KCE REPORT 292S

Federaal Kenniscentrum voor de Gezondheidszorg
Centre Fédéral d'Expertise des Soins de Santé
Belgian Health Care Knowledge Centre

HEALTH SYSTEM TARGETS – BACKGROUND MATERIAL

SUPPLEMENT

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HEALTH SERVICES RESEARCH

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CAROLINE OBYN, AUDREY CORDON, LAURENCE KOHN, CARL DEVOS, CHRISTIAN LÉONARD

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COLOPHON

Title :	Health system targets – background material – Supplement
Authors :	Caroline Obyn (KCE), Audrey Cordon (KCE), Laurence Kohn (KCE), Carl Devos (KCE), Christian Léonard (KCE)
Project coordinator:	Nathalie Swartenbroekx (KCE)
External Experts :	Hervé Avalosse (Alliance Nationale des Mutualités Chrétiennes [ANMC]), Tobias Backhaus (Gesellschaft für Versicherungswissenschaft und – gestaltung e.V. [GVG] gesundheitsziele.de, Germany), Lutgart Braeckman (Universiteit Gent - Department of Public health), Christian De Bock (Mutualité Chrétienne), Murielle Deguerry (Observatoire de la Santé et du Social de Bruxelles-Capitale - Observatorium voor Gezondheid en Welzijn van Brussel-Hoofdstad), Lieven De Raedt (FOD Volksgezondheid – SPF Santé Publique), Karin De Ridder (WIV – ISP), Stefaan Desmarest (WIV – ISP), Mireille Goemans (INAMI – RIZIV), Rita Goetschalckx (INAMI – RIZIV), Denis Herbaux (Plateforme pour l'Amélioration continue de la Qualité des soins et de la Sécurité des patients [PAQS]), David Hercot (Observatoire de la Santé et du Social de Bruxelles-Capitale - Observatorium voor Gezondheid en Welzijn van Brussel-Hoofdstad), Joeri Guillaume (Nationaal Verbond van Socialistische Mutualiteiten - Union Nationale des Mutualités Socialistes), Catherine Le Gales (Institut Francilien Recherche Innovation Société [IFRIS], France), Murielle Lona (Mutualités Libres – Onafhankelijke Ziekenfondsen), Alain Piette (SPF Emploi – FOD Werkgelegenheid), Françoise Renard (ISP – WIV), Rik Thys (Nationaal Verbond van Socialistische Mutualiteiten [NVSM]), Saskia Van den Bogaert (FOD Volksgezondheid – SPF Santé Publique), Pieter Vandenbulcke (Vlaams Agentschap Zorg en Gezondheid), Stephan Van den Broucke (UCL), Johan Van Der Heyden (WIV – ISP), Dominique Vandijck (ICURO, Zorgnet-Icuro, UHasselt), Elisabeth Van Eycken (Belgian Cancer Registry [BCR]), Chris Van Hul (Onafhankelijke Ziekenfondsen – Mutualités Libre), Vanessa Vanrillaer (Onafhankelijke Ziekenfondsen – Mutualités Libre), Dirk Wildemeersch (Vlaams Agentschap Zorg en Gezondheid)
Stakeholders:	Members of the steering committee: • Representatives of the policy unit of the Federal Minister of Health: Regina De Paepe, Mieke Walraevens • INAMI – RIZIV: Pascal Meeus • FOD Volksgezondheid – SPF Santé Publique: Pol Gerits, Margareta Haelterman WIV – ISP: Brecht Devleesschauwer, Françoise Renard
External Validators :	Hans Kluge, (WHO Regional Office For Europe), Gaetan Lafortune (OECD), Matthias Wismar (European Observatory on Health Systems and Policies)
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- **The external experts were consulted about a (preliminary) version of the scientific report. Their comments were discussed during meetings. They did not co-author the scientific report and did not necessarily agree with its content.**
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- **Finally, this report has been approved by common assent by the Executive Board.**
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1 SUGGESTIONS FOR STRUCTURED HEALTH SYSTEM TARGETS

1.1 Time horizon for the structured targets

The suggested time horizon for the HSPA target suggestions as formulated in this project is a 10-year period, compared to the data in the latest HSPA report of 2015, which forms the baseline. Since most of the data in the 2015 HSPA report relate to the year 2013 (not 2015)), the considered time frame is 2013-2023. The time horizon should not be too short as the implementation of the targets may require collaboration of several actors and the impact of public health interventions is often not always immediately visible in the indicators:

- Firstly, measures need certain time for implementation;
- Secondly, even more time may be required before measures unfold their full effect, especially for final health outcome indicators like “life expectancy in good health”.
- Not to forget there is also a time lag for data collection.

The set of HSPA target suggestions should be seen as a contributing element to a long-term strategy for healthcare policymaking, rather than a short-term tool to evaluate the impact of very specific policy measures.

1.2 Selected method for target suggestions in this project

Table 1 describes the method used in this project. The target suggestions are adapted in function of the appraisal of the indicator in the Belgian HSPA (2015). The method is inspired by the methods used in France and the United States. We followed this default method in a strict way to enhance coherency of the targets.

We did not formulate a target in the following cases:

- Contextual indicators
- When a target is already set at federal or interministerial level
- For indicators where data is only available for one region
- Indicators for which the definition and calculation method is expected to change over the considered time horizon.

Furthermore, when scientific recommendations stipulate universal coverage, or general vaccination, we added a target to move to 100% coverage.

Table 1 – Target-setting method

	Appraisal in HSPA (2015)	Default target formulation method
⊕	Good results, and improving	• At least maintain current level and o move towards the average of the **3 best performing EU-15** countries in 10 years o or, if no data is available for meaningful international comparison, improve by **10%**[a] in 10 years, compared to the baseline level from the 2015 HSPA report
●	Good results, and globally stable or trend not evaluated	
⊖	Good results, but deteriorating	
⊕	Average results, but improving	• If Belgium is performing below average EU-15, the target is to move towards **EU-15 mean** position in 10 years • If Belgium is performing above average EU-15, the target is to move towards (or maintain position amongst) the average of the **3 best performing EU-15** countries in 10 years • If no data is available for meaningful international comparison, improve by **10%** in 10 years, compared to the baseline level from the data in the 2015 HSPA report
●	Average results, and globally stable or trend not evaluated	
⊖	Average results, but deteriorating	
⊕	Poor results, but improving (warning signals)	
●	Poor results, and globally stable or trend not evaluated (warning signals)	
⊖	Poor results, and deteriorating (warning signals)	
	Disparities and inequalities	In addition, when considerable disparities or inequalities have been observed in the HSPA project, be it along **social groups, gender age, provinces or patient districts**, a warning sign is added to the suggested target. In that case the target can be broken down into sub-targets to reduce inequalities, whilst at the same time improving the average level of the population and the level of the weakest subgroup. Remind that focusing on reducing inequalities is not sufficient as a deterioration of the strongest subgroup towards the weakest subgroups may also misleadingly show reduced inequalities.

Note that when the target is based on EU-15 data, we fixed the target to the level of the baseline year (which is in most cases the year 2013), to avoid formulating “moving targets”.

[a] In case of a desired increase, this means a yearly increase by 0,958%. In case of a desired decrease, this means a yearly decrease by 1,048%.

Caveat:

The target suggestions based on the HSPA indicators are but a "straw-man proposal", they are intended to generate discussion and provide a potential basis or inspiration for further work.

The tables are to be read in conjunction with the tables of the 2015 HSPA report, which contain more detailed information on the sources.

1.3 Health status

Target		Inequalities flag
Indicators based on mortality data		
• Premature mortality (potential years of life lost before 70 years old/100 000 pop, age-adjusted): decrease from 4215 to 3750[(1)] for male and from 2361 to 2074[(1)] for female (average EU-15)	🔴	patient districts / gender
• Preventable mortality (rate/100 000 pop, age-adjusted): no target formulated since the indicator definition is planned to be reviewed by Eurostat	🔴	gender
• Infant mortality (deaths/1000 live births): decrease from 3.5 to 3.2[(2)] (average EU-15)	🟡	social group
• Life expectancy at birth (years): increase from 77.8 to 78.6[(1)] for male and from 83.2 to 83.7[(1)] for female (average EU-15)	🟡+	social group / gender
• Amenable mortality (rate/100 000 pop, age-adjusted): no target formulated since the indicator definition is planned to be reviewed by Eurostat	🟢+	gender
Indicators based on self-assessed health		
• Healthy Life Years at age 65 (years): maintain at least the current level (M:11.2, F:12.3 [(3)]; M:10.8, F:10.9 [(1)]) and move towards 11.8 for male and 12.9 for female[(1)] (average of the 3 best performing EU countries)	🟢	social group
• Self-perceived health (% pop 15+ in good or very good health): maintain at least the current level (77.9[(4)]; 74.3[(5)]) and move towards 79.6[(5)] (average of the 3 best performing EU countries)	🟢	social group / age

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

M = Male; F = Female

Sources of results for international comparison: [(1)] Eurostat (based on standardised age structure of the population); [(2)] OECD Health Statistics 2015 (based on standardised age structure of the population); [(3)] Statistics Belgium + HIS; [(4)] HIS; [(5)] Eurostat (EU-SILC).

1.4 Equity and inequalities

As reducing inequalities is a transversal goal, target suggestions on inequalities are made for all indicators for which inequalities have been signalled in the HSPA 2015 report. The suggestions for inequality targets are flagged in the outright column of the target suggestions tables.

1.5 Accessibility

Target		Inequalities flag
Financial accessibility		
• Out-of-pocket payments (in US $ PPP/capita): decrease from 760[(1)] to 595[(2)] (average EU-15)	⊖	
• Out-of-pocket payments (% of total health expenditures): decrease from 17.9[(1)] to 16.6[(2)] (average EU-15)	●	
• Self-reported delayed contacts with health services for financial reasons (% of households): decrease from 8.0 to 7.2 (10% improvement)	●	social group
• Health insurance status of the population (% of population): maintain at least the current level (98.9) and move towards 100	●	
Health workforce		
• Patient-to-nurse ratio: decrease from 10.7 to 9.0[(3)] (average EU-15)	●	
Waiting time		
• Waiting time of more than two weeks to get an appointment with a specialist (% of population asking an appointment): decrease from 38.4 to 34.56 (10% improvement)	●	

Good (●), average (●) or poor (●) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

PPP = Purchasing power parity. Sources of results for international comparison: [(1)] SHA [(2)] OECD Health Statistics 2015; [(3)] RN4CAST study.

1.6 Quality-of-care: Effectiveness of care

Target		Inequalities flag
Effectiveness primary care – avoidable hospital admissions		
• Asthma hospital admissions in adults (/100 000 pop): decrease from 38[(1)] to 35[(2)] (average EU-15)	●	
• Complication of diabetes hospital admissions in adults (/100 000 pop): decrease from 177[(1)] to 159 (10% improvement)	⊕	gender
Effectiveness hospital care – health outcomes		
• Breast cancer 5-year relative survival rate (%): maintain at least the current level (88.3)[(3)] and move towards 100	●	
• Case-fatality within 30 days after admission for ischemic stroke (pop aged 45+, admission-based, %): decrease from 8.9[(1)] to 8[(2)] (average EU-15)	●	
• Colorectal cancer 5-year relative survival rate (%): increase from 64.8[(3)] to 71.3 (10% improvement)	⊕	
• Case-fatality within 30 days after admission for AMI[a] (pop aged 45+, admission-based, %): decrease from 7.3 [(1)] to 7[(2)] (average EU-15)	⊕	

Good (●), average (●) or poor (●) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

Note: [a]AMI = acute myocardial infarction. [(1)] MZG-RHM ; [(2)] OECD Health Statistics 2015 ; [(3)] Cancer Registry.

1.7 Quality-of-care: Appropriateness of care

Target		Inequalities flag
Primary care – patients with chronic disease (guidelines)		
• Proportion of adult diabetics with appropriate follow-up[a] (% of diabetic patients under insulin): improve from 67.8 to 74.6 (10% improvement)	🔴	
• Proportion of adult diabetics with appropriate follow-up[a] (% of diabetic patients under oral antidiabetics only, aged 50+): improve from 43.4 to 74.6 (align with target for patients under insulin)	🔴	
Primary care – prescribing patterns (guidelines)		
• Use of antibiotics (total DDD/1000 pop/day): decrease from 28.7 to 21.8 (1) (average EU-15)	🔴	
• Use of antibiotics at least once in the year (% of population): decrease from 41.7 to 37.5 (10% improvement)	🔴	
• Use of antibiotics of second intention[b] (% total DDD antibiotics): decrease from 55.4 to 49.9 (10% improvement)	🔴	
Inappropriate medical imaging		
• Medical radiation exposure due to inappropriate medical imaging (mSv/capita/year): decrease from 0.90 to 0.81 (10% improvement)	🔴+	
Acute care – variability in surgical procedures		
• Caesarean sections (/100 live births): maintain at least the current level 20.4 and move towards 16.0 (average of the 3 best performing EU countries)	🔴	variability between hospitals and providers

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

DDD = defined daily dose. [a] Appropriate follow-up is defined as patients receiving regular retinal exams and blood tests (glycohemoglobin and serum creatinine); [b] Antibiotics of second intention are: amoxycilline with clavulanic acid, macrolides, cephalosporins and quinolones. Source of results for international comparison: (1) OECD Health Statistics 2015.

1.8 Quality-of-care: Safety of care

Target		Inequalities flag
Healthcare-associated infections		
• Prevalence of hospital-acquired infections (% of patients hospitalised): decrease from 7.1 to 5.7 (1) (average EU-15)	🔴	
• Incidence of hospital-acquired MRSA infections (/1000 hospital stays): decrease from 1.2 to 1.0 (10% improvement)	🟡+	
Complications after surgery[a]		
• Incidence of post-operative pulmonary embolism or deep vein thrombosis, after hip or knee replacement (/100 000 hip or knee surgery discharges): decrease from 472 to 385(2) (average EU-15)	🟡+	
• Incidence of post-operative sepsis after abdominal surgery (/100 000 abdominal surgery discharges): decrease from 2114 to 1736(2) (average EU-15)	🟡+	
Complications during hospitalisation – quality of nursing care		
• Prevalence of hospital-acquired cat II-IV pressure ulcers (% of patients hospitalised): decrease from 5.1 to 4.6 (10% improvement)	🟡	
Polymedication		
• Excessive polymedication (9 or more different medicines within last 24 hours) (% pop aged 65+): decrease from 5.6 to 5.0 (10% improvement)	🟡	
• Polymedication (5 or more different medicines within last 24 hours) (% pop aged 65+): decrease from 27.4 to 24.7 (10% improvement)	🟡+	

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

MRSA = Methicillin-resistant Staphylococcus aureus. [a] Patient Safety Indicators based on hospital discharge data. Sources of results for international comparison: (1) European Centre for Disease Control, based on EU-30; (2) OECD Health at a Glance 2014 (note: methodology not completely comparable).

1.9 Quality-of-care: Continuity of care

Target		Inequalities flag
Informational continuity in general practice		
Coverage of global medical record (% of pop with at least one contact with their GP within three years): increase from 62 to 68.2 (10% improvement) or at least 90 % in target population >45 years	⊕	provinces / age
Relational continuity in general practice		
• Usual Provider Continuity index ≥ 0.75: increase from 69.6 to 76.6 (10% improvement)	●	patient districts / social group / age
Management continuity between hospital and GP		
• GP encounter within 7 days after hospital discharge (% patients 65+): increase from 54.6 to 60.1 (10% improvement)	⊖	patient districts, gender / age / social group
Coordination in ambulatory care		
• Proportion of adult diabetics (under oral antidiabetic only) with a convention/passport/care trajectory (% of patients, 50+): increase from 16.1 to 17.7 (10% improvement)	⊕	patient districts / age
• Proportion of adult diabetics (under insulin) with a convention/passport/care trajectory (% of patients): maintain at least the current level (90.8) and move towards 100	⊕	patient districts / social group / age
Coordination in hospital care		
• Patients with cancer discussed at the multidisciplinary team meeting (%): maintain at least the current level (83.6) and move towards 100	⊕	

Good (●), average (●) or poor (●) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

GP = general practitioner

1.10 Quality-of-care: Patient centeredness of care

Target	Inequalities flag
Patient experiences with ambulatory care	
• Doctor spending enough time with patients during the consultation (% of respondents, contact with GP/SP): maintain at least the current level (GP: 97.7, SP: 96.3) and move towards 100	●
• Doctor providing easy-to-understand explanation (% of respondents, contact with GP/SP): maintain at least the current level (GP: 98.1, SP: 95.5) and move towards 100	●
• Doctor giving opportunity to ask questions or raise concerns (% of respondents, contact with GP/SP): maintain at least the current level (GP: 98.1, SP: 95.3) and move towards 100	●
• Doctor involving patients in decisions about care and/or treatments (% of respondents, contact with GP/SP): maintain at least the current level (GP: 95.8, SP: 92.1) and move towards 100	●

Good (●), average (●) or poor (●) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

GP = general practitioner; SP = Specialist Physician

1.11 Efficiency of healthcare system

Target	Inequalities flag
• Length of stay normal delivery (mean, days): decrease from 4.0 to 3.0[(1)] (average EU-15)	
• One-day surgical admissions (% of surgical admissions): maintain at least the current level (48.5) and move towards 53.4 (10% improvement)	
• Use of low-cost medication (% of total ambulatory DDDs): maintain at least the current level (54.8) and move towards 60.3 (10% improvement)	

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

DDD = Defined Daily Dose
Source of results for international comparison: [(1)] OECD Health Statistics 2015.

