A13. Essential rehabilitation service structural requirements
- A14. Community mental health teams for people with severe mental illnesses
- A15. Intensive case management
- A17. Evidence-based medicine
- A18. Safety issues
- A19. Informed consent
- A20. Monitoring of physical illness and access to general and specialized medical services
- A21. Hospitals/in-patient services - basic requirements
- A22. Hospitals/in-patient services – admission procedures
- A23. Hospitals/in-patient services: access to wards to special services
- A24. Hospitals/in-patient services - detained patients procedures
- A25. Elimination of waiting times for outpatient appointments
- A26. Rehabilitation units
- A27. Effective components of home-based treatment
- A28. Essential components of community mental health treatment
- A30. Organizational integration of psychiatric in-patient and out-patient services
- B1. Integrated care Amiel & Pincus, 2011; Chang et al., 2014; Bradford et al., 2013; Stewart et al., 2012; Beeber et al., 2013; Aubry et al., 2015; Garand et al., 2014
- B2. Symptom or diagnostic assessment Fisher et al., 2013; Parameswaran et al., 2012
- B3. Evidence-based pharmacotherapy Fisher et al., 2013; Parameswaran et al., 2012
- B4. Evidence-based psychosocial interventions Fisher et al., 2013; Parameswaran et al., 2012, Sveinbjarnardottir et al., 2013, Bormann et al., 2014 ; Baker et al., 2014 ; Laaksonen et al., 2013; Kay-Lambin et al., 2011; Chan et al., 2011; Secades-Villa et al., 2011 ; Fortney et al., 2015 ; Tandon et al., 2014 ; Wells et al., 2013; Mueser et al., 2014 ; Williams et al., 2014; Jensen et al., 2014; Battersby et al., 2013; Rosenbaum et al., 2014; Bartels et al., 2014; Muntingh et al., 2014; Lobban et al., 2013; Morokuma et al., 2013
- B5. Substance use Fisher et al., 2013; Parameswaran et al., 2012, Cunnincham, 2013; Zhuang et al., 2014
- B6. General medical care Fisher et al., 2013; Parameswaran et al., 2012
- B7. Continuity of care Fisher et al., 2013; Parameswaran et al., 2012; Tandon et al., 2014
- B8. Access measures Fisher et al., 2013; Parameswaran et al., 2012
- B9. Efficiency measures Fisher et al., 2013; Parameswaran et al., 2012
- B10. Patient safety Fisher et al., 2013; Parameswaran et al., 2012
- B11. Forensic and legal issues Fisher et al., 2013; Parameswaran et al., 2012
- B12. Recovery measures Fisher et al., 2013; Parameswaran et al., 2012

- B13. Outcome measures Fisher et al., 2013; Parameswaran et al., 2012; Schellings et al., 2012
- B14. Cultural or ethnic issues Fisher et al., 2013; Parameswaran et al., 2012
- B15. Population-based resources Fisher et al., 2013; Parameswaran et al., 2012
- B16. Pharmacotherapy Gorgeon et al., 2012; Schellings et al., 2012
- B17. Unplanned hospital admissions Jacobs et al., 2013
- B18. Quality concepts for appropriate use and management of antipsychotics for youth Kealy et al., 2014
- B19. Quality indicator for rehabilitative care Killapsy et al., 2012
- B20. Effectiveness of psychiatric consult service Lavakumar et al., 2013
- B21. Treatment plan Schellings et al., 2012
- B22. Care program Schellings et al., 2012
- B23. Involvement in treatment of patients and relatives Schellings et al., 2012
- B24. Pharmacotherapy Schellings et al., 2012
- B25. Governance responsibility Schellings et al., 2012
- B26. Seclusion and restraint Sacks & Walton, 2014
- B27. Clinical effectiveness Thomas & Rickwood, 2013
- B28. Satisfaction Thomas & Rickwood, 2013; Xavier & De Almeida, 2013
- B29. Cost effectiveness Thomas & Rickwood, 2013
- B30. Service utilization Wood & Wand, 2014
- B31. Efficiency Wood & Wand, 2014
- B32. Needs Xavier & De Almeida, 2013
- B33. Functioning Xavier & De Almeida, 2013
- B34. Quality of life Xavier & De Almeida, 2013
- B35. Physical activity Jacquart et al., 2014; Varambally et al., 2012; Van De Ven & Delbecq, 1976; Michon et al., 2014; Bartels et al., 2014; Patterson et al., 2013; Bartels et al., 2013
- B36. Case management Tomita et al., 2014; Tomita & Herman, 2012; Herman et al., 2011; Livingston et al., 2013; Archer et al., 2012; O'Brien et al., 2012
- B37. Caregiver and family burden Xavier & De Almeida, 2013; Sveinbjarnardottir et al., 2013; Winickoff et al., 2013; Whitebird et al., 2013; Kuo et al., 2013; Montgomery et al., 2011; Sundsli et al., 2014; Proudfoot et al., 2013
- B38. Psychiatric care for members of minority groups Zhou & Gu, 2014; Malm et al., 2014; Tan & King, 2013
- B39. Recovery Cook et al., 2013; Cook et al., 2012; Cook et al., 2012; Aboutanos et al., 2011
- B40. Self-help Services Vreugdenhil et al., 2012; Wu et al., 2014; Du et al., 2014; Naeem et al., 2014; Garrido et al., 2013
- B41. Supported employment Bejerholm et al., 2015; Waghorn et al., 2014; Orrell et al., 2014; Feinberg et al., 2014; Cai et al., 2014; Hoffmann et al., 2014; Torrent et al., 2013
- B42. Community health worker workforce Kangovi et al., 2014
- B43. Psycho-education Chien & Leung, 2013; Cook et al., 2012; Arends et al., 2014; Neunhauserer et al., 2013
- B44. Skills trainings for healthcare providers Ayers & Arch, 2013; Wiles et al., 2014
- B45. First line treatment Srihari et al., 2015; Grupp-Phelan et al., 2012; Gitlin et al., 2013; Roldan-Merino et al., 2013; Varambally et al., 2012
- B46. Telemedicine Gellis et al., 2014; Bedard et al., 2014; Volpe et al., 2015
- B47. Cognitive therapy Grupp-Phelan et al., 2012; Velligan et al., 2013; Oosterbaan et al., 2013; Stanton & Reaburn, 2014
- B48. Group therapy Bolier et al., 2013

*References 1 - 114 of the systematic review, see p. 40 - 52

3.2.3 Expert Panel – May 7th, 2015

On the 7th of May, results of the literature study were discussed and complemented by the working group of the SHC. Afterwards, it was agreed to categorize all recommendations, based on the seven aims of the Health Action Plan of the WHO (see Appendix 2):

4 core objectives:

- 1) Everyone has an **equal opportunity to realize mental well-being** throughout their lifespan, particularly those who are most vulnerable or at risk;
- 2) People with mental health problems are citizens whose **human rights** are fully valued, respected and promoted;
- 3) Mental health services are **accessible, competent and affordable**, available in the community according to need; and
- 4) People are entitled to **respectful, safe and effective treatment**.

3 cross-cutting objectives:

- 5) Health systems provide **good physical and mental health care for all**;
- 6) Mental health systems work in **well-coordinated partnership** with other sectors; and
- 7) Mental health governance and delivery are driven by **good information and knowledge**.

3.2.4 Expert Panel – June 29th, 2015

On the 29th of June, remarks of the members of the Superior Health Council were discussed in order to optimize the categorization. Appendix 3 shows the remarks of the expert group of the SHC and the second categorization of recommendations, based on the four core objectives and the three cross-cutting objectives of the WHO.

3.2.5 Consultation with stakeholders and patient representatives – April 18th, 2016

Several patient associations (Vlaams Patiëntenplatform, Ups-and-downs, Uilenspiegel, Psytoyens, Similes Vlaanderen, Similes Wallonie, Similes Bruxelles and Zelfhulp.be) were invited in order to ask their opinion on the quality of mental health care in Belgium and to verify whether the advice is complete and corresponds with the expectations of the mental health service users. Representatives of the following patient associations attended the meeting: Psytoyens, Vlaams Patiëntenplatform and Zelfhulp.be. Remarks of the attending members can be found in Appendix 4.

4. CATEGORIZATION OF RECOMMENDATIONS

The final optimization of the categorization table was conducted at KU Leuven LUCAS. Figure 2 shows a final overview of 34 recommendations that were extracted from the

- A) EPA Guidance of Gaebel et al. (2012);
- B) systematic literature study;
- C) expert discussions and;
- D) consultation with stakeholders and patient representatives.

All recommendations were categorized, based on the four core objectives and the three cross-cutting objectives of the WHO. A detailed description of the recommendations is provided below Figure 2.

Figure 2. Categorization of recommendations based on the four core objectives and the three cross-cutting objectives of the WHO



4.1 Description of the 34 recommendations of the SHC for the development of quality indicators on mental health care in Belgium

4.1.1 WHO objective 1: Everyone has an equal opportunity to realize mental wellbeing throughout their lifespan, particularly those who are most vulnerable or at risk

1) Mental health care is available for members of vulnerable groups

Vulnerability is “the degree to which a population, individual or organization is unable to anticipate, cope with, resist and recover from the impacts of disasters” (WHO, 2002). Members of vulnerable groups include the economically disadvantaged, racial and ethnic minorities, elderly, homeless people, people suffering from chronic health conditions, low-income children, people with HIV/AIDS, detainees, people in preventive detention, etc. (Robert Wood Johnson Foundation, 2001). Vulnerable groups are at higher risk for mental health problems (WHO, 2002). These people are likely to be stigmatized and marginalized. This may result in isolation, which is an important risk factor for mental health problems while it generates poor self-esteem, diminished motivation and less hope for the future (WHO, 2010).