1.12 Sustainability

Target	Inequalities flag
Health workforce in the future (inflow, outflow)	
• Mean age of practising GPs (in FTE, years): decrease from 52.8 to 47.5 (10% improvement)	
• Physicians aged 55+ (% of those practising): decrease from 43.2 to 34.8[(1)] (average EU-15)	
• Medical graduates becoming GP (% of those with medical specialisation): increase from 28 to 30.8 (10% improvement)	
Maintenance of facilities	
• Curative care bed-days (number/capita): decrease from1.1 towards 0.8 (average of the 3 best performing EU countries)	
Innovation	
• W.A.I.T indicator for innovative medicines[a] (in days): decrease from 368 to 278[(2)] (average EU-15)	
• GPs using an electronic medical file (% of practising GPs): increase from 76.7 to 84.4 (10% improvement)	

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

FTE = Full time equivalents; GP = General Practitioner; EFPIA = European Federation of Pharmaceutical Industries and Associations.
[a] W.A.I.T indicator defined as average number of days between marketing authorisation and patient access.
Sources of results for international comparison: [(1)] OECD Health Statistics 2015; [(2)] EFPIA reports.

1.13 Preventive care

Target	Inequalities flag
Vaccination coverage	
• Influenza vaccination (% pop aged 65+)[a]: increase from 56.4 to 100 (scientific recommendation)	districts
• Measles vaccination in children (%, 1th/2th dose) maintain at least the current level for 1d (95.5) and increase from 85.0 to 95 for 2d (Interministerial protocol agreement) and move towards 100 (scientific recommendation)	
• Polio, diphtheria, tetanus and pertussis vaccination in children (%, 3th/4th dose): maintain at least the current level (3d: 99.0, 4d: 92.0) and move towards 100 (scientific recommendation)	
• Hepatitis B vaccination in children (%, 3th/4th dose): maintain at least the current level (3d: 97.8, 4d: 91.3) and move towards 100 (scientific recommendation)	
Incidence infectious diseases preventable by vaccination	
• Incidence of measles (new cases/million pop): decrease from 6.1 to 0 (interministerial protocol agreement)	
Cancer screening[b]	
• Cervix cancer screening (% women aged 25-64): increase from 53.6 to 60.1[(1)] (average EU-15)	social group / age

• Breast cancer screening - organized programme (% women aged 50-69): increase from 32.5 to 75 (commonly accepted target)	🔴	districts / social group
• Colorectal cancer screening (FOBT) (% pop aged 50-75)**: increase from 16.5 to 18.2** (10% improvement)	➕	
• Breast cancer screening (% women aged 50-69): increase from 62.7 to 75 (commonly accepted target)	🟡	districts / social group
Over-screening cancer		
• Breast cancer screening outside age target group (% women aged 40-49): decrease from 35.1 to 31.6 (10% improvement)	🔴	
Oral health – contacts with dentist		
• No regular contacts with dentist[c] (% pop aged 3+): decrease from 50.8 to 45.7 (10% improvement)	🔴	age

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

FOBT = Faecal occult blood test. a Excluding population residing in homes for the elderly and nursing homes; [b] Within the last two years for breast and colorectal cancer screening, within the last three years for cervical cancer screening; [c] No regular contacts with dentist is defined as patients who do not have at least at 2 contacts on 2 different years over a three year period.
Source of results for international comparison: [(1)] OECD Health Statistics 2015.

1.14 Mental healthcare

Target		Inequalities flag
Health Status		
• Deaths due to suicide (/100 000 pop): decrease from 18.3 to 10.6[(1)] (average EU-15)	🔴	provinces
Accessibility of care		
• Waiting time longer than 1 month for first contact in ambulatory mental health centre (% of pop with contact in ambulatory mental health centre): no target formulated as there is no national data	🔴	
Appropriateness of care		
• ER visits for social, mental or psychic reason (% of admission in ER in general hospitals): decrease from 1.5 to 1.35 (10% improvement)	🟡	
Appropriateness of prescribing pattern in ambulatory patients		
• Use of antidepressants (total DDD/1000 pop/day): decrease from 71 to 64.6[(1)] (average EU-15)	➖	
• Use of antidepressants (% of adult population, at least once in the year): decrease from 13.4 to 12.1 (10% improvement)	🔴	age / gender
• Percentage of patients with short duration (< 3 months) of antidepressants treatment (% of pop under antidepressant): decrease from 47.4 to 42.7 (10% improvement)	🔴	
Safety of prescribing pattern in ambulatory patients		
• Patients (65+ years old) prescribed antidepressants with anticholinergic effect (%): decrease from 15.4 to 13.9 (10% improvement)	🔴	

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

ER = Emergency room
Source of results for international comparison: [(1)] OECD Health Statistics 2015.

1.15 Long-term care for the elderly

Target	Inequalities flag
Safety in residential care	
• Prevalence of pressure ulcers (grade II-IV) in home for the elderly[a] (% of residents): no target formulated as there is no national data	
• Prevalence of MRSA carriage in residential facility (% of residents): decrease from 12.2 to 10.98 (10% improvement)	

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

[a] Home for the elderly in Dutch: woonzorgcentra (previously called rustoorden voor bejaarden – ROB) and in French: maison de repos pour personnes âgées (MRPA)

1.16 Care at the end-of-life

Target	Inequalities flag
• Patients who received palliative care[a] (% of terminal cancer patients who died in the year): increase from 51 to 56.1 (10% improvement)	
Patient centeredness	
• Death at usual place of residence (home or in residential care) (% of terminal cancer patients who died in the year): increase from 29.6 to 32.6 (10% improvement)	
Lack of timely palliative care	
• Patients who died within one week after start of palliative care (% of terminal cancer patients who received palliative care and died in the year): decrease from 19.6 to 17.6 (10% improvement)	
Aggressiveness of care at the end of life	
• Patients who received chemotherapy in the last 14 days of life (% of terminal cancer patients who died in the year): decrease from 11.2 to 10.1 (10% improvement)	

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-).

[a] Palliative care as identified in billing data: this includes patients receiving a lump sum for palliative care at their usual place of residence, patients with visits of the general practitioner or nurse within a palliative setting, patients hospitalized in palliative units or hospitalized patients with visits of multidisciplinary palliative care teams.

1.17 Health promotion and lifestyles

Target	Inequalities flag
Health outcomes	
• Obesity in adults (BMI ≥ 30) (% pop aged 18+): move from 13.7 to 11.3[(1)] (average of the 3 best performing EU countries)	social group
• Overweight in adolescents (BMI exceeding normal weight limits (% pop aged 11, 13, 15)[a]: no target formulated as there is no national data	
• Incidence of HIV (new diagnoses/100 000 pop): decrease from 10 to 7.6[(2)] (average EU-15)	
Lifestyles	
• Binge drinking[c] (% pop aged 15+): decrease from 8.5 to 7.7 (10% improvement)	age / gender
• Daily physical activity (at least 30 min) (% pop aged 18-64): increase from 38.4 to 42.2 (10% improvement)	gender / age / social group
• Daily smokers (% pop aged 15+): move from 18.9 to 14,1[(1)] (average of the 3 best performing EU countries)	gender / social group
• Hazardous alcohol drinking[b] (% pop aged 15+): decrease from 5.0 to 4.5 (10% improvement)	
Effective health services	
• Global Medical Record + (% pop aged 45-75 with GMR): increase from 22 to 24.2 (10% improvement)	age
Health literacy (Empowerment)	
• Health literacy (at least sufficient level) (% of pop aged 18+): move from 58.7 to 64.6 (10% improvement)	

Policy	
• Tobacco Control Scale[d]: increase current score (47/100) to 70/100 (average of the 3 best performing EU countries)	🟡

Good (🟢), average (🟡) or poor (🔴) results, globally stable or trend not evaluated (empty), improving (+) or deteriorating (-

BMI = Body Mass Index.

[a] As defined by the standard definition for child overweight[23]; [b] Hazardous drinking is defined as average weekly alcohol consumption exceeding threshold considered harmful; [c] Binge drinking is defined as 6+ drinks at one occasion at least once a week; [d] Tobacco Control Scale quantifies the intensity of 6 policies considered by WHO as priorities for a comprehensive tobacco control programme. 100 means maximum score on the 6 policies

Sources of results for international comparison: [(1)]OECD Health statistics 2015, [(2)]European Centre Disease and Control 2011.

2 INVENTORY OF MAIN SUPRANATIONAL TARGETS, BY SOURCE

2.1 Overview of supranational targets by source

The following supranational target frameworks were considered to be the most important by members of the expert group:

- the “Sustainable Development Goals 2030” framework by the United Nations,
- the “9 global targets for Noncommunicable Diseases 2025” by the WHO,
- the European policy framework and strategy for the 21st century – 2020 by the World Health Organization regional office for Europe, and
- the Third Health Programme (2014-2020) of the European Union.

Although in all of these cases the targets are formulated by instances to which Belgium committed to, the targets remain voluntary.

Overall, supranationally much attention has been given to the following health topics:

- Antibiotics (UN, EU, WHO)
- Crisis and pandemics management (following the ebola-crisis)
- Universal health coverage
- Health promotion
- Healthforce planning.

2.1.1 9 Global targets for NCDs – 2025 by the World Health Organization

Noncommunicable diseases (NCDs), are defined by WHO as

"*Noncommunicable diseases, also known as chronic diseases, are not passed from person to person. They are of long duration and generally slow progression. The four main types of noncommunicable diseases are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes*" [24].

The following targets on NCDs were defined[10]:

- Target 1 - A 25% relative reduction in the overall mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases
- Target 2 - At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context
- Target 3 - A 10% relative reduction in prevalence of insufficient physical activity
- Target 4 - A 30% relative reduction in mean population intake of salt/sodium
- Target 5 - A 30% relative reduction in prevalence of current tobacco use in persons aged 15+ years
- Target 6 - A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances
- Target 7 - Halt the rise in diabetes and obesity
- Target 8 - At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes
- Target 9 - An 80% availability of the affordable basic technologies and essential medicines, including generics, required to treat major NCDs in both public and private facilities

With the corresponding 25 indicators[25]:

Mortality and morbidity:

1. Premature NCD Mortality
2. Cancer incidence

Behavioural Risk Factors:

3. Harmful use of alcohol: Adult Per Capita Consumption
4. Harmful use of alcohol: heavy episodic drinking
5. Harmful use of alcohol: alcohol-related morbidity and mortality
6. Physical inactivity in adolescents
7. Physical inactivity in adults
8. Salt intake
9. Tobacco use in adolescents
10. Tobacco use in adults

Biological Risk Factors:

11. a) Blood pressure: raised blood pressure

    b) Blood pressure: mean blood pressure
12. Raised blood glucose/diabetes
13. Overweight and obesity in adolescents
14. Overweight and obesity in adults
15. Saturated fat
16. Low fruit and vegetable consumption
17. a) Total Cholesterol: raised

b) Total Cholesterol: mean

National Systems Response:

18. Drug therapy and counselling to prevent heart attacks and stroke
19. Essential medicines and technologies for NCD
20. Palliative care
21. Elimination of trans-fats
22. Vaccination for HPV
23. Marketing to children
24. Vaccination for Hepatitis B
25. Cervical cancer screening

The targets are set globally and WHO urges governments to

- Adapt the global NCD targets and set targets for 2025 based on national circumstances;
- Develop multisectoral national NCD plans to reduce exposure to risk factors and enable health systems to respond in order to reach these national targets in 2025; and
- Measure results, taking into account the NCD Global Action Plan.

"*Member States are strongly encouraged to consider the development of national targets based on their own national situations, which build on the Nine global voluntary targets. Setting targets is a way to draw attention to NCDs and help mobilize resources to address NCD priorities. National targets may need to be adapted from the global targets if a country has already achieved a target or if the global target is too low given the progress already achieved within the country.*

As a starting point, Member States interested in setting national NCD targets are encouraged to consider the following:

- *Are the targets and indicators included in the GMF all suitable in the national context?*
- *Are there additional targets and indicators needed for the country?*
- *Are the systems in place to track these 25 global indicators and report on nine global targets? And systems which track any new proposed ones?*
- *What is the current level of exposure/mortality/service provision?*
- *Are the reductions or coverage proposed for global targets appropriate in the national context or should they be more ambitious?"*

2.1.2 Sustainable Development Goals – 2030 by the United Nations

At a UN Summit in 2015, world leaders adopted the 17 Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development. Each goal has specific targets to be achieved over the next 15 years[26]. Goal three is on good health and wellbeing: "Ensure healthy lives and promote well-being for all at all ages". The corresponding targets are as follows[1]:

- By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births [SDG3.1]
- By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births [SDG3.2]
- By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases [SDG3.3]
- By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being [SDG3.4]
- Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol [SDG3.5]

- By 2020, halve the number of global deaths and injuries from road traffic accidents [SDG3.6]
- By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes [SDG3.7]
- Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all [SDG3.8]
- By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination [SDG3.9]
- Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate [SDG3.10]
- Support the research and development of vaccines and medicines for the communicable and noncommunicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all [SDG3.11]
- Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States [SDG3.12]
- Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks [SDG3.13]
- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss [SDG3.14]
- Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels [SDG3.15]
- Strengthen the means of implementation and revitalize the global partnership for sustainable development [SDG3.16]

2.1.3 *A European policy framework and strategy for the 21st century – Health 2020 by the World Health Organization regional office for Europe*

At the WHO Regional Committee for Europe in September 2012, all 53 Member States in the WHO European Region approved a new European health policy framework: Health 2020. This common policy is based on evidence and peer-review and focuses on health in a multisectorial approach (health problems, determinants of health and well-being, health systems, public health capacity…). The vision adopted for Health 2020 is: "*A WHO European Region in which all people are enabled and supported in achieving their full health potential and well-being and in which countries, individually and jointly, work towards reducing inequities in health within the Region and beyond*". This policy framework aims to "*significantly improve the health and well-being of populations, reduce health inequalities, strengthen public health and ensure people-centred health systems that are universal, equitable, sustainable and of high quality*"[4].

Moreover, the Health 2020 framework tries to coordinate action across governments and society by encouraging them to integrate two strategic objectives[4]:

- improving health for all and reducing health inequalities; and
- improving leadership and participatory governance for health.

The Health 2020 policy identifies four priority areas for policy action:

- investing in health through a life-course approach and empowering people;
- tackling the European Region's major health challenges of noncommunicable and communicable diseases;
- strengthening people-centred health systems, public health capacity and emergency preparedness, surveillance and response; and
- creating resilient communities and supportive environments.

Each strategy has to be adapted to the specificity of the countries part of the WHO European Region.

The Health 2020 policy develops 6 targets to be reached by 2020 and defines indicators monitored at the regional level to measure progress on health and well-being. The regional targets have been created using the SMART target-setting method (Specific, Measurable, Achievable, Relevant and Time-bound) and are both quantitative and qualitative (see Table 2). All Member States have agreed on these targets and they have to contribute to their achievement by 2020. For a detailed description of the associated indicators (20 core and 17 additional indicators), we refer the interested reader to *Targets and indicators for Health 2020 – Version 3, WHO Regional office for Europe (2016)*[27].