2) Mental health care is available for children

Twenty percent of the child population suffers from mental illnesses such as anxiety disorders, attention-deficit disorders, autism spectrum disorders, eating disorders, affective and mood disorders, schizophrenia, tic disorders, etc. Child mental health care is defined as “the clinical investigation of phenomenology, biologic factors, psychosocial factors, genetic factors, demographic factors, environmental factors, history, and the response to interventions of child mental health problems” (Kaplan and Saddock, 2009).

3) Mental health care is available for adolescents

Approximately one in five adolescents suffers from a mental health problem. However, most adolescents with mental health problems do not seek the services they need (Schwartz, 2009; Merikangas, 2010; Coppens et al., 2015). Societal stigma associated with mental health problems may explain why many adolescents do not seek treatment. Other barriers include 1) the poor coordination of services; 2) missed opportunities by parents, medical providers, schools, etc. to identify mental problems; and 3) shortages of providers with a specific expertise in adolescents’ mental health (National Research Council and Institute of Medicine, 2009).

Adolescents’ mental health care encompasses “the clinical investigation of phenomenology, biologic factors, psychosocial factors, genetic factors, demographic factors, environmental factors, history, and the response to interventions adolescent mental health problems” (Kaplan and Saddock, 2009).

4) Mental health care is available for adults

Adults have mental health care needs that are different from the needs of children, adolescents and elderly (American Psychological Association, 2016). A recent study in the US has shown that adults are more likely to receive mental health services than older adults and when they do, they are more likely to receive care from a mental health specialist (Karel, Gatz & Smyer, 2012). Furthermore, adults are prone to many transitions in life: entrance to the working force, career changes, divorce, buying a house, the birth of children, etc. In order to cope with these changes, research shows the benefits of using mental health services (Boyd, 2008).

5) *Mental health care is available for older adults*

Worldwide, the population is ageing rapidly. More than 20 percent of the people aged 65 and older suffer from a mental or neurological disorder. Multiple social, psychological, and biological factors determine the level of mental health of a person at any point of time (WHO, 2015).

Mental health care for elderly refers to a subspecialty of mental health care dealing with the study, prevention and treatment of mental problems in older people (Harkins, 2003). Elderly people with mental health problems is a general term used to describe “people over the age of 65 years who have emotional, behavioral or cognitive problems which interfere with their ability to function independently, which seriously affect their feelings of well-being, or which adversely affect their relationships with others. These problems have a variety of biopsychosocial determinants and corresponding methods of treatment and care. People under the age of 65 who have conditions more commonly seen in elderly people, such as early dementia, are included in this group” (Wasylenky, 1982).

6) *Cultural and ethnic diversity are taken into account*

Ethnicity is “the social group a person belongs to, and either identifies with or is identified with by others, as a result of a mix of cultural and other factors including language, diet, religion, ancestry and physical features traditionally associated with race” (Bhopal, 2004). A Belgian study shows that ethnic minorities are less likely to receive mental health services due to mistrust and fear of treatment, racism and discrimination, and differences in language and communication (Meys et al., 2014). Therefore, ethnic minorities often experience a greater disability burden from mental health problems. It is important to understand the roles of culture and society in order to design and deliver mental health services that are more responsive to the needs of ethnic minorities (US Public Health Service, 2011).

7) *Caregiver and family burden are considered*

People with mental health problems often need assistance in their daily activities (Ampalam, 2012). Belgian research shows that this places caregivers at a great risk of mental and physical problems (Vermeulen et al., 2015). The term caregiver and family burden refers to “a multidimensional response to the negative appraisal and perceived stress resulting from taking care of an ill individual. Caregiver burden threatens the physical, psychological, emotional and functional health of caregivers” (Zarit et al., 1980; Parks and Novielli, 2000; Etters et al., 2008 ; Carretero et al., 2009).

4.1.2 WHO objective 2: People with mental health problems are citizens whose human rights are fully valued, respected and promoted

8) *Patient organizations have a voice*

Involvement in mental health care means “*involvement in decision making and active participation in a range of activities (e.g. planning, evaluation, care, research, training, recruitment) starting from the expertise by experience of the person, in collaboration with and as equal partners of professionals*” (Tambuyzer, 2011). Research shows that involvement increases satisfaction and compliance and could enhance mental health outcomes (Loh et al., 2007; Murray et al., 2007). An example of involvement is to involve patient associations when developing new policies or legislation (Tambuyzer, 2011).

9) Patient rights are preserved in mental health care

The Mental Health Declaration of Human Rights articulates guiding principles of the Citizens Commission on Human Rights (Citizens Commission on Human Rights, 2016).

In Belgium, patient rights are clearly described in the law since 2002 (Wet betreffende de rechten van de patient, 2002). Under the following link, an overview of the patient rights can be found:

http://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=nl&la=N&cn=2002082245&table_name=wet

In summary, these rights include “1) to receive quality services, 2) to freely choose a health care professional, 3) to be informed on one’s health condition, 4) to freely approve interventions, 5) to learn about the insurances of the health care professional and his/her authorization to practice his/her profession, 6) to rely on a patient file and to be able to look into the file or to receive a copy, 7) to be assured of the protection of personal privacy, and 8) to be able to lodge a complaint to the authorized ombudsman’s office”.

10) Staff competencies contribute to quality mental health care and to improved quality of life of the mental health service users

The quality of mental health care largely depends on the competencies of the professional health care providers (Heisler and Bagalman, 2015). Staff competencies refer to “a cluster of related abilities, commitments, knowledge, and skills that enable a person (or an organization) to act effectively in care and cure contexts. The competencies can be generic, covering a wide range of care situations, or they can be more specialized as necessary in the treatment of specific target groups. Staff members in mental health care are acquiring their competencies in education and traineeships but also by experience.

11) Shared decision making is applied in mental health services

Shared decision making is defined as “an approach where clinicians and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options to achieve informed preferences” (Elwyn et al., 2010). Shared decision making requires information about treatment or prevention options to be shared. Furthermore, mental health service users are supported to express their preferences and views during the decision making process (Elwyn et al., 2012). In order to accomplish this, three types of conversations can be distinguished: introducing choice (choice talk), describing options (option talk) and helping mental health care users make decisions (decision talk). Advantages of involving mental health care users in shared decision making include higher satisfaction with the decision, improved mental health literacy and treatment adherence (Bleyen, Vertommen and Van Audenhove, 1998; Van Audenhove and Vertommen, 2000; Wills and Holmes Rovner, 2006; Schauer et al., 2007).

12) Peer support and self-help are available

Self-help is defined as “any act or activity in which persons with mental health problems help themselves or others to achieve their own goals. Within this definition, a user is defined as a person who currently receives mental health services, who has received them in the past, or is eligible to receive them but chooses not to” (Brown and Wituk, 2010). Studies show a positive association between the use of self-help services and satisfaction with professional mental health services (Hodges et al., 2003). Self-help services include the use of self-help manuals, personal and telephone counselling, online self-help treatments, self-help groups or peer support, etc. (UK National Health Survey, 2010).

The concept of peer support can have different meanings: it can be a process by which people offer mutual help to each other to address common problems, but it can also be defined as a non-reciprocal type of care in which persons who have successfully overcome their mental health problems offer types of social, emotional or instrumental support that is different from professional help (Solomon and Phyllis, 2004; Davidson et al., 2006).

13) Seclusion and restraint should be avoided

In 2016, the SHC published an advisory report on the use of coercive measures in mental healthcare. The SHC defines *restraint* as "the full range of measures that pertain to the use and implementation of means of restraint and protection that will result in all or part of the body being immobilised in order to secure a patient whose behaviour is believed to be dangerous or inappropriate."

Isolation means that "the patient is held against their will in their own room or in an isolated, locked room in order to prevent them from having any contact with other people. It is used to ensure the safety of the patient and/or those around them and to restrict the patient's freedom of movement if the latter no longer adheres to the normal boundaries of privacy, personal space and physical integrity" (SHC, 2016).

All patients have the right to be free from physical or mental abuse, and corporal punishment. All patients have the right to be free from restraint or seclusion, of any form, imposed as a means of coercion, discipline, convenience, or retaliation by staff.

According to SHC advisory report no. 9193 (2016), "only a situation of serious danger caused by a patient who is unable to express their will, with all possible alternative, voluntary measures having either failed or being impracticable (last resort), may justify the use of coercive measures. Coercive measures are never part of standard psychiatric care. They are never to be used for punitive purposes. In the exceptional event of a coercive measure being resorted to, the least restrictive measure should always be chosen and used for the shortest possible amount of time".

4.1.3 WHO objective 3: Mental health services are accessible, competent and affordable, available in the community according to need

14) Primary health care is available and accessible

Mental health problems often lead to a diminished wellbeing and a reduced quality of life. It is estimated that 60% of the people with a mental health problem do not receive a treatment (NIMH, 2005; Vanclooster et al., 2013). Access to good primary care for mental health problems should be provided by developing primary care services with the capacity to detect and treat mental health problems, and create centers of competence and promote networks in each region; ensure access to specialized mental health care services for those in need" (Gaebel et al., 2012).

15) Specialized mental health care is available and accessible

Specialized mental health care is delivered by professionals, including psychiatrists, psychologists, psychiatric nurses and social workers as well as specialized hospitals, inpatient psychiatric units of general hospitals and outpatient mental health programs (Buhgra and Morgan, 2010). Specialized mental health service providers are trained to deal adequately with mental health problems. Furthermore, they have more experience and understanding of people with serious mental health problems and provide personalized care.

Specialized mental health services organized as part of general medical services provoke less stigmatization than separate settings (Center for Mental Health Services, 1996).