Table 2 – Overview of the six Health 2020 regional targets

Area and targets
Health 2020 area 1. Burden of disease and risk Factors
Overarching target 1. Reduce premature mortality in Europe by 2020
1.1. A 1.5% relative annual reduction in overall (4 causes combined) premature mortality from cardiovascular diseases, cancer, diabetes and chronic respiratory diseases by 2020
1.2. Achieved and sustained elimination of selected vaccine preventable diseases (poliomyelitis, measles and rubella) and prevention of congenital rubella syndrome
1.3. Reduction of mortality from external causes
Health 2020 area 2. Healthy people, wellbeing and determinants
Overarching target 2. Increase life expectancy in Europe
2.1. Continued increase in life expectancy at current rate (the annual rate during 2006–2010), coupled with reducing differences in life expectancy in Europe
Overarching target 3. Reduce inequities in health in Europe (social determinants target)
3.1. Reduction in the gaps in health status associated with social determinants in Europe
Overarching target 4. Enhance the well-being of the European population
4.1. Will be set as a result of the baseline of the core well-being indicators, with the aim of narrowing intraregional differences and levelling up
Health 2020 area 3. Processes, governance and health systems
Overarching target 5. Universal coverage and the "right to health"
5.1. Moving towards universal coverage (according to the WHO definition) by 2020
Overarching target 6. National targets/goals set by Member States
6.1. Establishment of processes for the purpose of setting national targets (if not already in place)

Source: http://www.euro.who.int/__data/assets/pdf_file/0011/199532/Health2020-Long.pdf?ua=1

2.1.4 *The Third Health Programme (2014-2020) of the European Union*

In 2014, based on the European Commission's proposal, the European Parliament and the European Council adopted and published the Third Health Programme (2014-2020) in the Official Journal of the European Union[28]. The programme is established accordingly to the Europe 2020 strategy and the international health strategy. The general objectives of the Programme is *"to complement, support and add value to the policies of the Member States to improve the health of Union citizens and reduce health inequalities"* and it is based on 4 specific objectives:

- promote health, prevent diseases and foster supportive environments for healthy lifestyles taking into account the 'health in all policies' principle;
- protect Union citizens from serious cross-border health threats;
- contribute to innovative, efficient and sustainable health systems, and
- facilitate access to better and safer healthcare for Union citizens.

The text of the Regulation also specifies priorities of actions for each objectives (see Table 3 Table 2) and indicators. The Programme has a budget of € 449.4 million to finance the implementation of actions to pursue the general objectives by 2020. In 2017, a mid-term evaluation report will monitor and evaluate the impact of these actions and identifies new priorities to achieve the objective within the duration of the Programme.

Table 3 – Overview of the 4 objectives and associated priorities

The 4 objectives and the associated priorities
Objective 1: Promote health, prevent diseases and foster supportive environments for healthy lifestyles
1.1 Risk factors such as use of tobacco and passive smoking, harmful use of alcohol, unhealthy dietary habits and physical inactivity
1.2 Drugs-related health damage, including information and prevention
1.3 HIV/AIDS, tuberculosis and hepatitis
1.4 Chronic diseases including cancer, age-related diseases and neurodegenerative diseases
1.5 Tobacco legislation
1.6 Health information and knowledge system to contribute to evidence-based decision-making
Objective 2: Protect Union citizens from serious cross-border health threats
2.1 Additional capacities of scientific expertise for risk assessment
2.2 Capacity-building against health threats in Member States, including, where appropriate, cooperation with neighbouring countries
2.3 Implementation of Union legislation on communicable diseases and other health threats, including those caused by biological and chemical incidents, environment and climate change
2.4 Health information and knowledge system to contribute to evidence-based decision-making
Objective 3: Contribute to innovative, efficient and sustainable health systems
3.1 Health Technology Assessment
3.2 Innovation and e-health
3.3 Health workforce forecasting and planning
3.4 Setting up a mechanism for pooling expertise at Union level
3.5 European Innovation Partnership on Active and Healthy Ageing
3.6 Implementation of Union legislation in the field of medical devices, medicinal products and cross-border healthcare
3.7 Health information and knowledge system including support to the Scientific Committees set up in accordance with Commission Decision 2008/721/EC
Objective 4: Facilitate access to better and safer healthcare for Union citizens
4.1 European Reference Networks
4.2 Rare diseases

4.3 Patient safety and quality of healthcare
4.4 Measures to prevent antimicrobial resistance and control healthcare-associated infections
4.5 Implementation of Union legislation in the fields of tissues and cells, blood, organs
4.6 Health information and knowledge system to contribute to evidence-based decision-making

Source: *https://ec.europa.eu/health/sites/health/files/programme/docs/factsheet_healthprogramme2014_2020_en.pdf*

3 INVENTORY OF QUANTIFIED TARGETS SET IN BELGIUM, BY SOURCE

In this section we summarise some example cases where visions, action plans, covenants, etc. in Belgium include a quantified target statement that meets the definition used in this report.

3.1 Strategic federal long term vision for sustainable development

In 2013 the federal government approved a set of ambitions formulated in a federal long term vision on sustainable development. The goals are linked to federal competencies like poverty, health, mobility, energy, climate change, consumption and production, finances and development aid. The goals for health are include a quantified target on the decrease of health inequality with regard to education level and sex. The complete vision on health is formulated as follows:

- "*In 2050… De volksgezondheid is verbeterd en zal op een hoog niveau gehandhaafd worden.* ***De levensverwachting in goede gezondheid zal gestegen zijn ten opzichte van 2010. Het verschil tussen de levensverwachting in goede gezondheid naargelang van het opleidingsniveau en naargelang het geslacht zal met gemiddeld 50% verlaagd worden.***

  Kwaliteitsvolle gezondheidszorg zal toegankelijk zijn voor iedereen en in het bijzonder voor kwetsbare groepen (mensen met een handicap, kansarmen, vruchtbare en zwangere vrouwen en kinderen, enz.).

  Er zal rekening gehouden worden met de gevolgen van milieubederf op de gezondheid. De kennis en het toezichtsysteem zal worden ontwikkeld om het inzicht in de rechtstreekse verbanden qua oorzaak en gevolg tussen het milieu en de gezondheid te verbeteren, met inbegrip van opkomende risico's die bijvoorbeeld verbonden zijn aan de klimaatveranderingen, aan de invoering van nieuwe producten of aan combinaties van vervuilende stoffen.

De morbiditeit/mortaliteit door chronische ziekten zal teruggebracht zijn."

- "*En 2050… La santé publique a été améliorée et elle sera maintenue à un niveau élevé.* ***L'espérance de vie en bonne santé aura augmenté par rapport à 2010. L'écart entre l'espérance de vie en bonne santé selon les niveaux d'éducation et selon le genre sera réduit en moyenne de 50 %.***

  Les soins de santé de qualité seront accessibles à tous et en particulier pour les groupes vulnérables (personnes avec un handicap, populations précarisées, femmes en âge de procréer et enceintes et enfants etc.).

  Les effets des dégradations environnementales sur la santé seront pris en compte. Les connaissances et le système de veille seront développés pour affiner la compréhension des liens directs de cause à effet et entre l'environnement et la santé, en ce compris les risques émergents liés par exemple aux changements climatiques, à l'introduction de nouveaux produits ou aux combinaisons de polluants.

  La morbidité/mortalité liée aux maladies chroniques sera réduite." [29]

3.2 Recent federal ministerial action plans and covenants

3.2.1 Anti-tobacco plan of the federal government

In 2016, the federal government agreed on an anti-tobacco plan. The plan consists of a quantified target:

- The number of adult smokers **must decrease by 10%** by 2018 compared to the last Health Information Survey (data of 2013). This means below 17 percent smokers by 2018. (According to the prognoses of the WIV – ISP, this percentage would be reached by 2020.)

Other measures part of the plan are to

- reduce the demand by increasing taxes on tobacco
- limit the supply by imposing more stringent rules on tobacco products (e.g. no online sales; EU rules on additives and maximum tar, nicotine and carbon monoxide yields) and by introducing neutral packaging of tobacco products
- improve accessibility for treatments for smoking cessation (increased reimbursement of smoking medication)
- protection against passive smoking (prohibiting smoking in the car with children, strengthening tobacco inspections).[30]

3.2.2 Covenant of Minister of Health with food industry

The covenant "balanced nutrition", signed in 2016 between the Minister of Health and the food industry, aims to decrease the number of calories consumed by the Belgian consumer by on average **5 percent** by the end of 2017, compared to 2012 and to optimise nutritional composition of food products in general.

Subtargets are set to reduce the sugar and fat content of food products in shops, restaurant chains and catering companies.

The following targets are set:

- Soda drinks: **- 5%** average sugar content by end 2017; -10% by 2020
- Dairy products: **-3%** added sugars by end 2017; -8% by 2020
- Breakfast cereals: **-4%** sugars, +5% fibres, +8,5% whole grain
- Chocolate products: **-2,5%** saturated fat
- Soya and vegetable drinks: **-4%** sugars
- Biscuits: **-3%** saturated fat
- Margarines, ice cream, sugar, chocolate and biscuits, bakery products, potato products, snacks and nuts: diverse initiatives on product composition, portion size or awareness campaigns for consumers
- Sauces, nectars, processed meat and prepared meals: further commitments to be developed in work groups.[22]

3.3 Recent interministerial action plans

3.3.1 Protocol agreement on measles and rubella

In 2016 the action plan on the eradication of measles and rubella was renewed at the interministerial conference for the period 2016-2020. The agreement includes the following quantified targets:

- Vaccination level of MBR1 en MBR2 **95%** in the three regions
- Eradication (**0 incidence**) of measles and rubella. [31]

3.4 BABCOC (FOD VVVL)

In its policy note 2014-2016, the Belgian Antibiotic Policy Coordination Committee included the following targets on the use of antibiotics:

- For hospitals:
  - choice of therapeutic antibiotic conform local guidelines in minimum **90%** of cases;
  - indication for antibiotic therapy indicated in medical file in minimum **90%** of cases;
  - choice of antibiotic in surgical prophylaxis conform local guideline in minimum **90%** of cases;
  - duration of surgical antibiotic prophylaxis conform local guideline in minimum **90%** of cases;
- For ambulatory care:
  - A decrease of total antibiotic consumption from more than 800 prescriptions per 1000 inhabitants per year to **600 prescriptions** by 2020 and to 400 prescriptions by 2025;
  - A decrease in use of quinolones from about 10% of the total antibiotic use to **5%** by 2018;
  - An increase in the proportion amoxicillin versus amoxicillin/clavulanic acid from about 50/50 to **80/20** by 2018.
- For veterinary medicine (strategic plan AMCRA 2020 is undersigned by WG Veterinary medicine of BAPCOC):
  - **- 50%** antibiotic use by 2020;
  - **- 75%** of the most critical important antibiotics by 2020;
  - **- 50%** medicated feeding stuff with antibiotics by 2017.[32]

3.5 RIZIV – INAMI

3.5.1 NRKP – CNPQ Feedback on prescriptions in first line (2015)

The aim of the NRKP – CNPQ at RIZIV – INAMI is to promote quality of healthcare and to take initiatives accordingly. The NRKP – CNPQ consists of representatives of physicians, universities/scientific organisations, sickness funds, and the Minister of Social Affairs and Public Health. The NRKP – CNPQ provides recommendations on good medical practice and provides individual feedback on prescribing behaviour to all physicians (GPs and specialists). On the RIZIV – INAMI website, results are published per local quality evaluation groups (LOK-GLEM).

For prescriptions in first line, recommendations and targets, as published in 2015, concern the following five therapeutic classes:

- Cardiovascular drugs, especially secundary prevention
- Proton pump inhibitors
- NSAIDs in elderly
- Drugs for the nervous system: antidepressants and antipsychotics
- Antibiotics

Some of the core messages in the recommendations are the following:

- Avoid unnecessary and potentially dangerous polymedication in elderly
- Amoxicillin is the first choice antibiotic
- Advise against preventive cardiovascular treatments when there is no cardiovascular antecedent or high cardiovascular risk.

The recommendations are largely based on recommendations from BAPCOC on antibiotics and presented choices in the WZC-Formularium 2014 published by Farmaka, and completed with literature STOPP and START.

The list with quantified targets meeting the definition in this project, is as follows:

- Flu vaccination
  - **15%** increase in median of the comparison group: % patients 65+ vaccinated for flu: from 58.9% to **67.7%**
- Antibiotics:
  - % patients 15+ with minimum one antibiotic prescription in the year: **10%** decrease in median of the comparison group (from 51.8 naar **46.6%**)
  - % prescriptions for amoxicillin, not combined with clavulanic acid (patients 15+): **10%** increase in median of the comparison group (from 47.3% to **52%**).
  - % DDD (macrolides + quinolones + amoxicillin combined with clavulanic acid + cephalosporin) / DDD antibiotics. **20%** decrease in median of the comparison group (from 53.6% to **42.9%**)
- Cardiovasvular:
  - % patients with angor (nitrates) treated with antiplatelet medicinal products: **10%** increase in median of the comparison group (from 69.2% to **76.1%**)
  - % patients treated with sartans, whilst drugs are prescribed working on Renin–angiotensin system: **20%** decrease in median of the comparison group (from 40% to **32%**)
- Diabetes:
  - Prescription of ACE-inhibitor in diabetics (patients 50+): **10%** increase in prescriptions (ACE-inhibitors are recommended, not sartans) (from 36.7% to **40.4%**)
  - Prescription of statins in diabetics (male patients between 50 and 79 yrs or female between 55 and 79 yrs): **10%** increase (from 63.2% to **69.5%**)

Besides these quantified targets, other desired trends are expressed (increase or decrease) for PPIs, NSAIDs, Statins, antidepressants and antipsychotics, chronic use of drugs and polymedication in elderly.[14]

3.5.2 Medical imaging

In 2009 a task force on medical imaging published quantified targets for consumption of medical imaging. The proposals aim at a reduction of 25% in theoretical exposure risk to ionising radiation, on the basis of a more rational use of diagnostic examinations. The proposals target examinations in ambulatory care for which discordance is observed with guidelines, for which higher consumption is observed compared to other countries and for which considerable variations in use exist in Belgium. The quantified targets are expressed per type of examination and per province. The quantified goals are to decrease the consumption percentage to that of the least consuming province.[33]

3.5.3 Cheap medicines

Since 2006, minimum percentages of low cost prescriptions (quotas) are imposed to physicians and dentists. Low cost prescriptions included in the quotas are:

- original drugs for which the reimbursement basis has been diminished because a generic alternative exists, and which have lowered their public retail price to the reimbursement basis (so that there is no reference supplement to be paid)
- generic drugs and copies
- drugs prescribed under the International Common Denomination (ICD or INN: International Non-proprietary Name), even if there is no generic alternative.

Quotas are set per specialty. Physicians receive individual feedback on this.[34]

3.5.4 Haemodialysis

In 2016 a new convention for haemodialysis came in force. The convention includes a quantified target on the proportion of patients (40%) treated by alternative forms of dialysis, to be reached by end 2017 for all hospitals signing the convention. The quantified target in this case is set at the level of the hospital as a condition to take part in a convention.

3.5.5 Breast reconstruction

Since 2016, hospitals that sign the agreement on breast reconstruction with RIZIV – INAMI have to guarantee, amongst other,

- A complete ban of so-called “esthetic supplements”
- A maximum supplement of 100% in one-person rooms
- That minimum 40% of patients are hospitalised in a two-person room, in which case no supplements can be billed (neither normal supplements nor “esthetic supplements”)

On these conditions increased reimbursement is provided.

The quantified target in this case is set at the hospital level, as a condition to meet an agreement with RIZIV – INAMI to increase reimbursement, to increase cost transparency and better guarantee quality of care.[35]

3.5.6 Action plan e-health

The national agreement between physicians and sickness funds includes a premium for general practitioners with the aim to stimulate the use of e-health services. The agreement does not set targets at national level, put provides extra financing for general practitioners who meet a number of the following 6 parameters:

- recip-e,
- aanvragen hoofdstuk IV,
- elektronische facturatie,
- informed consent,
- opladen sumehr,
- elektronisch beheer GMD.[35]

3.5.7 Dental care

A number of targets have been formulated in the draft agreement on dental care for 2017-2018. (The agreement however was not signed end 2016 but there was large support for the targets).

- *a. “Toename van het aantal rechthebbenden dat beroep doet op tandheelkundige zorg in de loop van een kalenderjaar:*
  - *i. in het aantal contacten met een tandarts tijdens die periode;*
  - *ii. in het aantal preventieve contacten met een tandarts tijdens die periode;*
- *b verbetering mondgezondheid bij jongeren (14-24j) en jong volwassenen (25-34j);*
- *c. afname van het aantal edentate ouderen van >65j;*
- *d. een substantieel aantal patiënten verzorgd aan conventietarieven;*
- *e. toename van verzorging aan conventietarieven*
- *f. toename van de elektronische gegevensdeling met zorgverleners en elektronische facturatie;*
- *g. afstemming van het lokale zorgaanbod (tandartsen en hulpkrachten in de tandartspraktijken) op de zorgnood.”*

(Source: internal communication from RIZIV – INAMI)

3.5.8 Medicomut measures with targeted budgetary impact

The budgetary measures agreed by representatives of physicians and insurers at the RIZIV – INAMI Medicomut were considered out-of-scope for this project.

3.6 WIV – ISP

WIV – ISP is mainly active in five domains:

- Environmental effects on health:
  - Monitoring detected toxicological or health risks, biosafety, indoor pollution, electromagnetic radiation, allergenic pollens and fungal spores, …
- Nutrition:
  - Mainly collaborating with Federal Agency for the Safety of the Food Chain (FASFC) for microbiology, GMOs, contaminants and residues in food, materials in contact with food, …
- Surveillance of health
  - Nationwide field surveys providing information on public health, medicine consumption, food habits and general well-being
  - Identification and monitoring of diseases, especially infectious diseases, coordinating an extensive network of laboratories, centres and platforms which microbiologically and epidemiologically monitor these diseases
- Healthcare evaluation
  - Conducting a national health survey allowing to estimate the prevalence and distribution of health indicators and to analyse social inequalities in access to care
  - Coordinating databases dedicated to patients suffering from, for example, cystic fibrosis, neuromuscular diseases or addiction
  - Hosting the Cancer Centre, which assesses Belgium's cancer policy and formulates new measures for the Cancer Plan
  - …
- Quality and effectiveness of vaccines, medicines and medical laboratories
  - Being the national reference laboratory for quality control of registered medicines and pharmaceutical preparations for the Federal Agency for Medicines and Health Products (FAMHP)
  - Evaluating and controlling the quality of vaccines and blood derived products prior to distribution
  - …

In this context, WIV – ISP produces and monitors many indicators:

- Gezondheidsenquête-Enquête de Santé
- Food consumption survey
- Quality indicators for hospital hygiene
- le SPAM, comprend beaucoup d'indicateurs de mortalité, espérance de vie et espérance de vie en bonne santé
- surveillance of infectious diseases
- vaccination coverage
- surveillance of « food-borne diseases »
- surveillance of treatment requests for drug abuse or alcohol dependence as part of the Belgian Treatment Demand Indicator Register

In some cases quantified targets are set, e.g. in the Action plan 2016-2020 of the "Comité voor de Eliminatie van Mazelen en Rubella in België"-"Comité pour l'Elimination de la Rougeole et la Rubéole en Belgique".

3.7 HGR-CSS

HGR-CSS produces scientific recommendations on amongst other:

Vaccination

- Polio
  - HGR-CSS Advies 9208 A - Vaccinatie van kinderen en adolescenten tegen poliomyelitis (2016)
  - HGR-CSS Advies 9208 B - Vaccinatie van volwassenen tegen poliomyelitis (2016)
- DTP
  - HGR-CSS Advies 8807 - Vaccinatie difterie, tetanus en kinkhoest - kinderen (2013)
- Influenza
  - HGR-CSS Advies 9367 - Vaccinatie griep Winterseizoen 2016 - 2017
- MBR
  - HGR-CSS Advies 8811 - Vaccinatie MBR - kinderen en adolescenten (2013)
- Pneumococcal vaccine
  - HGR-CSS Advies 9210 - Vaccinatie tegen pneumokokken - volwassenen (2014)
  - HGR-CSS Advies 8813 - Vaccinatie pneumokokken kinderen (2015)
- HPV
  - HGR-CSS Advies 8367 (2007)
- Hepatite
  - HGR-CSS Advies 8815 - Vaccinatie volwassenen hepatitis A (2013)
  - HGR-CSS Advies 8816 - Vaccinatie volwassenen hepatitis B (2013)
  - HGR-CSS Advies 8809 - Vaccinatie tegen hepatitis B - kinderen en adolescenten (2013)

Food

In 2016, HGR-CSS produced its 6th report with food recommendations for the Belgian population. For each nutrient, the report comprises guidelines, scientific recommendations on the Recommended Daily Intake (RDI) and the maximum daily intake. The food recommendations compose fundamental guidelines on which food advice should be based.

Some highlights from the report include:

- for the recommended calory uptake, distinction is made with regard to six activity categories (inactive, sedentary or limited acitivty, moderately active, active, very active, extremely active).
- for the recommendations on fats, distinction is made between the different types of fats: industrial transfats that should be avoided as much as possible, versus omega-6 and omega-3 fats which have to be consumed in sufficient quantities.
- recommendations are made on less sugar, and on the preference for whole grain products, pulses, potatoes, vegetables and fruit as main sources of carbohydrates.

Further recommendations are made on calcium, salt, and many other nutrients.

Exposure limits on chemical and physical environment risk factors

HGR-CSS formulates recommendations with regard to exposure limits, e.g. for noise: "*Richtlijnen voor blootstelling aan geluid overdag en 's nachts om ernstige hinder en (zelf-gerapporteerde) slaapverstoring te vermijden: Geluidsniveaus van minder dan 45 dB(A) overdag en 40 dB(A) 's nachts.*"

3.8 KCE

The Belgian Healthcare Knowledge centre mainly formulates scientific recommendations based on

- Health Technology Assessment (HTA)
- Health System Research (HSR): recommendations on the organisation of the health system
- Good Clinical Practice (GCP).

In HTA reports, KCE investigates whether a new technology or drug brings a therapeutic added value and whether it is value-for-money from the perspective of the healthcare payer. As such, KCE formulates an answer to the question "for which patient populations and indications and at what price the new technolgoy or drug is cost-effective?". Other aspects may be investigated as part of the HTA, like organisational, ethical, legal and budgetary aspects. Many HTA recommendations are formulated descriptively (not quantified) as process objectives (e.g. adapt the reimbursement criteria for certain therapies, explore ways to obtain price reduction, install initiatives for quality assurance, …). In some cases, recommendations on health service delivery are quantified:

- E.g. "*If PCV13 is administered, it should be followed by PPV23 (after at least 8 weeks) to protect against additional serotypes.*" (KCE report 274 on pneumococcal vaccines in elderly) This could be translated into: "**100%** of patients administerd PCV13 should be given PPV23 afterwards."

In HSR studies, KCE formulates recommendations on the organisation of the health system. In some HSR reports, KCE included recommendations with quantified targets at national level:

- E.g. Towards an inclusive trauma system for major trauma (KCE report 281): "*On the basis of international benchmarks and of estimates of major trauma incidence in our country, the maximum number of Major Trauma Centres (MTCs) in Belgium should be **between four and seven**.*"
- E.g. Quantified targets are expected from an ongoing study: Study 2015-11 (HSR) Reorientation of the role of hospitals in the healthcare landscape. The aim of this study is to assess the future need for acute care beds in hospitals on the basis of demographic trends and other factors known to affect acute care by changing the likelihood of admission to an acute-care bed or the length of stay. Second, the geographic spread of standard and specialised hospital care will be determined on the basis of population needs and available/necessary alternatives. Third, parameters for the configuration of hospital networks will be analysed.

GCP reports render recommendations for healthcare providers. In these reports, quantified recommendations are mainly formulated at patient level:

- E.g. "***All** patients under the age of 60 years with >10 adenomas cumulatively, should be referred for genetic counseling*."

In the domain of vaccination, KCE published a.o. the following reports:

- Influenza
  - KCE report 162 on priority target groups (2011)
  - KCE report 204 on childhood vaccination (2013)
- Pneumococcal vaccine
  - KCE report 274 on the cost-effectiveness of pneumococcal vaccines in the elderly (2016)
- Hepatite
  - KCE report 173 on screening and prevention of hepatite C (2012)

3.9 Vlaams Indicatorenproject voor Patiënten en Professionals (VIP²)

The Flemish Indicator Project for Patients and Professionsals is a collaboration of the Flemish government (Agentschap Zorg en Gezondheid), the Flemish Association of Chief Physicians (Vlaamse Vereniging van Hoofdgeneesheren) and the hospitals association Zorgnet-Icuro. By measuring quality of care in Flemish hospitals and publishing the results, the Flemish government and the sector aim to bring transparency on quality of care in hospitals and to improve quality of care. Hospitals can freely choose if and which indicators they measure. Results are published, upon approval of the hospital, on the website www.zorgkwaliteit.be. For most indicators, targets have been determined by experts participating in the project. Based on the benchmarking results, hospitals can further set their own targets internally with physicians and staff.

The following quantified targets were identified:

- Quality-of-care: appropriateness of care

Target
Breast cancer diagnosis
Bepaling soort kanker: Procent van de patiënten met borstkanker waarvoor de hormoongevoeligheid en/of HER2-status werd bepaald vóór het starten met chemotherapie, hormonale therapie of een behandeling met trastuzumab: streefwaarde: ***90-100%***
Weefseldiagnose: Procent van de patiënten met borstkanker waarvoor celonderzoek en/of weefselonderzoek van de tumor werd uitgevoerd vóór een borstoperatie: streefwaarde: ***80-100%***
Mammografie of borstechografie binnen 3 maanden: procent van de patiënten waarvoor in een vroeg stadium (cStadium I, II of III) van borstkanker een mammografie en/of een borstechografie werd uitgevoerd binnen de 3 maanden vóór een borstoperatie: streefwaarde: ***90-100%***
Breast cancer treatment
Borstsparende ingreep: procent van de patiënten met borstkanker in een vroeg stadium (cStadium I en II) kreeg een borstsparende ingreep (= tumorectomie): streefwaarde: ***50-80%***
Radiotherapie na borstsparende ingreep: procent van de patiënten dat radiotherapie (=bestraling) kreeg na een borstsparende operatie (= tumorectomie): streefwaarde: ***90-100%***
Chemo- of hormonale therapie bij patiënten met uitgezaaide borstkanker: procent van de patiënten met een uitgezaaide borstkanker dat chemo- of hormonale therapie kreeg: streefwaarde: ***80-100%***

- Quality-of-care: safety of care

Target
Hand hygiene in hospitals
Handhygiëne: procent van de zorgverleners dat voldoet aan de basisvereisten voor een goede handhygiëne: streefwaarde: ***100%***
Medication safety in hospitals
Voorschrift van geneesmiddelen is volledig: procent van de geneesmiddelenvoorschriftlijnen dat volledig is. Bevatten alle geneesmiddelen genoteerd op het voorschrift alle informatie om een correcte aflevering en toediening mogelijk te maken? Streefwaarde: ***90-100%***
Patient identification in hospitals
Procent van de gecontroleerde patiënten dat een identificatie-armbandje draagt met alle vereiste én correcte gegevens erop: streefwaarde: ***90-100%***
Surgical safety
Checklijst "veilige heelkunde" 1: hoeveel procent van de 22 uit te voeren controles werden daadwerkelijk uitgevoerd voor, tijdens en na een chirurgische ingreep? Streefwaarde: ***90-100%***
Checklijst "veilige heelkunde" 2: Hoeveel procent van de voorziene controles werden daadwerkelijk uitgevoerd voor, tijdens en na een chirurgische ingreep? Streefwaarde: ***90-100%***

- Quality-of-care: continuity of care

Target
Coordination in hospital care
Multidisciplinair overleg over de patiënt: procent van de patiënten die besproken werden tijdens een overleg van specialisten uit verschillende disciplines: streefwaarde: ***90-100%***

- Quality-of-care: patient centeredness of care

Target
Patient information in hospital care
Staat op de website van het ziekenhuis patiëntgerichte informatie? Aan hoeveel procent van de criteria voor patiëntgerichte informatie voldoet de ziekenhuiswebsite? Patiëntgerichte informatie is informatie die relevant en gemakkelijk vindbaar is voor patiënten. Streefwaarde: ***76-100%***
Patient experiences with hospital care
In welke mate zou je dit ziekenhuis aanbevelen? Hoeveel procent van de patiënten zou het ziekenhuis "zeker wel" aanbevelen bij familie of vrienden? De patiënten krijgen de keuze tussen: zeker niet, waarschijnlijk niet, waarschijnlijk wel, zeker wel. Streefwaarde: ***70-100%***
Welk cijfer geef je aan dit ziekenhuis? Hoeveel procent van de patiënten gaf 9/10 of 10/10 aan dit ziekenhuis? De patiënten kunnen een score van 0/10 tot 10/10 aanduiden. Streefwaarde: ***70-100%***

Additionally, indicators in the following domains are under development:

- Mother and child
  - Caesarian sections (validation phase)
  - Breastfeeding at hospital discharge (validation phase)
  - Hospitalisation of newborns in N* and NIC (validation phase)
  - Rehospitalisation in E-service (validation phase)
  - Child abuse (development phase)
- Orthopedics
  - Length of stay (validation phase)
  - Timeliness of care (validation phase)
  - Revision (development phase)
- Cardiology
  - Mortality (on-hold)
  - Use of ACEI inhibors or ARB therapy (on-hold)
  - Secondary prevention of cardiovascular events: use of aspirin (on-hold)
  - Secondary prevention of cardiovascular events: use of beta blockers (on-hold)
- Prostate cancer (under development)
- Stroke care - acute care
  - Thrombolysis (processing phase)
  - Antibiotics (processing phase)
  - Anticoagulants in atrial fibrillation (processing phase)
  - Door-to-needle time (processing phase)
- Incidence of MRSA – sepsis (processing phase)
- Unplanned rehospitalisation (processing phase)

3.10 Minister of Health Flanders

In order to set priorities within preventive healthcare policy, the Flemish government (Vlaams Agentschap Zorg en Gezondheid) has set a range of health targets. Currently three target programmes are running:

- Vaccination
- Cancer screening
- Suicide

The targets set are listed below.

The previous target programmes on "nutrition and physical activity" and "tobacco, alcohol and drugs" are currently being renewed in the context of the strategic plan "*De Vlaming leeft gezonder in 2025*".

Vaccination

- Influenza vaccination by 2020:
  - *Minstens 50% van de zwangere vrouwen*
  - *Minstens 50% van de risicogroepen voor complicaties van griep jonger dan 65 jaar is jaarlijks gevaccineerd*
  - *75% bij 65-plussers*
  - *80% van het gezondheidspersoneel*
- DTP vaccination by 2020:
  - WIV – ISP

Cancer screening

- 75% coverage for breast cancer screening programme in Flanders, in target population, by 2020
- 65% coverage for cervix cancer screening programme in Flanders, in target population, by 2020
- 60% coverage for colon cancer screening programme in Flanders, in target population, by 2020
- Targeted maximum time between breast cancer screening test and communication of result : 14 calendar days

Suicide

- *Het aantal suïcides in Vlaanderen is in 2020 met 20% gedaald ten opzichte van het jaar 2000*

4 EXAMPLES ABROAD AND INLAND

4.1 US healthy People 2020

Website

https://www.healthypeople.gov/

Time horizon

Targets are developed every 10 year.

Previous versions:

- 1979 Surgeon General's Report: Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention
- Healthy People 1990: Promoting Health/Preventing Disease: Objectives for the Nation
- Healthy People 2000: National Health Promotion and Disease Prevention Objectives
- Healthy People 2010: Objectives for Improving Health

Currently running:

- Healthy People 2020

Under development:

- Healthy People 2030

Vision, mission and overarching goals

Vision: A society in which all people live long, healthy lives.

Mission - Healthy People 2020 strives to:

- Identify nationwide health improvement priorities;
- Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress;

- Provide measurable objectives and goals that are applicable at the national, state, and local levels;
- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge;
- Identify critical research, evaluation, and data collection needs.

Overarching Goals:

- Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death.
- Achieve health equity, eliminate disparities, and improve the health of all groups.
- Create social and physical environments that promote good health for all.
- Promote quality of life, healthy development, and healthy behaviors across all life stages.

The selection of leading health indicators is intended to motivate action at the national, State, and local levels, as well as among individuals, families, and communities.