The effectiveness of specialized mental health units has been demonstrated in numerous populations (e.g. elderly, children, prisoners, veterans, etc.) (Wilkinson, 2000).

16) Mental health care workforce is available and accessible

Approximately a quarter of the global population suffers from mental health problems (WHO, 2001). However, worldwide there is a shortage of mental health workers (e.g. psychiatrists, psychiatric nurses, psychologists and social workers). This shortage is one of the main barriers to providing treatment and care in low- and middle-income countries (WHO, 2011).

Sufficient and competent workforce should be created in order to ensure an equitable distribution and to develop specialist training streams (Gaebel et al., 2012).

17) Mental health care is efficient, cost-effective and affordable

Efficiency refers to “the relationship between a specific product or output of the health care system, and the resources or inputs used to create the product. Achieving efficiency involves maximizing output for a given cost, or, minimizing cost for a given output” (McGlynn et al., 2009). An assessment of efficiency thus relates the output of the health care system to its costs. Cost effectiveness stands for “an economic study design in which consequences of different interventions are measured using a single outcome, usually in ‘natural’ units” (UK National Institute for Health and Clinical Excellence, 2008). Due to limited financial resources and the increased costs for residential mental health services, attention for the efficiency of mental health services is growing (Lagomasino, 2010).

Finally, it is important that mental health care is affordable for everyone. In many countries, the high cost of mental health care treatments poses significant financial barriers. In addition, the use of mental health services is not covered by insurance policies in many countries, making mental health care unaffordable for many people. The WHO also reports that 25% of all countries do not provide disability benefits to patients with mental disorders, and one third of the world’s population lives in countries that allocate less than 1% of their health budget to mental health (WHO, 2012). Furthermore, 31% of countries do not have a specific public budget for mental health (Saxena et al., 2007).

18) Technological equipment is available for assessment and treatment

Nowadays, e-mental health is regarded as a promising approach for the delivery of effective and efficient mental healthcare through the use of smart information and communication technology (ICT) (Riper et al., 2010). Today, several e-mental health applications exist. These are oriented towards information provision; screening, assessment and monitoring; treatment; and communication (Lal and Adair, 2014). Research shows that using ICT as a supplement to common therapies for mental health problems can improve the accessibility, effectiveness and affordability of mental health services (Arensman et al., 2015; Lal and Adair, 2014). For example, computerized Cognitive Behavioral Therapy (cCBT) is effective to treat persons with psychiatric disorders, can be provided to a large number of people at the same time requiring no waiting times, and is cost-effective (Anderson et al., 2014; NICE, 2009). Live videoconferencing technology is a recent development within e-mental health and is used to facilitate collaboration among healthcare professionals of different settings by means of videoconferencing (Shore et al., 2013; Chun-Do et al., 2012). It has been shown to be equally effective or even more effective than practice-based collaborative care (Fortney et al., 2007). Currently, the Mastermind project aims to stimulate the use of both cCBT and videoconferencing in routine mental healthcare across Europe (Vis et al., 2015).

Gaebel et al. (2012) also mention the importance of providing evidence-based technological diagnostic and therapeutic equipment and services within 72 hours (Gaebel et al., 2012). This recommendation is based on the clinical experience that a thorough diagnostic examination of a person with mental health problems requires a range of technical investigations (e.g. neuroimaging, electroencephalography, drug monitoring, somatic counselling services).

4.1.4 WHO objective 4: People are entitled to respectful, safe and effective treatments and interventions

19) Clinical effectiveness of mental health treatments is pursued

“A clinically effective treatment is characterized by sustained adherence by the patient to the prescribed treatment regimen; long-term reduction in symptoms or cure of the disease, treatment burden (side effects), and impact of the disease on the patient and members of his or her social circle; and long-term increase in healthy behaviors and restoration of wellness” (Lieberman et al., 2002). However, since the nineties, the recovery movement in mental health care is growing (Anthony, 1993; Leamy et al., 2011). For people with severe mental health problems, a real cure is not always possible. Being involved in a process of recovery is therefore a realistic option. Anthony (1993) defines recovery as ‘a deeply personal, unique process of changing one’s attitudes, values, feelings, goals, skills and/or roles. It is a way of living a satisfying, hopeful, and contributing life even with limitations caused by the illness. Recovery involves the development of new meaning and purpose in one’s life as one grows beyond the catastrophic effects of mental illness.’ This process can be stimulated, supported or hindered by the mental health professionals and services. The development of recovery oriented practice must be considered as a real part of effective mental health treatment in a community oriented mental health care system.

20) Specific treatments are provided to specific target groups

In their description of community mental health systems in a balanced care system, Thornicroft and Tansella (2003, p 13) describe the need for specialized treatment programs for specific target groups such as: eating disorders, dual diagnosis (for example: psychosis and substance abuse), treatment-resistant affective and psychotic disorders, other specific disorders such as post-traumatic stress disorder, mental health problems specific to incarcerated persons, mentally ill mothers and their babies. According to the authors, the decision to develop such specialized services depends upon the local needs and presence of other services, identified gaps and finances.

21) Mental health promotion, prevention and risk assessment are largely available

In 2011, Huber et al. defined health as “the ability to adapt and to self-manage, in the face of social, physical and emotional challenges” (Huber et al., 2011). The prevention of mental health problems aims at “reducing incidence, prevalence, recurrence of mental health problems, time spent with symptoms, or the risk condition for a mental illness, preventing or delaying recurrences and also decreasing the impact of illness in the affected person, their families and the society” (Mrazek and Haggerty, 1994). While prevention concerns the avoidance of an illness, promotion is about improving well-being and enhancing the quality of life (WHO, 2002). Promotion is defined by the WHO (1986) as “the process of enabling people to increase control over and to improve their health”. Studies show that combining prevention and promotion programs in mental health care reduces stigma, increases cost-effectiveness and improves outcomes (WHO, 2002).

“Risk assessment involves a professional duty of care on the part of those working in mental health services towards the individual service user, where health needs are balanced with issues of personal and public safety. Health professionals must balance the promotion of client decision making and autonomy with the demands of personal, professional and public accountability. Managing risk should not just focus on eliminating risk, it is about providing a process for ensuring the potential benefits identified are increased and the likelihood of harms occurring as a result of taking risks are reduced” (Titterton, 2005). Risk assessment is of increasing importance when dealing with the prevention of criminal behavior (McSherry, 2004).

In the forensic context, psychiatrists and psychologists could be invoked to evaluate whether a person will be violent in the future. Also, mental health professionals may be asked to report whether an accused person may reoffend. This, for the purpose of bail applications, sentencing and preventive detention, the disposition of offenders with mental health problems, and parole (McSherry, 2004). In a recovery oriented community mental health care, the perspective of the user in a process of risk assessment comes more on the foreground. Boardman and Roberts (2015) describe processes of recovery-orientated risk assessment and safety planning, based on the concept of shared decision making and the joint construction of personal safety plans. They state this approach respects service users' needs while recognizing everyone's responsibilities – service users, professionals, family, and friends – to behave in a way which upholds personal and public safety.

22) Psychotherapy is available

Psychotherapy is “a practice designed varyingly to provide symptom relief and personality change, reduce future symptomatic episodes, enhance quality of life, promote adaptive functioning in work/school and relationships, increase the likelihood of making healthy life choices, and offer other benefits established by the collaboration between client/patient and psychologist” (American Group Psychotherapy Association, 2007). Approaches to psychotherapy fall into five broad categories: 1) Psychoanalysis and psychodynamic therapies, 2) Behaviour therapy, 3) Cognitive therapy, 4) Humanistic therapy, and 5) Integrative or holistic therapy (American Psychology Association, 2016). Types of psychotherapies are family therapy, couples therapy, individual therapy and group therapy (American Group Psychotherapy Association, 2007). According to mental health service users, psychotherapy enhances their ability to understand themselves, it develops skills in order to improve relationships, it helps to overcome certain problems (eating disorder, bipolar disorder, etc.) and indicates how a solution to problems can be obtained (Cooper, 2008).

23) Case management services are available for people with severe mental problems

Case management is “a collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual's and family's comprehensive health needs through communication and available resources to promote quality, cost-effective outcomes” (Case Management Society of America, 2010). The effectiveness and implementation of case management projects depends on eight domains or requirements: 1) An appropriate workforce (e.g. skills of professionals, turnover of professionals, etc.); 2) A tailored service design and organization (e.g. shared decision process); 3) Self-management and support (e.g. Addressing concerns of beneficiaries and informal caregivers); 4) Community linkages (e.g. partnership with community organizations); 5) Appropriate financial incentives (e.g. incentives for GP participation); 6) Processes in support of the quality of care (e.g. monitoring of the care plan); 7) Knowledge management and decision support (e.g. use of results of research); and 8) Clinical information tools (e.g. registry). Case management stimulates the quality of life and the autonomy of the mental health service user (Ontario government, 2005).

24) Standardized outcome measures are used routinely in mental health services

Shellings et al. (2012) defined standardized outcome measurement as “periodically measuring treatment outcomes by means of a standardized method and using the results for the revision of the individual treatment plan and for the purpose of the aggregation of the treatment results”. By means of outcome measures, mental health service providers can identify what has improved for the mental health service user and which areas still require treatment.

Outcome measures can highlight changes in an individual mental health service user over time, and they can also be used at a broader level to reflect on the effectiveness of clinical practice, a team, a service or a sector. Studies show that outcome measures improve the quality of mental health services (Department of Human Services, 2006).

25) Safety is assured as a priority

Patient safety is defined by Emmanuel et al. (2008) as “A discipline in the health-care sector that applies safety science methods towards the goal of achieving a trustworthy system of health-care delivery. Patient safety is also an attribute of health-care systems; it minimizes the incidence and impact of, and maximizes recovery from adverse events”.