Stakeholder consultation

Healthy People 2020 is the result of a multiyear process that reflects input from a diverse group of individuals and organizations. Draft objectives are prepared by experts from Lead Federal Agencies. Proposed objectives are consequently made available for public comment and reviewed by the Federal Interagency Workgroup. In this extensive stakeholder feedback process, input from a consortium of more than 2 000 organizations and the public are integrated.

Target-setting methods

- Default method: 10 percent improvement over baseline
- Preferred method: modeling/projection or on scientific basis
- Alternative target formulations: consistency with national programs/regulations/policies/laws; total elimination or coverage; other.[36]

Downwards coordination with the States/Territories

One coordinator is appointed for each State/Territory. This coordinator is a liaison with the national initiative and ensures the State or Territory's plan is in line with the Healthy People initiative.

Health in all policies approach

The Federal Interagency Workgroup, leading the effort, includes representatives from

- U.S. Department of Health
- Human Service agencies and offices
- U.S. Department of Agriculture
- U.S. Department of Education
- U.S. Department of Housing and Urban Development
- U.S. Department of Interior
- U.S. Department of Justice
- U.S. Department of Transportation
- U.S. Department of Veterans Affairs
- U.S. Environmental Protection Agency

Overview of targets

More than 1 200 targets have been developed in 42 Topic area workgroups. The following table shows the topics for which targets have been set. Underlined topics are Leading Health Indicator topics.

Pathology related topics	Population topics	Health promotion and risk factors	Transversal topics
Arthritis, Osteoporosis, and Chronic Back Conditions	Older Adults	Nutrition and Weight Status	Clinical Preventive Services
Blood Disorders and Blood Safety	Adolescent Health	Physical Activity	Social Determinants of Health
Cancer	Early and Middle Childhood	Substance Abuse	Access to Health Services
Genomics	Lesbian, Gay, Bisexual, and Transgender Health New	Tobacco Use	Public Health Infrastructure
Chronic Kidney Disease	Maternal, Infant, and Child Health	Occupational Safety and Health	Educational and Community-Based Programs
Dementias, Including Alzheimer's Disease	Disability and Health	Environmental Health	Health Communication and Health Information Technology
Diabetes		Injury and Violence Prevention	Health-Related Quality of Life & Well-Being
Hearing and Other Sensory or Communication Disorders		Food Safety	Preparedness (for major health incidents)
Heart Disease and Stroke		Medical Product Safety	Global Health (e.g. Ebola virus outbreak)
HIV		Healthcare-Associated Infections	
Immunization and Infectious Diseases			
Mental Health and Mental Disorders			
Oral Health			
Respiratory Diseases			
Reproductive and sexual health			
Sexually Transmitted Diseases			
Sleep Health New			
Vision			
Family Planning			

For each of the topics, targets have been set. Many targets focus on interventions that are designed to

- Reduce or eliminate illness, disability, and premature death among individuals and communities.

Others focus on broader issues such as:

- Eliminating health disparities
- Addressing social determinants of health
- Improving access to quality health care
- Strengthening public health services
- Improving the availability and dissemination of health-related information

In some cases, reduction of associated economic cost may also be a subtarget (like e.g. for nephrology)

4.2 France

4.2.1 "100 Objectifs de Santé"

Time horizon

Targets annexed to the Public Health Law in 2004

Time horizon: 2008

Target-setting process

In 2004, the national technical group of health targets setting ("Groupe Technique National de Définition des Objectifs" (GTNDO)), composed by more than 100 experts from health information institutions and medical domains, was created to define health targets in France. A list of 100 health targets (see Table 4) and 5 national plans was incorporated into the Public Health Act of 2004 ("Loi de santé publique de 2004").

First, the GTNDO drew up a statement of the main health problems, pathologies and health determinants in France[37]. The list composed of 70 health problems was built on the basis of several analysis of the High Council for Public Health ("Haut Conseil de Santé Publique" (HCSP)) and WHO reports on diseases and risks factors. This step tries to identify what could be the public health priorities and the preventable problems. For each problem, a synthesis was written underlining the importance of the problem in term of mortality and morbidity. They established targets to be achieved within 5 year and they specified indicators, already available or recommended, to monitor every problems over time. Finally, they also described measures to be taken in order to improve the French situation.

Then, in 2005, the Directorate for Research, Studies, Evaluation and Statistics ("Direction de la recherche, des études, de l'évaluation et des statistiques" (DRESS)) was mandated to identify associated indicators for each targets[38]. Indicators was chosen on the basis of specific criteria, such as availability of data (rapidly available and detailed data by region and by socio-demographic level) and comparability with European countries. Every year, DRESS describes health status of French population through health indicators in order to assess the impact of health problems.

In 2010, the High Council for Public Health has made an evaluation of health objectives established in 2004 and recommendations for new targets[39]. Among the 100 targets only half could be evaluated due to undefined indicators or a lack of available data. First, they determine if the targets were evaluable (e.g. quantified target with indicators) or not (e.g. non-quantified targets or quantified targets without available indicators). Then, the HCSP determine the level of reaching the objective and the degree of achievement (fully achieved, partially achieved and not achieved). Finally, they try to detect which specific actions had a real impact to reach an objective. Generally, the evolution of indicators could not be assigned to a specific policy but to a combination of policies.

The establishment of health targets in France significantly increase the coordination between the main health information institutions and help them to develop better coordination of national and regional projects. This project has contributed to identify the major areas of action to be taken for policy makers and has improved health in France. This has emphasized the need of complete information system to define a public health policy[40]. Considering the evolution of information system and the improvement of dataset, a revision of indicators have been made in 2014[41]. A proposal for indicators was made insisting more on premature mortality and on the importance of regional comparison. To reduce health inequalities, health policies should be adapted to local specificities. Finally, the limits of health targets in France was to have an incomplete list of objectives and do not get public health priorities[42]. The High Council for Public Health considered public health priorities as a political choice and not within their competencies[43].

Target-setting method

The methodology used to define health objectives is very systematic. France uses the average of the European countries of the respective indicator as point of reference. If in the year 2000, France was among the last European countries, the established target was to reach European average by 2008. In the case of France was among the first European countries, the established target was to maintain the same level by 2008 (taking into account demographic changes). If no European comparison was possible, the established target was the most ambitious level:

- *Si, en 2000, la France était l'un des plus mauvais pays européens, l'objectif a été choisi pour que la France se situe dans la moyenne en 2008 (et non parmi les meilleurs, compte tenu des délais);*
- *Si, en 2000, la France était l'un des meilleurs pays européens, l'objectif visait à être au moins à ce niveau en 2008 (compte tenu de l'évolution démographique). Sans comparaison possible avec les autres pays européens, l'objectif retenu est le niveau le plus ambitieux sur 5 ans.*

Table 4 – Inventory of 100 health targets formulated by France

100 objectifs de santé
Alcool, tabac, toxicomanie
1. Diminuer la consommation annuelle moyenne d'alcool par habitant de 20% : passer de 10,7 l/an/hbt en 1999 à 8,5 l/an/hbt d'ici à 2008.
2. Réduire la prévalence de l'usage à risque ou nocif de l'alcool et prévenir l'installation de la dépendance.
3. Abaisser la prévalence du tabagisme (fumeurs quotidiens) de 33 à 25% chez les hommes et de 26 à 20% chez les femmes d'ici 2008 (en visant en particulier les jeunes et les catégories sociales à forte prévalence).
4. Réduire le tabagisme passif dans les établissements scolaires (disparition totale), les lieux de loisirs et l'environnement professionnel.
Nutrition – activité physique
5. Obésité : réduire de 20% la prévalence du surpoids et de l'obésité (IMC>25kg/m²) chez les adultes : passer de 10% en 2000 à 8% en 2008 (objectif PNNS(1)).
6. Déficience en iode : réduire la fréquence des goîtres : passer de 11,3% chez les hommes et 14,4% chez les femmes actuellement à 8,5% et 10,8% d'ici à 2008.
7. Carence en fer : diminuer la prévalence de l'anémie ferriprive : passer de 4% des femmes en âge de procréer à 3%, de 4,2% des enfants de 6 mois à 2 ans à 3% et de 2% des enfants de 2 à 4 ans à 1,5%.
8. Rachitisme carentiel, carence en vitamine D : disparition du rachitisme carentiel.
9. Sédentarité et inactivité physique : augmenter de 25% la proportion de personnes, tous âges confondus, faisant par jour, l'équivalent d'au moins 30 minutes d'activité physique d'intensité modérée, au moins cinq fois par semaine : passer de 60% pour les hommes et 40% pour les femmes actuellement, à 75% pour les hommes et 50% pour les femmes d'ici à 2008.
10. Faible consommation de fruits et légumes: diminuer d'au moins 25% la prévalence des petits consommateurs de fruits et légumes : passer d'une prévalence de l'ordre de 60% en 2000 à 45% (objectif PNNS).
11. Déficience en iode : réduire la fréquence de la déficience en iode au niveau de celle des pays qui en ont une maîtrise efficace (Autriche, Grande Bretagne, Pays-Bas, Suisse...).
12. Obésité : interrompre la croissance de la prévalence de l'obésité et du surpoids chez les enfants (objectif PNNS).
13. Folates dans l'alimentation : diminuer l'incidence des anomalies de fermeture du tube neural.
Santé-travail
14. Réduire de 20 % le nombre d'accidents routiers liés au travail
15. Réduire de 20 % le nombre de travailleurs soumis à des contraintes articulaires plus de 20 H par semaine
16. Réduire de 20% le nombre de travailleurs soumis à un niveau de bruit de plus de 85 db plus de 20 H par semaine sans protection auditive
17. Réduire les effets sur la santé des travailleurs des expositions aux agents cancérogènes (cat 1 et 2) par la diminution des niveaux d'exposition
Environnement-santé
18. Habitat : réduire de 50% la prévalence des enfants ayant une plombémie > 100µg/l : passer de 2% en 1999 à 1% en 2008.
19. Bâtiments publics : Réduire l'exposition au radon dans tous les établissements d'enseignement et dans tous les établissements sanitaires et sociaux en dessous de 400 Bq/m3 (valeur guide de l'UE).
20. Réduire l'exposition de la population aux polluants atmosphériques : respecter les valeurs limites européennes 2008 (NOx et particules fines PM10) dans toutes les villes (-20% par rapport à 2002).

21. Réduire l'exposition de la population aux polluants atmosphériques : réduire les rejets atmosphériques : -40% pour les composés organiques volatils (dont le benzène) entre 2002 et 2010 ; réduction d'un facteur 10 pour les émissions de dioxines de l'incinération et de la métallurgie entre 1997 et 2008 ; -50% pour les métaux toxiques entre 2000 et 2008.
22. Qualité de l'eau : Diminuer par deux d'ici 2008 le pourcentage de la population alimentée par une eau de distribution publique dont les limites de qualité ne sont pas respectées en permanence pour les paramètres microbiologiques et les pesticides.
23. Habitat : réduire de 30% la mortalité par intoxication par le monoxyde de carbone.
24. Bruit : réduire les niveaux de bruit entraînant des nuisances sonores quelles que soient leurs sources (trafic, voisinage, musique amplifiée) par rapport aux niveaux mesurés en 2002 par diverses institutions (Ministère de l'Ecologie, INRETS).
25. Qualité de l'eau : réduire de 50% l'incidence des légionelloses.
Iatrogénie
26. Réduire la proportion de séjours hospitaliers au cours desquels survient un évènement iatrogène(3) de 10% à 7% d'ici à 2008.
27. Réduire la fréquence des évènements iatrogènes d'origine médicamenteuse, survenant en ambulatoire et entraînant une hospitalisation, de 130 000 par an à moins de 90 000 d'ici à 2008.
28. Réduire d'1/3 la fréquence des évènements iatrogéniques évitables à l'hôpital et en ambulatoire.
29. Réduire de 30 % les doses annuelles par habitant secondaires à une irradiation médicale à visée diagnostique (1,6mSv/an/hbt en 1986).
30. 100% du parc des appareils diagnostiques utilisant l'émission de radioéléments artificiels conforme aux réglementations en vigueur.
Douleur
31 Prévenir la douleur d'intensité modérée et sévère dans au moins 75% des cas où les moyens techniques actuellement disponibles permettent de le faire, notamment en post-opératoire, pour les patients cancéreux (à tous les stades de la maladie), et lors de la prise en charge diagnostique ou thérapeutique des enfants.
32. Réduire l'intensité et la durée des épisodes douloureux chez les patients présentant des douleurs chroniques rebelles, chez les personnes âgées, et dans les situations de fin de vie.
Accessibilité
33. Réduire les obstacles financiers à l'accès aux soins pour les personnes dont le niveau de revenu est un peu supérieur au seuil ouvrant droit à la CMU.
Inégalité
34. Réduire les inégalités devant la maladie et la mort par une augmentation de l'espérance de vie des groupes confrontés aux situations précaires : l'écart d'espérance de vie à 35 ans est actuellement de 9 ans.
Restrictions d'activité
35. Réduire les restrictions d'activité induites par des limitations fonctionnelles (9,5% des personnes en population générale selon l'enquête HID, Indicateur de Katz).
Maladies infectieuses et vaccination
36. Infection VIH-Sida : réduire l'incidence des cas de sida à 2,4 pour 100 000 en 2008 (actuellement 3,0 pour 100 000).
37. Hépatites : réduire de 30% la mortalité attribuable aux hépatites chroniques : passer de 10-20% à 7-14% des patients ayant une hépatite chronique d'ici à 2008.
38. Tuberculose : stabiliser l'incidence globale de la tuberculose en renforçant la stratégie de lutte sur les groupes et zones à risque (10,8 pour 100 000 actuellement) d'ici à 2008.
39. Grippe : atteindre un taux de couverture vaccinale d'au moins 75% dans tous les groupes à risque : personnes souffrant d'une ALD (actuellement 50%), professionnels de santé (actuellement 21%), personnes âgées de 65 ans et plus (actuellement 65%) d'ici à 2008.