Operational policies should be implemented in mental health facilities in order to ascertain patient and staff safety (Gaebel et al., 2012). Patient safety depends on the following factors: 1) patient factors (e.g. disruptive behavior); 2) provider factors (e.g. poor communication); organizational factors (e.g. community resources, staffing shortages, etc.); and 4) physical environment (e.g. poor physical design) (BC Mental health and addiction services, 2008).

Furthermore, for persons with mental health problems, psychotropic medications are an important mode of treatment (Brickel et al., 2009). Medication can help some people to lead the lives they want to lead. Abuse of medication can cause additional problems (UK Mental Health Foundation, 2016). The decision whether or not to use medication should be taken by the multi-disciplinary team and it is good practice to discuss this in shared decision with the patient and to involve the family with regard to such decisions. Mental health care providers should also explain the risks of taking medication (Latha and Phil, 2010). Follow-up appointments for medication monitoring are needed to evaluate the effectiveness of the treatment and the possible side-effects of the medication (US Mental Health Division of Student Affairs, 2015). Indeed, most medication has side-effects and problems may occur when people stop taking the medication.

4.1.5 WHO objective 5: Health systems provide good physical and mental health care for all

26) Multidisciplinary mental health care is stimulated

Mitchel et al. (2008) state that mental health services are multidisciplinary “when professionals from a range of disciplines work together to deliver comprehensive care that addresses as many of the mental health care users’ needs as possible. This can be delivered by a range of professionals functioning as a team under one organisational umbrella or by professionals from a range of organisations, including private practice, brought together as a unique team. As a patient’s condition changes over time, the composition of the team may change to reflect the changing clinical and psychosocial needs of the patient”. The WHO (2013) advocates that people with mental problems should be treated by multidisciplinary health professionals who are able to address their biomedical, psychological and socio-economical needs. This holistic approach leads to improved diagnosis and coordination, improved outcomes for people with mental health problems and their families, increased cost-effectiveness, etc. (Greenberg, 2011).

27) Physical illness and access to general and specialized medical services is monitored

People with severe mental health problems are likely to have physical co-morbidities that are not recognized and/or treated (Mitchell et al., 2009). Under-recognition of physical problems in people with mental health problems is often due to ‘diagnostic overshadowing’ which is defined as “a process where health professionals wrongly presume that present physical symptoms are a consequence of their patient’s mental illness. As a result, the patient with mental illness gets inadequate diagnosis or treatment” (Jones et al., 2008).

Recent guidelines on healthcare for people with mental health problems include standards for physical healthcare. These standards should be routinely applied. The monitoring of physical conditions and access to general and specialized medical services would increase the likelihood of early detection of medical conditions (Gaebel et al., 2012; Golomb et al., 2000).

4.1.6 WHO objective 6: Mental health systems work in well-coordinated partnership with other sectors

28) Integrated care and continuity of mental health care are realized

The WHO defines integrated care as “a concept bringing together inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation and mental health promotion. Integration is a means to improve services in relation to access, quality, user satisfaction and efficiency” (WHO, 2002). Integrated models of cooperative community care should be developed and implemented in order to provide scientific evidence-based services with joint budgetary responsibility of participating service providers (Gaebel et al. 2012). Furthermore, mental health services should be integrated organizationally in general hospitals with mental health out-patient facilities including out-patient facilities in mental health hospitals, private practices and other ambulatory mental health services (Gaebel et al., 2012). ‘Continuity of care’ is closely related to integrated care. The first component is ‘provider continuity’, which refers to the importance of a trusting relationship with the mental health care professional. The second component refers to ‘the continuity across the secondary-primary care interface’, which stands for discharge planning from specialist to generalist care. The last component is ‘continuity of information through shared records’ (Gröne and Garcia-Barbero, 2002). Gaebel et al. (2012) emphasize the use of mental health reporting systems in order to facilitate the continuity of care. By means of mental health reporting systems, the epidemiology of mental health problems as well as data on the number of mental health care facilities, their regional distribution, frequency and type of use, staffing and mental health research can be monitored. Furthermore, the use of mental health case registers (PCRs) should be stimulated. PCRs are described as “patient-centered longitudinal records of contacts with a defined set of mental health care services originating from a defined population” (Perera et al., 2009). Mental health case registers are efficient and cost-effective data-sources that are increasingly used to investigate questions about health service delivery and to evaluate care programmes and patterns of care, as well as the validity of diagnostic tools and therapies (Perera et al., 2009). In this context, the multinational consortium interRAI, an international collaborative network to improve the quality of life of vulnerable persons through a seamless comprehensive assessment system, developed the interRAI Mental Health instruments (interRAI Mental Health, interRAI Community Mental Health, interRAI Child and Youth Mental Health) (interrai.org, 2016). These interRAI instruments are part of a suite of assessment systems available for almost every health sector.

Outcomes of the interRAI instruments are client assessment protocols (CAPs), Scales and Quality indicators (QIs). The interRAI mental Health and other interRAI assessments include applications for care planning, case-mix, outcomes, and quality measurement (Hirdes et al., 2000). Research shows the interRAI Mental Health to be a feasible assessment instrument for deriving mental health quality indicators (Perlman, 2013). Using these instruments enhances communication between health settings and contributes to a continuity of care for the individual as they receive services across sectors (Grey et al., 2009).

29) The transition from child and adolescent to adult mental health services is well-coordinated

Health care transition has been described as “a purposeful, planned process that addresses the medical, psychosocial and educational/vocational needs of adolescents and young adults with chronic physical and medical conditions as they move from child-centred to adult-oriented healthcare systems” (Blum et al., 1993). Several instances state the importance of supporting and facilitating the transition of adolescents with mental health problems into adulthood (American Academy of Pediatrics, 2002). Belgian research shows that transition planning should be a standard part of providing care for all youth and young adults since a well-timed, well-planned, and well-executed transition from child- to adult-oriented health care between the ages of 18 and 21 enables youth to optimize their ability to assume adult roles and activities (Coppens et al., 2015).

4.1.7 WHO objective 7: Mental health governance and delivery are driven by good information and knowledge

30) Continuing education opportunities are available for mental health professionals

Continuing education refers to “lectures, courses, seminars, webinars, or any other similar type of educational program designed to educate an individual and give him or her further skills or knowledge to be applied in his or her line of work. These programs are intended to educate persons on new advancements, or to build upon a person’s expertise in a given field. These may be optional for some trades, but in other circumstances can be required to maintain status, certification, or licensure” (Business Directory, 2015). It is important for mental health care professionals to invest in educational programs in order to obtain up to date knowledge and skills (WHO, 2004). Coordinating bodies, professional federations and academic committees should organize and oversee public education and should provide awareness campaigns on mental health and mental health problems (Gaebel et al. 2012).

31) The government monitors and evaluates the quality of mental health services

Monitoring refers to “routine tracking of a plan” and evaluation refers to “a systematic means of appraisal to assess the value, worth or effectiveness of the policy or plan” (WHO 2007). Monitoring as well as evaluation are important for the mental health policy development and for restructuring processes. Firstly, the process of developing the policy should be evaluated. Furthermore, the content of the policy should be evaluated. Quantitative and qualitative data, and sometimes both, are important for evaluating policies and plans. The plan should be monitored to ensure that its output is realized. Finally, at the end of a policy period it is important to assess whether the objectives have been realized (WHO 2007). The government body in charge should also be informed about the quality of mental health care and should - if necessary - adjust the policy (Schellings et al., 2012).

32) Sufficient population-based services are available for mental health care

The government has good data on the prevalence of mental health problems and mental health needs in the population as well as administrative data on the service use, processes and outcomes of users of mental health care and the cost of care. Good data means that the use of care in different settings by the same users can be calculated and that follow up over the time is possible. At the service level, data need to permit benchmarking between comparable services in the country and internationally. A Belgian study shows that particular attention is needed for the most vulnerable groups who very often do not have access to the services they need: the treatment gap (Vanclooster et al., 2013).

33) Governments are responsible for the funding and provision of public mental health services

Worldwide, mental health services as well as mental health research have been chronically underfunded (WHO, 2011). In Belgium, the mental healthcare budget amounts to 6% of the total care budget (Meys et al., 2014). Stigma is one of the main reasons of the underfunding. Despite the costs, people believe that mental health concerns are not on par with concerns relevant to “physical” health. The lack of funding results in many people who don’t have access to mental health services. Therefore, the WHO is calling on governments to increase the budget for services for people suffering from mental, neurological and substance use disorders (WHO, 2011). Furthermore, Thornicroft and Patel (2014) plead for the inclusion of mental health among the new millennium development goals of the United Nations. Mental and social care resources should be provided in parity with resources for services addressing physical health (Thornicroft and Patel, 2014). Thornicroft and Patel (2014) also suggest the inclusion of two key indicators: service coverage for severe mental disorders will have increased by 20% by 2020 and the rate of suicide will be reduced by 10% by 2020 (Thornicroft and Patel, 2014).

34) Mental health facilities should be future oriented

Future orientation is defined as “the organizational capability to identify and interpret changes in the environment and trigger adequate responses to ensure long-term survival and success” (Future orientation, 2010). In this regard, attention to new target groups is recommended. This means, for example, that more attention is given to the mental health needs of the growing group of the elderly in our society and that relevant services and interventions for this group are developed. The relation between mental health problems and participation in employment, education and free-time is another topic that requires more attention, as well as the mental health problems of the growing group of migrants.

5. CONCLUSION

Every year, mental health problems affect more than a third of the European population. The new European Mental Health Action Plan of the World Health Organization (WHO) requests member states to develop a common set of quality indicators for mental health care.