40. Maladies diarrhéiques : diminuer de 20% d'ici 2008 la mortalité attribuable aux maladies infectieuses intestinales chez les enfants de moins de 1 an (actuellement 3,4 pour 100 000) et chez les personnes de plus de 65 ans (actuellement 1,65 pour 100 000 chez les 65-74 ans, 6,8 entre 75 et 84 ans, 25,1 entre 85 et 94 ans, 102,9 au-delà).
41. Réduire l'incidence des gonococcies et de la syphilis dans les populations à risque, la prévalence des chlamydioses et de l'infection à HSV2.
42. Maladies à prévention vaccinale relevant de recommandations de vaccination en population générale : atteindre ou maintenir (selon les maladies) un taux de couverture vaccinale d'au moins 95% aux âges appropriés en 2008 (aujourd'hui de 83 à 98%).
43. Infections sexuellement transmissibles : offrir un dépistage systématique des Chlamydioses à 100% des femmes à risque d'ici à 2008.
Santé de la mère et du jeune enfant
44. Réduire la mortalité maternelle au niveau de la moyenne des pays de l'Union Européenne : passer d'un taux actuel estimé entre 9 et 13 pour 100 000 à un taux de 5 pour 100 000 en 2008.
45. Réduire la mortalité périnatale de 15% (soit 5,5 pour 100 000 au lieu de 6,5) en 2008.
46. Grossesses extra-utérines : diminuer le taux des complications des grossesses extra-utérines responsables d'infertilité.
47. Santé périnatale : réduire la fréquence des situations périnatales à l'origine de handicaps à long terme.
Cancer
48. Cancer du col de l'utérus : poursuivre la baisse de l'incidence de 2,5% par an, notamment par l'atteinte d'un taux de couverture du dépistage de 80% pour les femmes de 25 à 69 ans.
49. Toutes tumeurs malignes : Contribuer à l'amélioration de la survie des patients atteints de tumeurs, notamment en assurant une prise en charge multidisciplinaire et coordonnée pour 100% des patients.
50. Cancer du sein : réduire le pourcentage de cancers à un stade avancé parmi les cancers dépistés chez les femmes, notamment par l'atteinte d'un taux de couverture du dépistage de 80% pour les femmes de 50 à 74 ans.
51. Cancer de la peau-mélanome : améliorer les conditions de détection précoce du mélanome.
52. Cancer de la thyroïde : renforcer la surveillance épidémiologique nationale des cancers thyroïdiens.
53. Cancer colo-rectal : Définir d'ici quatre ans une stratégie nationale de dépistage.
Diabète
54. Diabète : assurer une surveillance conforme aux recommandations de bonne pratique clinique émises par l'ALFEDIAM, l'AFSSAPS et l'ANAES pour 80% des diabétiques en 2008 (actuellement de 16 à 72% selon le type d'examen complémentaire).
55. Diabète : Réduire la fréquence et la gravité des complications du diabète et notamment les complications cardiovasculaires.
Toxicomanie et santé mentale
56. Toxicomanie : dépendance aux opiacés et polytoxicomanies : maintenir l'incidence des séroconversions VIH à la baisse chez les usagers de drogue et amorcer une baisse de l'incidence du VHC.
57. Psychoses délirantes chroniques : diminuer de 10% le nombre de psychotiques chroniques en situation de précarité.
58. Toxicomanie : dépendance aux opiacés et polytoxicomanies : poursuivre l'amélioration de la prise en charge des usagers dépendants des opiacés et des polyconsommateurs.
59. Troubles bipolaires, dépressifs et névrotiques : diminuer de 20% le nombre de personnes présentant des troubles bipolaires, dépressifs ou névrotiques non reconnus.
60. Troubles bipolaires, dépressifs et névrotiques : augmenter de 20% le nombre de personnes souffrant de troubles bipolaires, dépressifs ou névrotiques et anxieux qui sont traitées conformément aux recommandations de bonne pratique clinique.
61. Psychoses délirantes chroniques, troubles bipolaires, troubles dépressifs, troubles névrotiques et anxieux : réduire la marginalisation sociale et la stigmatisation des personnes atteintes de troubles psychiatriques qui sont en elles-mêmes des facteurs d'aggravation.
Neurologie

62. Epilepsie : prévenir les limitations cognitives et leurs conséquences chez les enfants souffrant d'une épilepsie.
63. Maladie d'Alzheimer : limiter la perte d'autonomie des personnes malades et son retentissement sur les proches des patients.
64. Maladie de Parkinson : retarder la survenue des limitations fonctionnelles et des restrictions d'activité sévères chez les personnes atteintes.
65. Sclérose en plaques : pallier les limitations fonctionnelles induites par la maladie.
Limitations fonctionnelles
66. Dépister et traiter conformément aux recommandations en vigueur 80% des affections systémiques induisant des complications ophtalmologiques.
67. Atteintes sensorielles chez l'enfant : dépistage et prise en charge précoces de l'ensemble des atteintes sensorielles de l'enfant.
68. Troubles de la vision : réduire la fréquence des troubles de la vision dans la population adulte et en particulier dans la population âgée, et prévenir les limitations fonctionnelles et restrictions d'activité associées et leurs conséquences.
Maladies cardiovasculaires
69. Obtenir une réduction de 13% de la mortalité associée aux cardiopathies ischémiques chez les hommes et de 10% chez les femmes d'ici à 2008.
70. Hypercholestérolémie : réduire de 5 % la cholestérolémie moyenne (LDL-cholestérol) dans la population adulte dans le cadre d'une prévention globale du risque cardio-vasculaire d'ici à 2008 : actuellement 1,53g/l pour le LDL-cholestérol chez les hommes de 35 à 64 ans (objectif PNNS).
71. Hypertension artérielle : réduire de 5 mm de mercure la pression artérielle systolique moyenne dans la population hypertendue et de 2 mm dans la population normotendue d'ici à 2008.
72. Accidents vasculaires cérébraux : réduire la fréquence et la sévérité des séquelles fonctionnelles associées aux AVC.
73. Insuffisance cardiaque : diminuer la mortalité et la fréquence des décompensations aiguës des personnes atteintes d'insuffisance cardiaque.
Maladies respiratoires
74. Asthme : réduire de 20% la fréquence des crises d'asthme nécessitant une hospitalisation d'ici à 2008 (actuellement 63 000 hospitalisations complètes ou partielles par an).
75. Broncho-pneumopathie chronique obstructive : réduire les limitations fonctionnelles et les restrictions d'activité liées à la BPCO et ses conséquences sur la qualité de vie.
Maladie inflammatoire chronique intestinale
76. Réduire le retentissement des MICI sur la qualité de vie des personnes atteintes, notamment les plus sévèrement atteintes.
Endométriose
77. Endométriose : augmenter la proportion de traitements conservateurs.
Santé femmes
78. Incontinence urinaire et troubles de la statique pelvienne chez la femme : réduire la fréquence et les conséquences de l'incontinence urinaire.
79. Pathologies mammaires bénignes chez la femme : réduire le retentissement des pathologies mammaires bénignes sur la santé et la qualité de vie des femmes.
Néphrologie
80. Stabiliser l'incidence de l'insuffisance rénale chronique terminale d'ici à 2008 (actuellement 112 par million).
81. Réduire le retentissement de l'IRC sur la qualité de vie des personnes atteintes, en particulier celles sous dialyse.
Ostéoporose
82. Ostéoporose : réduire de 10% l'incidence des fractures de l'extrémité supérieure du fémur d'ici à 2008 (actuellement 67,9 pour 10 000 chez les femmes et 26,1 pour 10 000 chez les hommes de 65 ans et plus.)
Limitations fonctionnelles
83. Polyarthrite rhumatoïde : réduire les limitations fonctionnelles et les incapacités induites par la polyarthrite rhumatoïde.
84. Spondylarthropathies : réduire les limitations fonctionnelles et les incapacités induites par les spondylarthropathies.
85. Arthrose : réduire les limitations fonctionnelles et les incapacités induites.

86. Lombalgies : réduire de 20% en population générale la fréquence des lombalgies entraînant une limitation fonctionnelle d'ici 2008.
Qualité de vie
87. Arthrose : améliorer la qualité de vie des personnes atteintes d'arthrose.
88. Réduire la mortalité et améliorer la qualité de vie des personnes atteintes de drépanocytose.
Accès - équité
89. Améliorer l'accès à un dépistage et à un diagnostic anténatal respectueux des personnes.
90. Assurer l'équité pour l'accès au diagnostic, au traitement et à la prise en charge.
Santé bucco-dentaire
91. Réduire de 30% d'ici à 2008 l'indice CAO moyen à l'âge de 6 ans (de 1,7 à 1,2), à l'âge de 12 ans (de 1,94 à 1,4) et chez l'adulte (de 14,6 à 10,2 chez les 35-44 ans et de 23,3 à 16,3 chez les 65-74 ans).
Suicide
92. Suicide : réduire de 20% le nombre des suicides en population générale d'ici à 2008 (passer d'environ 12 000 à moins de 10 000 décès par suicide par an).
Traumatismes
93. Traumatismes non intentionnels dans l'enfance : réduire de 50% la mortalité par accidents de la vie courante des enfants de moins de 14 ans d'ici à 2008.
94. Traumatismes liés à la violence routière : réduire de 50 % le nombre de décès et de séquelles lourdes secondaires à un traumatisme par accident de la circulation d'ici à 2008.
95. Traumatismes intentionnels dans l'enfance : définition d'actions de santé publique efficaces.
Troubles du langage
96. Amélioration du dépistage et de la prise en charge des troubles du langage oral et écrit.
Santé de la reproduction
97. Assurer l'accès à une contraception adaptée, à la contraception d'urgence et à l'IVG dans de bonnes conditions pour toutes les femmes qui décident d'y avoir recours.
Personnes âgées
98. Dénutrition du sujet âgé : réduire de 20% le nombre de personnes âgées de plus de 70 ans dénutries (passer de 350-500 000 personnes dénutries vivant à domicile à 280-400 000 et de 100-200 000 personnes dénutries vivant en institution à 80-160 000 d'ici à 2008).
99. Chutes des personnes âgées : réduire de 25% le nombre de personnes de plus de 65 ans ayant fait une chute dans l'année d'ici à 2008.
100. Consommation médicamenteuse chez le sujet âgé : réduire la fréquence des prescriptions inadaptées chez les personnes âgées.

Source: http://social-sante.gouv.fr/IMG/pdf/Annexe4_-_Scannographie_des_100_objectifs_de_sante_publique.pdf

4.2.2 *"Multiyear contracts for targets and resources" between ARS and hospitals*

Another target-setting programme in France takes place at the level of the hospitals, where targets and resources are negotiated with the "*Agences Régionales de Santé*" (ARS). The "multiyear contracts for targets and resources" ("*contrats pluriannuels d'objectifs et de moyens*") are typically agreed for a period of five years. An example on targets for day-surgery is described in detail in KCE report 282 on "Proposals for a further expansion of day surgery in Belgium". The quantitative targets included in these contracts are not enforced, but the ARS use several incentives, in the form of support programmes, to encourage the hospitals to reach the assigned targets.

4.3 Germany

Website

http://gesundheitsziele.de/ ; www.health-targets.de

History of the target-setting network

In **2000**, the Federal Ministry of Health and the Länder took the initiative to establish national health goals and to initiate the implementation of these targets into real-life. For this aim it created a network with all of the most important stakeholders in the healthcare system. A pilot project called 'Forum gesundheitsziele.de' was launched, under the coordination of the GVG (Gesellschaft für Versicherungswissenschaft und –gestaltung e.V.; Association for Social Security Policy and Research).

In the period **2000 - 2006**, six national health targets were developed and in some cases their implementation had already commenced. Because of these successes, the involved parties decided to continue the process.

Since **2007**, 'gesundheitsziele.de' exists as a permanent co-operation network funded by the involved parties themselves.

In **2015**, with the Preventive Health Care Act, the health goals identified by the co-operation network have been incorporated into the Social Insurance Code (Fünftes Buch Sozialgesetzbuch - SGB V). The National Association of Statutory Health Insurance Funds is obliged to take the targets into account in activities in the areas of prevention and health promotion.

> *"The health targets are anchored in the Prevention Act (Gesetz zur Stärkung der Gesundheitsförderung und der Prävention (Präventionsgesetz – PrävG)). This increases the importance for patient treatment and at the same time it defines the framework for benefits of the sickness funds."*

Dr. Rainer Hess, Chair of the Committee health-targets.de

Involved stakeholders

> *"Health targets are agreements between the central players of the self-administration in the German health care system. Among the players are over 120 relevant health care organizations, including statutory and private health insurance, care providers, patient representatives and self-help organizations, scientific institutions, as well as the federal government, the Länder and municipalities."*

Tobias Backhaus, Policy Officer Cooperation Network health-targets.de

Over 120 institutions/organizations, mainly players in the field of health care, are involved. For example:

- Federal Ministry of Health
- Health insurances (statutory and private)
- Pension insurance
- Doctors associations
- Pharmaceutical companies & associations
- Lander (e.g. Ministry of Health)
- Patient representatives

Funding of the health targets network

There are several stakeholders that fund the cooperation network "health-targets.de":

- Federal Ministry of Health (BMG)
- Health Ministries of the Lander (GMK)
- National Association of Statutory Health Insurance Dentists (KZBV)
- German Hospital Federation (DKG)
- German Medical Association (BAK)
- Federal Chamber of Psychotherapists
- Association of Substitute Health Insurance Funds (vdek) Association of Local Health Insurance Funds (AOK)
- Guilds Health Insurance Funds (IKK)
- Company Health Insurance Funds (BKK)
- Association of Social Insurance in Agriculture (LSV)
- Association of Private Health Insurance (PKV)
- German Statutory Pension Insurance Scheme (DRV Bund) German Pension Insurance for Miners, Railway Worker and Seamen (DRV Knappschaft-Bahn-See)
- Association for Social Security Policy and Research (GVG)

Role of the Minister

Representatives of the Federal Ministry of Health are actively cooperating in all steps of the development and drafting of targets. They are present in the three committees and in all working groups. In addition to this, the Minister of Health does the preface for (most of) the health targets when it comes to publications and usually presents a new health target at a press conference.

Time horizon of the targets

Health targets have been developed in succession:

- Type 2 diabetes mellitus: reduction of disease risk, early recognition and treatment of patients (2003)
- Breast cancer: reduction of mortality, increase in quality of life (2003, updated in 2011 and 2014)
- Reduction of tobacco consumption (2003, updated in 2015)
- Growing up healthy: life skills, exercise, nutrition (2003, updated 2010)
- Enhancing health competence, strengthening patient sovereignty (2003; updated 2011)
- Depressive disorders: prevention, early detection, provision of long-term treatment (2006)
- Healthy ageing (2012)
- Reduction of alcohol consumption (2015)
- Perinatal health (2017)

Coordination of the network

There are three committees:

1. Steering committee, with the following tasks:
   a) Selection of new health targets
   b) Strategic orientation of the co-operation network
2. Committee/board, with the following tasks:
   a) Control and advise on the content of the working groups
   b) Gives feedback with the evaluation committee on current evaluation projects
   c) Resolutions for target revisions
   d) Accept and decide new and updated health targets

3. Evaluation committee, with the following tasks:
    a) Elaborates concepts for the evaluation of individual health targets and the overall process

For each individual health target, there are working groups.

The office coordinating the network and the working groups is part of the GVG.

Selection process for a new health target

Step 1: each member of the steering committee and the committee appoints maximum three suggestions for a new health target, based on a questionnaire. Preselected suggestions should be tested along the following criteria:

1. degree of severity – mortality
2. degree of severity – burden of the disease
3. spread of the disease – prevalence
4. potential for improvement
5. economical relevance
6. ethical aspects
7. equal opportunities
8. priority of the "problem" from the view of the population
9. measurability
10. feasibility – instruments
11. feasibility – players
12. possibility of participation of the citizens/patients
13. legal framework

Step 2: the members of the steering committee and the committee prioritise the suggestions with help of a scoring system (with scores from 1 to 3). At the end, the three topics with the highest scores will be scientifically analysed.

Step 3: the evaluation committee scientifically develops the three topics chosen.

Step 4: the evaluation committee presents the scientific development of the three chosen topics to the committee. The committee gives scientifically proven and feasibility-oriented recommendations to the steering committee. Based on all this information, the steering committee does the final target selection. If the selection differs from the committee's recommendation, the steering committee has to justify and explain its different choice.

Target-setting methodology

There is a fixed structure of a health target: health targets ("Gesundheitsziele") are broken down into targets ("Ziele"), intermediate targets ("Teilziele") and recommended strategies and actions for implementation ("Maßnahmenempfehlungen").

An example from the target on reducing tobacco consumption:

- Target 1: Adolescents and young adults stay non-smokers
    - Teilziel 1: the number of non-smokers is high
    - Teilziel 2: the starting age is high
    - Teilziel 3: Kindergartens, schools, sport clubs, educational institutions etc. are smoke-free
    - Teilziel 4: there are offers of smoke-free promotions at Kindergartens, schools, sport clubs, educational institutions etc.
    - Teilziel 5: adults are good examples
    - Teilziel 6: the positive attitude of non-smoking is high
    - …

Another example of the recently published national Gesundheitsziel „Gesundheit rund um die Geburt“:

- Target 1: Eine gesunde Schwangerschaft wird ermöglicht und gefördert
  - Teilziel 1.1 Gesundheitliche Ressourcen und Kompetenzen sowie das Wohlbefinden sind gestärkt.
  - Maßnahmenempfehlung: Ausbau von bereits evaluierten, umfassenden, nutzerorientierten und frühzeitigen Zugängen und Konzepten zur Stärkung der Familien
    - Institutionelle Akteurinnen und Akteure: Berufs-/ Fachverbände und Kammern der Gesundheitsfachberufe und Heilberufe
    - Relevante Berufsgruppen/ Multiplikatorinnen und Multiplikatoren: Ernährungsberaterinnen, Ernährungsberater
  - Maßnahmenempfehlung: Maßnahmen zur Förderung von Empowerment von werdenden Müttern und Eltern durch Information und Beratung und psychosoziale Unterstützung.
    - Institutionelle Akteurinnen und Akteure: BMEL
    - Relevante Berufsgruppen/ Multiplikatorinnen und Multiplikatoren: Familienhebammen

How a health target is actually developed differs from one target to another as the composition of the working groups differs. In most cases, targets are not quantified.

Level of target formulation

Gesundheitsziele are the national health targets for Germany. In addition to the health goals on the Federal level, the Federal Länder fix their own specific health goals or priority fields of action.

Implementation of the health targets

The sponsoring agencies and partners of the network affirmed, each within its remit,

- to match their own activities to the health goals,
- to implement measures leading to these goals and, in doing so, follow the approaches and concepts set out in gesundheitsziele.de,
- to award major priority to networking and co-operation with other goal-based processes and programmes on the Federal, Länder and local levels,
- to jointly champion the achievement of the health goals and
- to develop additional priority health goals, particularly considering the goal initiatives put in place in the Länder.

Evaluation of the health target network

The overall process of the health target network was evaluated in 2013 in collaboration with the Berlin School of Public Health. The evaluation mainly dealt with the following two questions: 1. Does the process create added value for the co-operation partners? 2. How are the interfaces and interactions among the partners? Overall, the evaluation showed that the health targets process is perceived to create added value. Many participants came out in favour of further strengthening the process, to further intensify co-operation and networking among the partners. [44]

4.4 Austria

Website

http://www.gesundheitsziele-oesterreich.at/

Time horizon

In 2012, the Federal Health commission of Austria and the Austrian Council of Ministers approved 10 health targets. The health targets are developed for 20 years: 2012-2032.

Participatory process

The health targets have been developed based on a participatory process with 40 stakeholders, representatives of

- public authorities at federal, regional and local level (covering different political sectors)
- social insurance
- social partners
- experts on the health care system
- health care professionals
- institutions of the health and social care system
- representatives of patients, children and adolescents, elderly and socio-economic disadvantaged people.

Two conferences have taken place:

- Kick-off conference in May 2011
- Presentation conference in May 2012

Furthermore an online platform was created where everyone interested was invited to express their views and opinions.

Waterfall approach

Different levels are developed sequentially:

- Global aim of the project is to increase the number of years lived in a healthy condition by 2 years, in 20 years.
- 10 Overarching Health Targets (“Rahmen-Gesundheitsziele”) have been formulated through a participatory process with stakeholders (see table below)
- The 10 meta-targets are broken down into objectives and subtargets, drawn up in separate working groups
- For all of the objectives and subtargets, measures and concrete actions are defined by the responsible institutions in the working groups. A benchmark is defined to monitor the implementation of the measures.

Guiding principles

The Austrian health targets initiative is guided by three main principles:

- "orientation towards health determinants“
- "health-in-all-policies approach"
- "promoting health equity".

List of targets

Table 5 – 10 overarching health targets formulated by Austria

Targets
Target 1: To provide health-promoting living and working conditions for all population groups through cooperation of all societal and political areas
Target 2: To promote fair and equal opportunities in health, irrespective of gender, socio-economic group, ethnic origin and age
Target 3: To enhance health literacy in the population
Target 4: To secure sustainable natural resources such as air, water and soil and healthy environments for future generations
Target 5: To strengthen social cohesion as a health enhancer
Target 6: To ensure conditions under which children and young people can grow up as healthy as possible
Target 7: To provide access to a healthy diet for all
Target 8: To promote healthy, safe exercise and activity in everyday life through appropriate environments
Target 9: To promote psychosocial health in all population groups
Target 10: To secure sustainable and efficient health care services of high quality for all

For each of the overarching health targets, meta-indicators (existing or needed indicators) have been listed:

Table 6 – Meta-indicators formulated for the overarching health targets

Indicators	
Ergänzende übergeordnete Indikatoren	
Lebenserwartung in Gesundheit	Lebenserwartung in sehr guter oder guter Gesundheit (berechnet auf Basis von ATHIS und EU-SILC)
Lebenserwartung	Lebenserwartung bei der Geburt sowie fernere Lebenserwartung im Alter von 25, 45 und 65 Jahren (auf Basis der Sterbetafeln bzw. Todesursachenstatistik)
Selbstberichtete Gesundheit	Selbstberichteter Gesundheitszustand (ATHIS, EU-SILC)
RGZ-Prozess	Vorliegen und Umsetzung eines Strategie- und Maßnahmenkonzeptes zu den RGZ
RGZ-Prozess	Monitoring und Berichtswesen zur Umsetzung der R-GZ
Ziel 1: Gesundheitsförderliche Lebens- und Arbeitsbedingungen für alle Bevölkerungsgruppen durch Kooperation aller Politik- und Gesellschaftsbereiche schaffen	
Lebenszufriedenheit und -qualität	Lebenszufriedenheit (ATHIS, EU-SILC, Gallup World Poll) und Lebensqualität (ATHIS)
Lebenswelt Arbeitsplatz	Arbeitsklima-Index (Befragung von Arbeitnehmerinnen und Arbeitnehmern; im Auftrag der AK Oberösterreich)
Lebenswelt Arbeitsplatz	Psychische Belastungen am Arbeitsplatz (Mikrozensus-Arbeitskräfteerhebung der Statistik Austria)
Policy-Ebene	Rechtliche Verankerung der Wirkungsfolgenabschätzung-Gesundheit
Policy-Ebene	Praktische Implementierung der Gesundheits-folgenabschätzung
Ziel 2: Für gesundheitliche Chancengerechtigkeit zwischen den Geschlechtern und sozioökonomischen Gruppen, unabhängig von der Herkunft, für alle Altersgruppen sorgen	
Bildung als wichtige Gesundheits¬determinante	Bildungsniveau (höchste abgeschlossene [Schul-]Bildung) [Bildungsstandregister], Bildungsmobilität [EU-SILC]), tertiäre Bildungsabschlüsse (Eurostat-Datenbank)
Armut als wichtige Gesundheits¬determinante	Armuts- und Ausgrenzungsgefährdung (EU-SILC)
Policy-Ebene	Vorliegen und Umsetzung einer nationalen Strategie oder eines Maßnahmenplans zur Reduktion gesundheitlicher Ungleichheiten
Ziel 3: Die Gesundheitskompetenz der Bevölkerung stärken	
Gesundheitskompetenz	Gesamtindex Gesundheitskompetenz (HLS-EU)
Basiskompetenz	Funktioneller Analphabetismus (PIRLS)
Policy-Ebene	Vorliegen und Umsetzung einer nationalen Strategie oder eines Maßnahmenplans zur Förderung der Gesundheitskompetenz

Ziel 4: Die natürlichen Lebensgrundlagen wie Luft, Wasser und Boden sowie alle unsere Lebensräume auch für künftige Generationen nachhaltig gestalten und sichern	
Luftqualität	Feinstaubbelastung: Einhaltung bzw. Überschreitung vorgeschriebener Immissionsgrenzwerte (Eurostat)
Lärm	Lärmbelastungen (Mikrozensus Umweltbedingungen, Umweltverhalten 3. Quartal 2011 der Statistik Austria EU-SILC)
Ziel 5: Durch sozialen Zusammenhalt die Gesundheit stärken	
Sozialkapital	Sozialkapital (Zufriedenheit mit persönlichen Beziehungen) (ATHIS) und soziales Vertrauen (EES)
Verteilung	GINI-Koeffizient (EU-SILC, WIFO-Berechnungen)
Teilhabe	Freiwilliges Engagement (MZ)
Ziel 6: Gesundes Aufwachsen für alle Kinder und Jugendlichen bestmöglich gestalten und unterstützen	
Gesundheit	Selbstberichteter Gesundheitszustand der Kinder und Jugendlichen (HBSC)
Lebenswelt Familie	Eltern: Kommunikation und Vertrauensverhältnis (Index aus HBSC)
Lebenswelt Kindergarten und Schule	Schulklima (Verhältnis zwischen den Schülern/Schülerinnen; Schüler/innen/Lehrkräfte) (HBSC)
Arbeitslosigkeit als wichtige Gesundheitsdeterminante	Jugendarbeitslosigkeit (Mikrozensus-Arbeitskräfteerhebung)
Frühzeitige Schul- und Ausbildungsabbrüche	Frühzeitige Schul- und Ausbildungsabgänger (Mikrozensus Arbeitskräfteerhebung)
Policy-Ebene	Umsetzung, Monitoring und Berichtslegung zur Kinder- und Jugendgesundheitsstrategie
Ziel 7: Gesunde Ernährung mit qualitativ hochwertigen Lebensmitteln für alle zugänglich machen	
Ernährung	Konsum von Obst und Gemüse (Erwachsene und Kinder) (ATHIS, HBSC)
Körpergewicht	Rate von Untergewicht und Adipositas (ATHIS, HBSC, OECD Health Data 2012, Eurostat Datenbank, WHO Global Infobase)
Policy-Ebene	Umsetzung, Monitoring und Berichtswesen des Nationalen Ernährungsplans (NAP.e)
Ziel 8: Gesunde und sichere Bewegung im Alltag durch die entsprechende Gestaltung der Lebenswelten fördern	
Mobilität	Modal-Split: Anteil der täglichen Wege, die zu Fuß oder mit dem Fahrrad zurückgelegt werden (Mikrozensus Umweltbedingungen, Umweltverhalten 2011 der Statistik Austria)
Bewegungsverhalten	Körperliche Aktivität und Sport (ATHIS, HBSC, Eurobarometer 2010 Sport und körperliche Bewegung)
Policy-Ebene	Umsetzung, Monitoring und Berichtswesen des Nationalen Bewegungsplans (NAP.b)
Ziel 9: Psychosoziale Gesundheit bei allen Bevölkerungsgruppen fördern	
Psychische Gesundheit	Mental-Health_Index und Vitalitätsindex (ATHIS, HIS)

Lebenswelt Schule und Arbeitsplatz	Psychische Gesundheit in der Schule (HBSC) und am Arbeitsplatz (Arbeitsklimaindex, ESWC)
Policy-Ebene	Vorliegen und Umsetzung einer Mental-Health-Strategie für Österreich
Ziel 10: Qualitativ hochstehende und effiziente Gesundheitsversorgung für alle nachhaltig sicherstellen	
Chancengerechtigkeit	Inanspruchnahme von Vorsorgeuntersuchungen (Statistik der Vorsorgeuntersuchungen, ATHIS)
Gesundheitssystem	Anteil der Gesundheitsausgaben nach Sektoren im Gesundheitswesen (Versorgung – Prävention; stationär – ambulant)
Policy-Ebene zur Zielsteuerung-Gesundheit	Umsetzung der Performance-Messung im Gesundheitswesen
Policy-Ebene zur Qualität im Gesundheitssystem	Umsetzung der operativen Ziele für die Qualitätsstrategie

Abkürzungen: ATHIS = Österreichische Gesundheitsbefragung; ESS = European Social Survey, HLS-EU = European Health Literacy Survey, ESWC = European Survey on Working Conditions, EU-SILC = EU Statistics on Income and Living Conditions, EUROSTAT = statistisches Amt der Europäischen Union, HBSC = Health Behavior in School-aged Children, HIS = Health Interview Survey(s), PIRLS = Progress in International Reading Literacy Study; WIFO = Österreichisches Institut für Wirtschaftsforschung Wien; Quelle und Darstellung: GÖG – ÖBIG

4.5 New Zealand

Website

http://www.health.govt.nz/new-zealand-health-system/health-targets

Time horizon

Health targets are reviewed annually to ensure they align with government health priorities

Targets

7 targets are currently running. 3 targets focus on patient access:

- Shorter stays in emergency departments:
  - 95% of patients will be admitted, discharged, or transferred from an emergency department (ED) within six hours.
  - The target indicates how efficiently our acute (urgent) patients are flowing through our public hospitals to get back home again.
- Improved access to elective surgery:
  - The volume of elective surgery will be increased by an average of 4000 discharges per year.
  - District Health Board (DHBs) have negotiated local targets taking into consideration the health needs of their communities. Collectively these targets contribute to a national increase in elective surgery discharges.
  - Since 2015/16 the target has included elective and arranged in-patient surgical discharges, regardless of whether they are discharged from a surgical or non-surgical specialty (excluding maternity).
- Faster cancer treatment:
  - 85% of patients receive their first cancer treatment (or other management) within 62 days of being referred with a high suspicion of cancer and a need to be seen within two weeks.
  - Public reporting on the Faster cancer treatment health target is based on six-months rolling data.

3 targets focus on prevention:

- Increased immunisation:
  - 95% of infants aged eight months will have completed their primary course of immunisation (six weeks, three months and five months immunisation events) on time.
  - The quarterly progress result includes children who turned eight months old during the three month period of the quarter and who were fully immunised at that stage.
- Better help for smokers to quit:
  - 90% of PHO enrolled patients who smoke have been offered help to quit smoking by a health care practitioner in the last 15 months.
  - 90% of pregnant women who identify as smokers upon registration with a DHB-employed midwife or Lead Maternity Carer are offered brief advice and support to quit smoking.
- Raising healthy kids:
  - By December 2017, 95% of obese children identified in the B4 School Check programme will be offered a referral to a health professional for clinical assessment and family-based nutrition, activity and lifestyle interventions.
  - Public reporting on the Raising Healthy Kids health target is based all completed B4 School Checks in a six-month period.

Previous health targets:

- More heart and diabetes checks

Reporting on results

The Ministry of Health quarterly reports on the progress towards achieving agreed annual health targets with each district health board.

4.6 Flanders

Website

https://www.zorg-en-gezondheid.be/gezondheidsdoelstellingen

Time horizon

Targets have been set for the following domains consecutively:

- Accident prevention (1998-2002)
- Infectious diseases and vaccinations (1998-2002)
- Alcohol, tobacco and drugs (2009-2015)
- Physical activity and nutrition (2009-2015)
- Suicide (2012-2020)
- Vaccination (2013-2020)
- Cancer screening (2015-2020)
- Currently new targets are under development for:
  - Healthy food; Malnutrition in elderly; Eating disorders
  - Physical activity; Sedentary behavior
  - Alcohol, tobacco and drugs
  - Psycho-active medication
  - Gaming and gambling

Target-setting process

Targets are determined through a participatory process with stakeholders, making targets generally backed by the sector. The development process for the new targets on "Nutrition and physical activity" and "Tobacco, alcohol and drugs" includes:

- work groups
- surveys
- public consultation
- scientific revisions
- 3 regional check moments with more than 250 persons of 200 organisations
- a health conference.

Finally the targets are officially approved by the Flemish government.

Shift away from targets at population level towards targets per setting

Previously, targets have been determined at population level, like for smoking (2009-2015):

- % smokers in -15 yrs population is not higher than 11%
- % smokers in +16 yrs population is not higher than 20%.

However, to improve policy implementation, new targets will focus more on targets specified for different settings and contexts. After all, policy measures need to be taken within and tailored to different settings. The new targets will be formulated as follows: "x% of secondary schools have a school policy on tobacco, alcohol, drugs… "

Relevant settings and contexts include:

- local community
- work
- education
- leisure time
- family
- directly to the citizen
- care and welfare
- good governance.

Shift away from outcome targets to process targets

Previously, targets were predominantly expressed in terms of outcomes, like e.g. the targets for nutrition and physical activity (2009-2015):

1. Increase in % persons that are sufficiently active to obtain health gains by 10% points
2. Decrease in % persons with a sedentary lifestyle by 10% points
3. Increase in % mothers starting breastfeeding, measured on day 6, from 64 to 74%
4. More people eat balanced diet according to the recommendations of the active food pyramid
5. At least maintain % persons with a healthy weight status.

Learning from previous experiences, health outcome targets however have not always proved very informative, especially for evaluating policy measures. Indeed, health outcomes are influenced by many other factors than just health policy and often it is hard to filter out the impact of interfering factors. So for the new targets, the focus will no longer be on health outcomes, but on process targets that are directly related to installing health policy measures.

Within and for each sector, process targets will be determined together with the concerned stakeholders. Health outcomes will continue to be monitored as important indicators, but they will not (or less) be used for setting targets.

Conditions for success

Based on the previous target scheme 2009-2015, the following conditions for success have been defined. Health targets are most useful when:

- The target has an impact on an important health problem
- It is required to bring together different actors along a common vision, to sensitise and engage them
- The common vision is backed by the different actors
- The target pertains to a broad, social trend or ambition
- The target can be monitored with measurable indicators
- The reaching of the target can be influenced by policy strategies
- There are sufficient garantees that the policy strategies are implementable
- It is clear which means and resources are required to reach the target and these means and resources are effectively made available
- The preconditions to reach the targets are met
- The communication on targets towards the population is well overthought.[45]

4.7 The Netherlands

In the Netherlands, quantified targets are set on ad hoc basis. Recently, targets have been set for e-health and depression.