In this advice, the working group of the Superior Health Council aimed to provide an overview of recommendations on quality mental health care that can constitute the basis for the development of quality indicators on mental health care in Belgium. A systematic literature study was conducted for the years 2011 to 2015 to update the previous work of Gaebel et al. (2012). Recommendations that were retrieved from the systematic literature search were discussed and completed by the experts of the SHC and by stakeholder organizations. Finally, recommendations were categorized, based on the seven aims of the Mental Health Action Plan of the WHO. In total, this process resulted in 34 recommendations of the SHC.

As the literature search was conducted, based on previous work of Gaebel et al., most studies that were retrieved from literature were conducted in countries other than Belgium. This means that the link with specific Belgian characteristics of the mental health sector is a point of discussion for future expert groups. Indeed, with its worldwide highest number of psychiatric hospital beds after Japan, limited resources for community mental health care, for mental health promotion and prevention and a strong disintegration over different governments (federal and regional) the situation of Belgium is relatively unique and not easily comparable with other countries. In this regard, we refer to some of these characteristics that can be important for the prioritization of the quality indicators (QI) that could be particularly relevant for Belgium.

Since 2010, the Belgian mental health care sector is in a transformation movement in the direction of more integrated care by the development of networks and in the direction of deinstitutionalization by reducing psychiatric hospital beds and development of mobile teams. It is important to monitor these innovations with specific attention to the treatment gap and accessibility, burden on the family and on the community as well as to the evolutions towards recovery oriented practices.

Special attention could be given to adolescent mental health care. The results of the ADOCARE study can be inspiring for the development of quality indicators that mark an evolution in the direction of better integration and transition of youngsters, the development of youth friendly services and mental health promotion in schools.

Another issue of importance concerns the participation of persons with mental health problems. Participation in employment appears to be a challenge for the future for many persons with mental health problems in Belgium (OECD, 2013). Drake and colleagues (2012) argue that a larger implementation of IPS (individual placement and support) could contribute positively to many of the negative aspects of burden on society of mental illness.

The evidence-based recommendations that resulted from this study can be used as a general framework for the selection and development of structure and process quality indicators for mental health care in Belgium.

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7. COMPOSITION OF THE WORKING GROUP

The composition of the Committee and that of the Board as well as the list of experts appointed by Royal Decree are available on the following website: [composition and mode of operation](#).

All experts joined the working group *in a private capacity*. Their general declarations of interests as well as those of the members of the Committee and the Board can be viewed on the SHC website (site: [conflicts of interest](#)).

The following experts were involved in drawing up and endorsing this advisory report. The working group was chaired by **Chantal VAN AUDENHOVE**; the scientific secretary was Sylvie GERARD.

BRUFFAERTS Ronny	Psychology	KU Leuven
CAMUT Stéphane	Occupational Therapy	Haute Ecole Libre de Bruxelles Ilya Prigogine Collège d'Ergothérapie de Bruxelles
CASSELMAN Joris	Psychiatry	KU Leuven
CROMBEZ Geert	criminology	
HERMANS Kirsten	Health psychology	UGent
MERTENS Serge	Psychology	KU Leuven
SEVENANTS Aline	Psychiatry	H.N.P. Saint-Martin
VAN AUDENHOVE Chantal	Psychology	KU Leuven
		KU Leuven
VAN DEN AMEELE Hans	Psychiatry	AZ Sint-Jan Brugge-Oostende
		European Research Council
VANDENDORPE Florence	Sociology, psychology	Executive Agency (ERCEA)

The following experts were heard but did not take part in endorsing the advisory report:

ANDRIEN Hervé	Psytoyens
DE COEN Marlien	Vlaamse Vereniging voor Geestelijke Gezondheid
DEMESMAEKER Marc	CRESAM
GIELEN Peter	Zelfhulp.be
HOYOUX Stéphane	CRESAM
TAMBUYZER Else	Vlaams Patiëntenplatform
VAN HOUDT Sabine	Vlaams Patiëntenplatform
WEBER Carmen	Psytoyens

The following administrations were heard:

DE BOCK Paul	FPS Public Health
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8 APPENDICES

Appendix 1. Recommendations that were retrieved from the literature

This appendix shows an overview of recommendations and/or indicators that emerged from the literature (references see main text). The first 30 recommendations were formulated in the article of Gaebel et al. (2012). The following 48 recommendations and/or indicators emerged from the present literature search. Every recommendation /indicator is accompanied by a description which is either an explanation of the recommendation, a possible operationalization or a possible way to measure this recommendation and/or indicator.

EPA guidance on the quality of mental health services

Gaebel W, Becker T, Janssen B, Munk-Jorgensen P, Musalek M, Rössler W, Sommerlad K, Tansella M, Thornicroft G, Zielasek J. (2012)

STRUCTURE RECOMMENDATIONS

QIs - MACRO

A1. Mental health education

Number of coordination bodies per 100.000 population

A2. Mental health reporting and monitoring

Presence of mental health information system providing annually updated information of the number of mental healthcare facilities, their regional distribution, their staffing and use

QI's - MESO

A3. Structural requirements to ascertain patient's dignity and basic needs

Number of mental healthcare facilities following the ITHACA toolkit recommendations divided by the number of mental healthcare facilities not following the ITHACA toolkit recommendations

A4. Multi-professionality of services

Number of multi-professional teams per 100.000 people with mental disorders

A5. Access to good primary healthcare and specialized psychiatric care

Number of primary mental health services per 100.000 people with mental disorders. Number of competence centers for psychiatry per 100.000 people with mental disorders

A6. Availability of technological equipment for assessment and treatment

Number of in-and outpatient services which provide access to major evidence-based diagnostic and therapeutic technologies within 72 hours for non-acute cases and immediate access for acute cases divided by the number of in- and out-patient services without such a provision

EPA guidance on the quality of mental health services

Gaebel W, Becker T, Janssen B, Munk-Jorgensen P, Musalek M, Rössler W, Sommerlad K, Tansella M, Thornicroft G, Zielasek J. (2012)

A7. Psychiatric workforce

Number of psychiatrists in out-patient psychiatric services per 100.000 people with mental disorders

Number of psychiatrists in hospitals per 100.000 people with mental disorders

A8. Catchment areas

Number of people living in areas which catchment areas are defined divided by the number of people living in areas in which no catchment areas were defined

A9. Day hospitals for people with acute mental disorders

Number of 'places' in day hospital services for people with acute mental disorders per 100.000 people with acute mental disorders

A10. Psychiatric care for members of minority groups

Number of linguistic, ethnic and religious minority groups for which specialized mental healthcare services are available divided by the number of linguistic, ethnic and religious minority groups for which specialized mental healthcare services are not available

QIs MICRO

A11. Essential in-patient services structural requirements

Number of psychiatric hospitals/in-patient psychiatric services fulfilling essential structural requirements

A12. Essential out-patient services structural requirements

Number of outpatient services fulfilling the essential structural requirements

A13. Essential rehabilitation service structural requirements

Number of rehabilitation wards fulfilling the structural requirements

A14. Community mental health teams for people with severe mental illnesses

Number of community mental health teams for people with severe mental illnesses or personality disorders per 100.000 people with severe mental illness or personality disorders

EPA guidance on the quality of mental health services

Gaebel W, Becker T, Janssen B, Munk-Jorgensen P, Musalek M, Rössler W, Sommerlad K, Tansella M, Thornicroft G, Zielasek J. (2012)

A15. Intensive Case Management

Number of severely ill persons in intensive case management divided by the total number of severely ill persons

A16. Integrated Care Models

Number of integrated models of cooperative community care providing evidence based services with joint budgetary responsibility of participating service providers divided by the sum of the numbers of psychiatric hospitals, psychiatric departments in general hospitals, out-patient mental healthcare services and private psychiatric practices

PROCESS RECOMMENDATIONS

QIs MESO

A17. Evidence-based medicine

Numbers of mental health services with implemented standard operating procedures ascertaining obedience to the rules of evidence-based medicine divided by the number of mental health services without such implemented standard operating procedures

QIs MICRO

A18. Safety issues

Number of mental health services with standard operational policies to ascertain patient and staff safety divided by the number of those without such standard operational policies

A19. Informed consent

Number of patients in all mental health services treated with informed consent divided by the number of patients in all mental health services without informed consent

A20. Monitoring of physical illness and access to general and specialized medical services

Number of patients with mental illness monitoring divided by the total number of patients with mental illness

EPA guidance on the quality of mental health services

Gaebel W, Becker T, Janssen B, Munk-Jorgensen P, Musalek M, Rössler W, Sommerlad K, Tansella M, Thornicroft G, Zielasek J. (2012)

A21. Hospitals/in-patient services – basic requirements

Number of patients admitted to mental hospitals and other in-patient services

A22. Hospitals/in-patient services – admission procedures

Number of patients with mental illness admitted to a psychiatric ward or other in-patient psychiatric service with psychiatric and medical assessment within 24 hours of admission divided by the number of admitted patients with mental illness

A23. Hospitals/in-patient services: access to wards to special services

Number of mental hospital and other in-patient units with access to psychology, occupational therapy, social work, administration and pharmacy, divided by the total number of mental hospital wards

A24. Hospitals/in-patient services – detained patients procedures

Number of detained patients with written information on their rights within 12 hours divided by the number of detained patients without such information

A25. Elimination of waiting times for out-patient appointments

Number of patients with a waiting time of 0 days, divided by the number of patients with a waiting time > 0 days

A26. Rehabilitation units

Number of psychiatric rehabilitation wards

A27. Effective components of home-based treatment

Number of mental healthcare facilities providing home treatment and follow a plan for regularly visiting at home

EPA guidance on the quality of mental health services

Gaebel W, Becker T, Janssen B, Munk-Jorgensen P, Musalek M, Rössler W, Sommerlad K, Tansella M, Thornicroft G, Zielasek J. (2012)

A28. Essential components of community mental health treatment

Number of persons in community healthcare who receive all of the following: multidisciplinary assessment, regular team reviews, monitoring and prescribing medication, psychological interventions and whose management plan has a focus on the continuity of care, divided by the number of all persons in community mental healthcare

A29. Active components of intensive case management

A30. Organizational integration of psychiatric in-patient and out-patient services

Number of mental hospital organizations integrated with mental health out-patient facilities divided by the total number of mental hospitals

A. Literature search

B.

B1. Integrated care Amiel & Pincus, 2011; Chang et al., 2014; Bradford et al., 2013; Stewart et al., 2012; Beeber et al., 2013; Aubry et al., 2015; Garand et al., 2014

Quality improvement through the provision of psychiatric care in medical settings, medical care in psychiatric settings or fully integrated care through broadly trained providers, care coordinated services (inpatient MH services), integrated care for people with schizophrenia, a combination of generalist and specialist nurses

B2. Symptom or diagnostic assessment Fisher et al., 2013; Parameswaran et al., 2012

Substance abuse, suicide risk, bipolar or depressive disorder, schizophrenia or other psychotic illness, anxiety disorder, etc.

B3. Evidence-based pharmacotherapy Fisher et al., 2013; Parameswaran et al., 2012

Selection of medications, medication adherence, polypharmacy, adequate medication dosage, occurrence of side effects, monitoring, medication reconciliation, etc.

B4. Evidence-based psychosocial interventions Fisher et al., 2013; Parameswaran et al., 2012,

Sveinbjarnardottir et al., 2013, Bormann et al., 2014 ; Baker et al., 2014 ; Laaksonen et al., 2013; Kay-Lambin et al., 2011; Chan et al., 2011; Secades-Villa et al., 2011 ; Fortney et al., 2015 ; Tandon et al., 2014 ; Wells et al., 2013; Mueser et al., 2014 ; Williams et al., 2014; Jensen et al., 2014; Battersby et al., 2013; Rosenbaum et al., 2014; Bartels et al., 2014; Muntingh et al., 2014; Lobban et al., 2013; Morokuma et al., 2013

Assertive community treatment, early intervention programs, mental health screening, psychotherapy, case management, employment support or assistance, integrated dual diagnosis treatment, family psycho-education, cognitive behavior therapy, collaborative care, etc.

B5. Substance use Fisher et al., 2013; Parameswaran et al., 2012, Cunnincham, 2013; Zhuang et al., 2014

Engagement in care, quantity or frequency of use, blood urine monitoring, alcohol health center (AHC), better drug treatment enrollment, etc.

B6. General medical care Fisher et al., 2013; Parameswaran et al., 2012

Preventive medical care or screening, chronic illness medical care, etc.

B7. Continuity of care Fisher et al., 2013; Parameswaran et al., 2012; Tandon et al., 2014

Inpatient readmission, outpatient follow-up after inpatient discharge, coordination without mental health, coordination with primary care, inpatient discharge planning, coordination with substance abuse treatment, electronic personal health records, etc.

B8. Access measures Fisher et al., 2013; Parameswaran et al., 2012

Access to emergency mental health, access to and wait times for outpatient services, access to primary care, access to and wait times for substance abuse treatment, etc.

B9. Efficiency measures Fisher et al., 2013; Parameswaran et al., 2012

Duration of hospitalization, utilization of outpatient services, utilization of substance abuse treatment, etc.

B10. Patient safety Fisher et al., 2013; Parameswaran et al., 2012

Use of seclusion or restraints, medication errors or adverse events, falls or injuries, non-medication adverse events, etc.

B11. Forensic or legal issues Fisher et al., 2013; Parameswaran et al., 2012

Involuntary or compulsory hospitalization, criminal justice encounters, involuntary or compulsory community treatment, etc.

B12. Recovery measures Fisher et al., 2013; Parameswaran et al., 2012

Access to peer or consumer services, shared decision making, recovery, etc

B13. Outcome measures Fisher et al., 2013; Parameswaran et al., 2012; Schellings et al., 2012

Functioning, client or family satisfaction with care, change in reported symptoms, general health status, mortality, employment or income, client or family self-assessment, housing, etc. Treatment outcome is periodically measured by means of a standardized method and results are used for the revision of the individual treatment plan and for the purpose of the aggregation of treatment results.

B14. Cultural or ethnic issues Fisher et al., 2013; Parameswaran et al., 2012

Racial or ethnic disparities in care, training cultural competency, access to culturally specific care, etc.

B15. Population-based resources Fisher et al., 2013; Parameswaran et al., 2012

Total expenditure for mental health services for the population, mental health workforce (full-time equivalents) for the population, etc.

B16. Pharmacotherapy Gorgeon et al., 2012; Schellings et al., 2012

Medication safety, pharmacotherapy (based on medication guidelines), etc.

B17. Unplanned hospital admissions Jacobs et al., 2013

Structured reviews within 15 months, documented comprehensive care plan, monitoring of blood levels, monitoring lithium patients' thyroid and kidney function, etc.

B18. Quality concepts for appropriate use and management of antipsychotics for youth Kealy et al., 2014

Use in very young children, multiple concurrent antipsychotics, higher-than-recommended doses, use without a primary indication, access to psychosocial interventions, metabolic screening, follow-up visits with a prescriber, etc.

B19. Quality indicator for rehabilitative care Killapsy et al., 2012

Ratings of autonomy and experiences of care

B20. Effectiveness of psychiatric consult service Lavakumar et al., 2013

Consultee satisfaction is perceived as a useful global measure of the effectiveness of a psychiatric consult service

B21. Treatment plan Schellings et al., 2012

An elaborate plan for the individual, including information about psychiatric diagnosis, informed consent, goals of treatment, therapeutic interventions

B22. Care program Schellings et al., 2012

A general program in which a comprehensive view on the treatment of patients is presented

B23. Involvement in treatment of patients and relatives Schellings et al., 2012

The treatment plan is determined in consultation with the patient and his or her relatives.

B24. Pharmacotherapy Schellings et al., 2012

Pharmacotherapy is based on medication guidelines.

B25. Governance responsibility Schellings et al., 2012

The governing body is informed about the quality of care and will adjust the policy.

B26. Seclusion and restraint Sacks & Walton, 2014

Restraint events, restraint hours, repeated use of involuntary restraint, seclusion lasting less than 1 hour, seclusion lasting more than 1 hour but less than 6 hours, and 1 or more seclusion events, etc.

B27. Clinical effectiveness Thomas & Rickwood, 2013

Clinical improvements at discharge from acute residential units that are similar to or greater than the clinical improvements of inpatients at discharge.
Subsequent mental health service use.

B28. Satisfaction Thomas & Rickwood, 2013, Xavier & De Almeida, 2013

Satisfaction with mental healthcare / satisfaction with the services.

B29. Cost effectiveness Thomas & Rickwood, 2013

Cost per degree of improvement.

B30. Service utilization Wood & Wand, 2014

Annual referral rates.

B31. Efficiency Wood & Wand, 2014

Response timeliness to hospital staff referrals.

B32. Needs Xavier & De Almeida, 2013

The service or procedure is what the patient actually needs.

B33. Functioning Xavier & De Almeida, 2013

Independent functioning in the community.

B34. Quality of life Xavier & De Almeida, 2013

Quality of life of the patient.

B35. Physical activity Jacquart et al., 2014; Varambally et al., 2012; Van De Ven & Delbecq, 1976; Michon et al., 2014; Bartels et al., 2014; Patterson et al., 2013 ; Bartels et al., 2013

Exercise for people with a depression, yoga as a complementary intervention in the management of schizophrenia, community based exercise program for people with Alzheimer, physical activity for people with a mental illness, hiking for suicidal patients, The In SHAPE program (for overweight people with serious mental illness), supervised aerobic exercise for people with a depression, etc.

B36. Case management Tomita et al., 2014 ; Tomita & Herman, 2012 ; Herman et al., 2011 ; Livingston et al., 2013 ; Archer et al., 2012 ; O'Brien et al., 2012

Critical time intervention for people with severe mental illness, critical time intervention for homeless people with severe mental illness, The Flinders Program, In-hospital Brief Violence Interventions with community wraparound case management interventions, etc.

B37. Caregiver and family burden Xavier & De Almeida, 2013, Sveinbjarnardottir et al., 2013; Winickoff et al., 2013; Whitebird et al., 2013; Kuo et al., 2013; Montgomery et al., 2011; Sundsli et al., 2014; Proudfoot et al., 2013

Specific short-term therapeutic conversation intervention in acute inpatient psychiatry, Parental tobacco control intervention (in pediatric practice), Mindfulness-based stress reduction for family caregivers, Home-based caregiver training program, Tailored Caregiver Assessment and Referral(R) (TCARE(R)), A manual based coping strategy, REACT intervention (for family caregivers of people with psychosis), etc.

B38. Psychiatric care for members of minority groups Zhou & Gu, 2014; Malm et al., 2014; Tan & King, 2013

Housing first for homeless people with mental illness, supported employment (for Latinos in the US), etc.

B39. Recovery Cook et al., 2013; Cook et al., 2012; Cook et al., 2012; Aboutanos et al., 2011

Wellness Recovery Action Planning (WRAP) (for people with severe mental illnesses), Humor skill training in a mental health service (for people with schizophrenia), etc.

B40. Self-help services Vreugdenhil et al., 2012; Wu et al., 2014; Du et al., 2014 ; Naeem et al., 2014 ; Garrido et al., 2013

Self-management training (for people with schizophrenia), Self-care telephone talks, Integrated-IMR, The myCompass program, DVD-based training (for older adults), etc.

B41. Supported employment Bejerholm et al., 2015; Waghorn et al., 2014; Orrell et al., 2014; Feinberg et al., 2014; Cai et al., 2014 ; Hoffmann et al., 2014 ; Torrent et al., 2013

Individual placement (for people with severe mental illness), Supported employment programs, SHARP-at work intervention, problem-solving intervention (for recurrent sickness absence in workers with mental disorders), etc.

B42. Community healthworker workforce Kangovi et al., 2014

Number of community mental health teams for people with severe mental illnesses or personality disorders per 100.000 people with severe mental illness or personality disorders, etc.

B43. Psycho-education Chien & Leung, 2013; Cook et al., 2012 ; Arends et al., 2014 ; Neunhauserer et al., 2013

Needs-based, nurse-led psycho-education program, building recovery of individual dreams and goals through education and support (BRIDGES), problem solving education (for parents with children with autism), psycho-education for major depressive disorders, etc.

B44. Skills trainings for healthcare providers Ayers & Arch, 2013; Wiles et al., 2014

VA academic partnership, consultation and expert coaching for training therapists, listening visits, etc.

B45. First line treatment Srihari et al., 2015; Grupp-Phelan et al., 2012; Gitlin et al., 2013; Roldan-Merino et al., 2013; Varambally et al., 2012

First-episode service (for people with psychotic disorders), ED-based mental health service engagement intervention (for adolescents at risk for suicide), personalized in-home nursing care plan (for people with schizophrenia), listening visits (LV), etc.

B46. Telemedicine Gellis et al., 2014; Bedard et al., 2014; Volpe et al., 2015

Integrated telehealth care (for older adults with chronic illness and comorbid depression), online well-being intervention (for mildly depressed adults), Computer-assisted cognitive remediation therapy (for people with schizophrenia), etc.

B47. Cognitive therapy Grupp-Phelan et al., 2012; Velligan et al., 2013; Oosterbaan et al., 2013; Stanton & Reaburn, 2014

Motivational interviewing (MI) (for adults with depression in outpatient psychiatry), in-person and electronic interventions (for people with schizophrenia), cognitive remediation (for Asian people with schizophrenia), functional remediation (for bipolar patients), etc.

B48. Group therapy Bolier et al., 2013

A structured group reading program, etc.

4 core objectives WHO – Extended version

<p>WHO objective 1: Everyone has an equal opportunity to realize mental wellbeing throughout their life-span, particularly those who are most vulnerable or at risk [T&T: equity, justice]</p>	<ul style="list-style-type: none"> •A10. Psychiatric care for members of minority groups •B14. Cultural and ethnic issues •B37. Caregiver and family burden •C1. Identification of vulnerable groups •C2. Psychiatric care for the poor •C3. Psychiatric care for children and adults
<p>WHO objective 2: People with mental health problems are citizens whose human rights are fully valued, respected and promoted [T&T: equity, justice, autonomy]</p>	<ul style="list-style-type: none"> •A3. Staff competences •C4. Shared decision making (e.g.: B11. Forensic and legal issues, A19. Informed consent, C5. Freedom of choice, C6. Second opinion, B49 Patient participation) •B23. Involvement in treatment of patients and relatives •B26. Seclusion and restraint •B40. Self-help services and patient associations
<p>WHO objective 3: Mental health services are accessible, competent and affordable, available in the community according to need [T&T: accessibility, efficiency]</p>	<ul style="list-style-type: none"> •A5. Access to good primary healthcare and specialized psychiatric care / B8. Access measures •A6. Availability of technological equipment for assessment and treatment / B46. Telemedicine •A7. Psychiatric workforce •C7. Network (e.g.: A8. Catchment areas, A9. Day hospital for people with acute mental disorders, A11. Essential in-patient services structural requirements, A12. Essential out-patient services structural requirements, A14. Community mental health teams for people with severe mental illness, A21. Hospitals/in-patient services – basic requirements, A22. Hospitals/in-patient services – admission procedures, A23. Hospitals/in-patient services – access of wards to special services, A24. Hospitals/in-patient services – detained patients procedures, C8. Crisis intervention centers) •B9. Efficiency measures •B31. Efficiency •A25. Elimination of waiting times for outpatient appointments •B29. Cost effectiveness •C9. Treatment gap (taking account of people who don't have access to mental health care) •C10. Waiting lists
<p>WHO objective 4: People are entitled to respectful, safe and effective treatment [T&T: effectiveness]</p>	<ul style="list-style-type: none"> •A18. Safety issues / B10. Patient safety •B20. Effectiveness of psychiatric consult service / B27. Clinical effectiveness •B13. Outcome measures (e.g.: B28. Satisfaction, B32. Needs, B33. Functioning, B34. Quality of life) •B36. Case management / A15. Intensive case management / A27. Effective components of home-based treatment / A28. Essential components of community mental health treatment •B48. Individual and group therapy (e.g.: B2. Symptom and diagnostic assessment, B5. Substance use / B24. Pharmacotherapy, B6. General medical care, B12. Recovery measures / B19. Rehabilitative care / B39. Recovery, B21. Treatment plan / B22. Care program, B35. Physical activity, B41. Supported employment, B43. Psycho-education, B45. First-line treatment, C11. Disability management) •C12. Prevention •C13. Transition •C14. Risk taxation •C15. Specific treatments for specific target groups (age, problems, etc.) (e.g. B18. Quality concepts for appropriate use and management of antipsychotics for youth, B51. Behavior disorders in children, B52. Depression in adults)

3 cross cutting objectives WHO

WHO objective 5: Health systems provide good physical and mental health care for all [T&T: *quality, relevance, comprehensiveness*]

- A4. Multi-professionality of services
- A20. Monitoring of physical illness and access to general and specialized medical services

WHO objective 6: Mental health systems work in well-coordinated partnership with other sectors [T&T: *coordination, continuity*]

- A2. Mental health reporting and monitoring
- A16. Integrated care models / B1. Integrated care / A30. Organizational integration of psychiatric in-patient and out-patient services / B7. Continuity of care
- B50. Continuity and coordination of care
- C16. Collaboration between different care settings
- C17. Case registers

- A1. Mental health education / B44. Skills trainings for healthcare providers
- A17. Evidence-based medicine / B3. Evidence-based pharmacotherapy / B4. Evidence-based psychosocial interventions
- B15. Population-based resources
- B25. Governance responsibility
- C18. Future orientation – WHO objective 7

WHO objective 7: Mental health governance and delivery are driven by good information and knowledge [T&T: *accountability, relevance*]

4 core objectives WHO – Short version

<p>WHO objective 1: Everyone has an equal opportunity to realize mental wellbeing throughout their lifespan, particularly those who are most vulnerable or at risk [T&T: equity, justice]</p> <ul style="list-style-type: none"> • A10. Psychiatric care for members of minority groups • B14. Cultural and ethnic issues • B37. Caregiver and family burden • C1. Identification of vulnerable groups • C2. Psychiatric care for the poor • C3. Psychiatric care for children and adults 	<p>WHO objective 2: People with mental health problems are citizens whose human rights are fully valued, respected and promoted [T&T: equity, justice, autonomy]</p> <ul style="list-style-type: none"> • A3. Staff competences • C4. Shared decision making • B23. Involvement in treatment of patients and relatives • B26. Seclusion and restraint • B40. Self-help services and patient associations 	<p>WHO objective 3: Mental health services are accessible, competent and affordable, available in the community according to need [T&T: accessibility, efficiency]</p> <ul style="list-style-type: none"> • A5. Access to good primary healthcare and specialized psychiatric care • A6. Availability of technological equipment for assessment and treatment • A7. Psychiatric workforce • C7. Network • B9. Efficiency measures • B31. Efficiency • A25. Elimination of waiting times for outpatient appointments • B29. Cost effectiveness • C9. Treatment gap • C10. Waiting lists 	<p>WHO objective 4: People are entitled to respectful, safe and effective treatment [T&T: effectiveness]</p> <ul style="list-style-type: none"> • B10. Patient safety • B27. Clinical effectiveness • B13. Outcome measures • B36. Case management • B48. Individual and group therapy • C12. Prevention • C13. Transition • C14. Risk taxation • C15. Specific treatments for specific target groups (age, problems, etc.)
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3 cross-cutting objectives WHO

<p>WHO objective 5: Health systems provide good physical and mental health care for all [T&T: quality, relevance, comprehensiveness]</p> <ul style="list-style-type: none"> • A4. Multi-professionality of services • A20. Monitoring of physical illness and access to general and specialized medical services 	<p>WHO objective 6: Mental health systems work in well-coordinated partnership with other sectors [T&T: coordination, continuity]</p> <ul style="list-style-type: none"> • A2. Mental health reporting and monitoring • A16. Integrated care models • B50. Continuity and coordination of care • C17. Case registers 	<p>WHO objective 7: Mental health governance and delivery are driven by good information and knowledge [T&T: accountability, relevance]</p> <ul style="list-style-type: none"> • A1. Mental health education • A17. Evidence-based medicine and psychosocial interventions • B15. Population-based resources • B25. Governance responsibility • C18. Future orientation – WHO objective 7
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Appendix 3. Remarks of the members of the working group and second categorization of recommendations, based on the four core objectives and the three cross-cutting objectives of the WHO

The following remarks of the members of the working group were taken into account, in order to optimize the categorization:

4 core objectives

1. Everyone has an **equal opportunity to realize mental well-being** throughout their lifespan, particularly those who are most vulnerable or at risk:
 - Treatment gap should be categorized under objective 3 because it concerns the accessibility of mental health care.
 - Groups that don't have access to mental health care should be described in more detail (e.g. forensic patients, poor people, adolescents, etc.).
 - The identification of vulnerable groups should be added as a recommendation.
2. People with mental health problems are citizens whose **human rights** are fully valued, respected and promoted:
 - "Structural requirements to ascertain patient's dignity and basic needs (A3)" should be described differently. It is important to refer to personnel and competencies of personnel to assure the patient's dignity.
 - "Forensic and legal issues (B11)" and "Informed consent (A19)" are covered by "Shared decision making". "Freedom of choice (C5)", "Patient participation (B49)" and "Second opinion (C6)" should also be categorized under "Shared decision making".
 - "Patient associations" should be added to "Self-help services (B40)".
 - "Caregiver and family burden (B37)" are categorized under objective 1.
 - "Outcome measures (B13)" such as Needs, Satisfaction, Functioning, Quality of life, etc. are covered by objective 4 because it concerns human rights.
3. Mental health services are **accessible, competent and affordable**, available in the community according to need:
 - Recommendations "Catchment areas (A8)" till "Hospitals/in-patient services detained patient procedures (A24)" should be categorized as "Network".
 - "Crisis centers (C8)" should be categorized under "Network".
 - "Waiting lists" should be categorized under objective 3.
 - "Monitoring of physical illness and access to general and specialized medical services (A20)" was transferred to objective 5 since this recommendation applies to all aims.
 - "Competencies of the personnel (C11)" should also be addressed here.
4. People are entitled to **respectful, safe and effective treatment**:
 - In the title of this objective, "treatment" should be replaced by "intervention".
 - "Availability of technological equipment (A6)" should be transferred to objective 3.
 - "Case management (A15, B36)" is covered by "Effective components of homebased treatment (A27, A28)".
 - "Individual therapy" should be added to "Group therapy (B48)". This covers all therapies.
 - The following recommendations should be added to objective 4: "Prevention (C14)", "Transition (C15)", "Risk taxation (C16)", "Specific treatments for specific target groups - age, problems, etc. – (C17)" and "Rehabilitation management (C13)".

3 cross-cutting objectives

5. Health systems provide **good physical and mental health care for all**:
 - “Monitoring of physical illness and access to general and specialized medical services (A20)” should be added since this applies to all core objectives.
6. Mental health systems work in **well-coordinated partnership** with other sectors:
 - “Case registers (C18)” and “Collaboration between settings (C19)” should be added.
7. Mental health governance and delivery are driven by **good information and knowledge**:
 - “Psychiatric workforce (A7)” and “Community health worker workforce (B44)” are covered by objective 3.
 - “Evidence-based medicine (A17)” and “Evidence-based psychosocial interventions (B4)” go hand. “EBP” can be used as a collective term to describe evidence-based practice.
 - “Population based resources (B15)” and “Governance responsibility (B25)” apply to all four core objectives.

Second categorization of recommendations, based on the four core objectives and the three cross-cutting objectives of the WHO

WHO objective 1: Everyone has an equal opportunity to realize mental wellbeing throughout their lifespan, particularly those who are most vulnerable or at risk [T&T: <i>equity, justice</i>]	WHO objective 2: People with mental health problems are citizens whose human rights are fully valued, respected and promoted [T&T: <i>equity, justice, autonomy</i>]	WHO objective 3: Mental health services are accessible, competent and affordable , available in the community according to need [T&T: <i>accessibility, efficiency</i>]	WHO objective 4: People are entitled to respectful, safe and effective treatment [T&T: <i>effectiveness</i>]
Psychiatric care for members of minority groups (A10)/ Identification of vulnerable groups (C1)/ Psychiatric care for the poor (C2) Cultural and ethnic issues (B14) Caregiver and family burden (B37) Psychiatric care for children and adults (C3)	Staff competences (C19) Shared decision making (C4) (e.g.: Forensic and legal issues (B11), informed consent (A19), Freedom of choice (C5), Second opinion (C6), Patient participation (B49), Involvement in treatment of patients and relatives (B23)) Seclusion and restraint (B26) Self-help services (B40) patient associations (C5)	Access to good primary healthcare and specialized psychiatric care (A5)/ Access measures (B8)/ Treatment gap (taking account of people who don't have access to mental health care) (C9)/ Waiting lists (C10)/ Elimination of waiting times for outpatient appointments (A25) Availability of technological equipment for assessment and treatment (A6)/ Telemedicine (B46) A7. Psychiatric workforce (A7) Efficiency measures (B9)/ Efficiency (B31)/ Cost-effectiveness (B29)	Safety issues (A18)/ Patient safety (B10) Effectiveness of psychiatric consult service (B20)/ Clinical effectiveness (B27) Outcome measures (B13) (e.g.: Satisfaction (B28), Needs (B32), Functioning (B33), Quality of life (B34)) Case management (B36)/ Intensive case management (A15)/ Effective components of home-based treatment (A27)/ Essential components of community mental health treatment (A28) Individual and group therapy (B48) (e.g.: Symptom and diagnostic assessment (B2), Substance use (B5), Pharmacotherapy (B24), General medical care, B12. Recovery measures, Rehabilitative care (B19), Recovery (B39), Treatment plan (B21), Care program (B22), Physical activity (B35), Supported employment (B41), Psycho-education (B43), First-line treatment (B45), Disability management (C11)) Prevention (C12) Risk taxation (C14) Specific treatments for specific target groups (age, problems, etc.) (C15) (e.g. Quality concepts for appropriate use and management of antipsychotics for youth (B18), Behavior disorders in children (B51), Depression in adults (B52))

WHO objective 5: Health systems provide good physical and mental health care for all <i>[T&T: quality, relevance, comprehensiveness]</i>
Multi-professionality of services (A4) Monitoring of physical illness and access to general and specialized medical services (A20)
WHO objective 6: Mental health systems work in well-coordinated partnership with other sectors <i>[T&T: coordination, continuity]</i>
Mental health reporting and monitoring (A2) Integrated care models (A16)/ B1. Integrated care (B1)/ Organizational integration of psychiatric in-patient and out-patient services (A30)/ Continuity of care (B7)/ Network (C7) (e.g.: A8. Catchment areas (A8), Day hospital for people with acute mental disorders (A9), Essential in-patient services structural requirements (A11), Essential out-patient services structural requirements (A12), Community mental health teams for people with severe mental illness (A14), Hospitals/in-patient services – basic requirements (A21), Hospitals/in-patient services – admission procedures (A22), Hospitals/in-patient services – access of wards to special services (A23), Hospitals/in-patient services – detained patients procedures (A24), Crisis intervention centers (C8))
Continuity and coordination of care (B50)/ Transition (C13)
Collaboration between different care settings (C16)
Case registers (C17)
WHO objective 7: Mental health governance and delivery are driven by good information and knowledge <i>[T&T: accountability, relevance]</i>
Mental health education (A1)/ Skills trainings for healthcare providers (B44) Evidence-based medicine (A17)/ Evidence-based pharmacotherapy (B3)/ Evidence-based psychosocial interventions (B4) Population-based resources (B15) Governance responsibility (B25) Future orientation (C18)

Appendix 4. Remarks of representatives of patient associations

Representatives of patient associations indicated that the most important aspect of care quality is to provide patient-centered care. This means that every person should be sufficiently informed in an understandable language. It is important to listen to the patient and to take into account each person's questions and his/her network. Follow-up care is also essential, even after the treatment. Finally, patient associations mention that the recommendations that were retrieved from the literature, are based on the professional's point of view and less on the patient's point of view.

The attending members made the following comments:

- Objective 1: Mental healthcare for detainees and ethnic minorities should be mentioned in the table.
- Objective 2: Patient rights should be included in the table.
- Objective 3: The accessibility of finances should also be discussed.
- Objective 4: It should be clear that this objective does not only refer to medication intake.
- Objective 7: Besides the availability of population-based resources, it is also important to focus on the accessibility and the knowledge of population-based resources.

The above-mentioned remarks were taken into account in the final categorization and the description of the recommendations.

About the Superior Health Council (SHC)

The Superior Health Council is a federal advisory body. Its secretariat is provided by the Federal Public Service Health, Food Chain Safety and Environment. It was founded in 1849 and provides scientific advisory reports on public health issues to the Ministers of Public Health and the Environment, their administration, and a few agencies. These advisory reports are drawn up on request or on the SHC's own initiative. The SHC aims at giving guidance to political decision-makers on public health matters. It does this on the basis of the most recent scientific knowledge.

Apart from its 25-member internal secretariat, the Council draws upon a vast network of over 500 experts (university professors, staff members of scientific institutions, stakeholders in the field, etc.), 300 of whom are appointed experts of the Council by Royal Decree. These experts meet in multidisciplinary working groups in order to write the advisory reports.

As an official body, the Superior Health Council takes the view that it is of key importance to guarantee that the scientific advisory reports it issues are neutral and impartial. In order to do so, it has provided itself with a structure, rules and procedures with which these requirements can be met efficiently at each stage of the coming into being of the advisory reports. The key stages in the latter process are: 1) the preliminary analysis of the request, 2) the appointing of the experts within the working groups, 3) the implementation of the procedures for managing potential conflicts of interest (based on the declaration of interest, the analysis of possible conflicts of interest, and a Committee on Professional Conduct) as well as the final endorsement of the advisory reports by the Board (ultimate decision-making body of the SHC, which consists of 40 members from the pool of appointed experts). This coherent set of procedures aims at allowing the SHC to issue advisory reports that are based on the highest level of scientific expertise available whilst maintaining all possible impartiality.

Once they have been endorsed by the Board, the advisory reports are sent to those who requested them as well as to the Minister of Public Health and are subsequently published on the SHC website (www.shc-belgium.be). Some of them are also communicated to the press and to specific target groups (healthcare professionals, universities, politicians, consumer organisations, etc.).

In order to receive notification about the activities and publications of the SHC, please contact: info.hgr-css@health.belgium.be.