4.7.1 Targets on e-health

For e-health, the following targets were set by the Dutch Minister of Health's cabinet in 2014:

By 2019:

- 80% of chronically ill have direct access to certain medical data like their medication data, vital function and test results, and can use them – if wanted- in mobile apps or internet applications. For the non-chronically ill population, the ambition is set at 40%.
- 75% of chronically ill (diabetes and COPD) and fragile elderly, who are willing and able, can perform measurements independently themselves and let them monitor from distance
- Everybody who get care at home has the possibility to communicate with a care provider 24 hrs per day.

The ambitions were formulated based on conversations with care providers, care insurers, industry and patient and elderly organisations and federations. In parallel, an e-health roadmap has been developed with the covenant partners of the covenant "Governance e-health (KNMG, Nictiz, NPCF, VZVZ, Kwaliteitsinstituut and ZN), VNG, and the federations of cure and care providers, patient- and elderly organisations.[46]

4.7.2 Targets on depression

In 2017 19 partners agreed a deal on depression. The deal aims to reach a reduction of 30 percent in people with depression by 2030. The stakeholders, amongst which ActiZ Jeugd, MIND, Trimbos, GGZ Nederland and the V&VN agree to collaborate on a multiyear programme on prevention of depression. Also GPs, municipalities and insurers are invited to participate to think about how to fill in the programme.

4.8 England

History of the target-setting in NHS England [47]

The National Health Service (NHS) England has a historical experience in using target-setting approach to measure system performance and to drive policies in health care sector. The first tentative of targets setting was introduce in 1991 for health care ("The Patient's Charter") and in 1992 for public health ("The Health of the Nation") but the results were not conclusive. Few years later, an independent evaluation highlighted that the targets implemented at the national level were too much focus on operational issues than on outcomes (medical view of health targets) and not so ambitious. They also noticed that targets were not adapted at the local level and a lack of incentives for managers to pursue these objectives was present. Another analysis showed the lack of communication and partnership within the health system as a weakness. Since 1997, the system evolved taking into account lessons learned from the past and a strong targets culture was developed in England. The government introduced a performance-based management with challenging targets focus on outcomes ("Public Service Agreements") and a rating system for all NHS organisations. Depending on the performance rating and on the level of attainment, financial rewards and/or more autonomy were given. One of the main improvement of health care is the major reduction of inpatient waiting times. Another example concerns the implementation of a new General Practitioner (GP) contract in which payments are based on quality incentives (combination of clinical-quality and remuneration.

Even if there is no doubt about the success of the use of targets to drive policy implementation, negatives consequences and adverse effects were found. Some distortion of behaviour, ineffective responses, manipulation, gaming, and a focus on the achievement of targets at the expense of other activities were identified. Actually, the targets are a central element of health policy in England and they have an important role in the NHS England. A European analysis[48] associates the rise of influence of targets in England to:

- a move from long-term and general objectives towards short-term and precise targets;
- a move from national to local and organisational level;
- increasing number of professional who accept the target approach;
- improvement of organisations capacity (extra finance, information and managerial expertise) to reach the targets;
- a set of incentives.

Target-setting process

Health care targets are set at national level and sub-national level and are more than hundreds targets. Moreover, explicit evaluations of their policies are established. The government should be careful in avoiding any conflict between targets and any incompatibility.

Time horizon of the targets

Today, the overall goals are developed for 5 years: 2015-2020 and operational plans at local level are published each year.

Level of target formulation

In 2015, the British Government mandates NHS England to achieve long term objectives in 2020 by reaching specific deliverables updated each year and sets its budget for five year. These goals are defined following the Government's priorities and its health partner organisations. Through them, the Government will assess NHS England Performance. The goals and the specific deliverables for 2016-2017 are described inTable 7.

Moreover, the Department of Health establishes a program that provides directions and action plans to "*help people to live better for longer*"[49]. His plan contains ten objectives, on the same lines as the Government goals, and how to reach them.

Table 8 summarises all the targets per objective and the main goals are:

- Improving out-of-hospital care
- Creating the safest, highest quality healthcare services[b]
- Maintaining and improving performance against core standards while achieving financial balance
- Improving efficiency and productivity of the health and care system
- Preventing ill health and supporting people to live healthier lives
- Supporting research, innovation and growth
- Enabling people and communities to make decisions about their own health and care
- Building and developing the workforce
- Improving services through the use of digital technology, information and transparency
- Delivering efficiently: supporting the system more efficiently

In addition to National and Department of Health goals, the NHS England published in 2014 his own vision: “NHS Five Year Forward View”[50]. This document was developed by several partner organisations and describes the vision of health based on new models of care. In 2017, “Next steps on the NHS Five Year Forward View” is published and gives information about the progress made since his implementation. This operational plan sets targets and establishes a series of measures to lead to a “*triple integration of primary and specialist hospital care, of physical and mental health services, and of health and social care*”. The aim is to have a resilient system that deliver better health and wellbeing for now and future generation, a high quality of care and sustainable finances. In order to delivery this goal, the plan focus on nine priorities:

- Urgent and emergency care
- Primary care
- Cancer
- Mental health
- Integrating care locally
- Funding and efficiency
- Strengthening our workforce
- Patient safety
- Harnessing technology and innovation

Finally, local plans called “Sustainability and Transformation Plans” (STP) are created to facilitate the implementation of NHS vision. Actually, there are 44 local plans adapted to the needs of local populations and which involved many different organisations.

Table 7 – Overview of The Government's mandate to NHS England (objectives and deliverables for 2016-2017)

Objectives and priorities
OBJECTIVE 1: Through better commissioning, improve local and national health outcomes, particularly by addressing poor outcomes and inequalities
1.1 CCG performance Overall 2020 goals: • Consistent improvement in performance of CCGs against new CCG assessment framework. 2016-17 deliverables: • By June, publish results of the CCG assessment framework for 2015-16, which provides CCGs with an aggregated Ofsted style assessment of performance and allows them to benchmark against other CCGs and informs whether NHS England intervention is needed. • Ensure new Ofsted-style CCG framework for 2016-17 includes health economy metrics to measure progress on priorities set out in the mandate and the NHS planning guidance including overall Ofsted-style assessment for each of cancer, dementia, maternity, mental health, learning disabilities and diabetes, as well as metrics on efficiency, core performance, technology and prevention. • By the end of Q1 of 2016-17, publish the first overall assessment for each of the six clinical areas above.
OBJECTIVE 2: To help create the safest, highest quality health and care service
2.1 Avoidable deaths and seven-day services Overall 2020 goals: • Roll out of seven-day services in hospital to 100% of the population (four priority clinical standards in all relevant specialities, with progress also made on the other six standards), so that patients receive the same standards of care, seven days a week. • Achieve a significant reduction in avoidable deaths, with all trusts to have seen measurable reduction from their baseline on the basis of annual measurements. • Support NHS Improvement to significantly increase the number of trusts rated outstanding or good, including significantly reducing the length of time trusts remain in special measures. • Measurable progress towards reducing the rate of stillbirths, neonatal and maternal deaths and brain injuries that are caused during or soon after birth by 50% by 2030 with a measurable reduction by 2020. • Support the NHS to be the world's largest learning organisation with a new culture of learning from clinical mistakes, including improving the number of staff who feel their organisation acts on concerns raised by clinical staff or patients. • Measurable improvement in antimicrobial prescribing and resistance rates. 2016-17 deliverables: • Publish avoidable deaths per trust annually and support NHS Improvement to help trusts to implement programme to improve from March 2016 baseline. • Rollout of four clinical priority standards in all relevant specialties to 25% of population. • Implement agreed recommendations of the National Maternity Review in relation to safety, and support progress on delivering Sign up to Safety. • Support the Government's goal to establish global and UK baseline and ambition for antimicrobial prescribing and resistance rates.

2.2 Patient experience

Overall 2020 goals:

- Maintain and increase the number of people recommending services in the Friends and Family Test (FFT) (currently 88-96%), and ensure its effectiveness, alongside other sources of feedback to improve services.
- 50-100,000 people to have a personal health budget or integrated personal budget (up from current estimate of 4,000).
- Significantly improve patient choice, including in maternity, end-of-life care and for people with long-term conditions, including ensuring an increase in the number of people able to die in the place of their choice, including at home.

2016-17 deliverables:

- Produce a plan with specific milestones for improving patient choice by 2020, particularly in maternity, end-of-life care (including to ensure more people are able to achieve their preferred place of care and death), and personal health budgets.
- Building on the FFT, develop proposals about how feedback, particularly in maternity services, could be enhanced to drive improvements to services at clinical and ward levels.

2.3 Cancer

Overall 2020 goals:

- Deliver recommendations of the Independent Cancer Taskforce, including:
    - significantly improving one-year survival to achieve 75% by 2020 for all cancers combined (up from 69% currently); and
    - patients given definitive cancer diagnosis, or all clear, within 28 days of being referred by a GP.

2016-17 deliverables:

- Achieve 62-day cancer waiting time standard.
- Support NHS Improvement to achieve measurable progress towards the national diagnostic standard of patients waiting no more than 6 weeks from referral to test.
- Agree trajectory for increases in diagnostic capacity required to 2020 and achieve it for year one.
- Invest £340m in providing cancer treatments not routinely provided on the NHS through the Cancer Drugs Fund, and ensure effective transition to the agreed operating model to improve its effectiveness within its existing budget.

OBJECTIVE 3: To balance the NHS budget and improve efficiency and productivity.

3.1 Balancing the NHS budget

Overall 2020 goals:

- With NHS Improvement, ensure the NHS balances its budget in each financial year.
- With the Department of Health and NHS Improvement, achieve year on year improvements in NHS efficiency and productivity (2-3% each year), including from reducing growth in activity and maximising cost recovery.

2016-17 deliverables:

- With NHS Improvement ensure the NHS balances its budget, with commissioners and providers living within their budgets, and support NHS Improvement in:
    - securing £1.3bn of efficiency savings through implementing Lord Carter's recommendations and collaborating with local authorities on continuing healthcare spending;
    - delivering year one of trust deficit reduction plans and ensuring a balanced financial position across the trust sector, supported by effective deployment of the Sustainability and Transformation Fund; and

- reducing spend on agency staff by at least £0.8bn on a path to further reductions over the Parliament.

- Roll-out of second cohort of RightCare methodology to a further 60 CCGs.
- Measurable improvement in primary care productivity, including through supporting community pharmacy reform.
- Work with CCGs to support Government's goal to increase NHS cost recovery up to £500m by 2017-18 from overseas patients.
- Ensure CCGs' local estates strategies support the overall goal of releasing £2bn and land for 26,000 homes by 2020.

OBJECTIVE 4: To lead a step change in the NHS in preventing ill health and supporting people to live healthier lives.

4.1 Obesity and Diabetes

Overall 2020 goals:

- Measurable reduction in child obesity as part of the Government's childhood obesity strategy.
- 100,000 people supported to reduce their risk of diabetes through the Diabetes Prevention Programme.
- Measurable reduction in variation in management and care for people with diabetes.

2016-17 deliverables:

- Contribute to the agreed child obesity implementation plan, including wider action to achieve year on year improvement trajectory for the percentage of children who are overweight or obese.
- 10,000 people referred to the Diabetes Prevention Programme.

4.2 Dementia

Overall 2020 goals:

- Measurable improvement on all areas of Prime Minister's challenge on dementia 2020, including:
  - maintain a diagnosis rate of at least two thirds;
  - increase the numbers of people receiving a dementia diagnosis within six weeks of a GP referral; and
  - improve quality of post-diagnosis treatment and support for people with dementia and their carers.

2016-17 deliverables:

- Maintain a minimum of two thirds diagnosis rates for people with dementia.
- Work with National Institute for Health Research on location of Dementia Institute.
- Agree an affordable implementation plan for the Prime Minister's challenge on dementia 2020, including to improve the quality of post-diagnosis treatment and support.

OBJECTIVE 5: To maintain and improve performance against core standards.

5.1 A&E, Ambulances and Referral to Treatment (RTT)

Overall 2020 goals:

- 95% of people attending A&E seen within four hours; Urgent and Emergency Care Networks rolled out to 100% of the population.
- 75% of Category A ambulance calls responded to within eight minutes.
- 92% receive first treatment within 18 weeks of referral; no-one waits more than 52 weeks

2016-17 deliverables:

- With NHS Improvement, agree improvement trajectory and deliver the plan for year one for A&E.

- Implement Urgent and Emergency Care Networks in 20% of the country designated as transformation areas, including clear steps towards a single point of contact.
- With NHS Improvement, agree improvement trajectory and deliver the plan for year one for ambulance responses; complete Red 2 pilots and decide on full roll-out.
- With NHS Improvement, meet the 18-week referral-to-treatment standard, including implementing patient choice in line with the NHS Constitution; and reduce unwarranted variation between CCG referral rates to better manage demand.

OBJECTIVE 6: To improve out-of-hospital care.

6.1 New models of care and General Practice

Overall 2020 goals:

- 100% of population has access to weekend/evening routine GP appointments.
- Measurable reduction in age standardised emergency admission rates and emergency inpatient bed-day rates; more significant reductions through the New Care Model programme covering at least 50% of population.
- Significant measurable progress in health and social care integration, urgent and emergency care (including ensuring a single point of contact), and electronic health record sharing, in areas covered by the New Care Model programme.
- 5,000 extra doctors in general practice.

2016-17 deliverables:

- New models of care covering the 20% of the population designated as being in a transformation area to:
    - provide access to enhanced GP services, including evening and weekend access and same-day GP appointments for all over 75s who need them; and
    - make progress on integration of health and social care, integrated urgent and emergency care, and electronic record sharing.
- Publish practice-level metrics on quality of and access to GP services and, with the Health and Social Care Information Centre, provide GPs with benchmarking information for named patient lists.
- Develop new voluntary contract for GPs (Multidisciplinary Community Provider contract) ready for implementation in 2017-18.

6.2 Health and social care integration

Overall 2020 goals:

- Achieve better integration of health and social care in every area of the country, with significant improvements in performance against integration metrics within the new CCG assessment framework. Areas will graduate from the Better Care Fund programme management once they can demonstrate they have moved beyond its requirements, meeting the government's key criteria for devolution.
- Ensure the NHS plays its part in significantly reducing delayed transfers of care, including through developing and applying new incentives.

2016-17 deliverables:

- Implement the Better Care Fund (BCF) in line with the BCF Policy Framework for 2016-17.9
- Every area to have an agreed plan by March 2017 for better integrating health and social care.
- Working with partners, achieve accelerated implementation of health and social care integration in the 20% of the country designated as transformation areas, by sharing electronic health records and making measurable progress towards integrated assessment and provision.
- Work with the Department of Health, other national partners and local areas to agree and support implementation of local devolution deals.
- Agree a system-wide plan for reducing delayed transfers of care with overall goal and trajectory for improvement, and with local government and NHS partners implement year one of this plan.

2016-17 requirements:

- NHS England is required to:
    - ring-fence £3.519bn within its allocation to CCGs to establish the Better Care Fund, to be used for the purposes of integrated care;
    - consult the Department of Health and the Department for Communities and Local Government before approving spending plans drawn up by each local area; and
    - consult the Department of Health and the Department for Communities and Local Government before exercising its powers in relation to failure to meet specified conditions attached to the Better Care Fund as set out in the BCF Policy Framework.

6.3 Mental health, learning disabilities and autism

Overall 2020 goal:

- To close the health gap between people with mental health problems, learning disabilities and autism and the population as a whole (defined ambitions to be agreed based on report by Mental Health Taskforce).
- Access and waiting time standards for mental health services embedded, including:
    - 50% of people experiencing first episode of psychosis to access treatment within two weeks; and
    - 75% of people with relevant conditions to access talking therapies in six weeks; 95% in 18 weeks.

2016-17 deliverables:

- 50% of people experiencing first episode of psychosis to access treatment within two weeks.
- 75% of people with relevant conditions to access talking therapies in six weeks; 95% in 18 weeks.
- Increase in people with learning disabilities/autism being cared for by community not inpatient services, including implementing the 2016-17 actions for Transforming Care.
- Agree and implement a plan to improve crisis care for all ages, including investing in places of safety.
- Oversee the implementation of locally led transformation plans for children and young people's mental health, which improve prevention and early intervention activity, and be on track to deliver national coverage of the children and young people's Improving Access to Psychological Therapies (IAPT) programme by 2018.
- Implement agreed actions from the Mental Health Taskforce.

OBJECTIVE 7: To support research, innovation and growth.

7.1 Research and growth

Overall 2020 goals:

- Support the Department of Health and the Health Research Authority in their ambition to improve the UK's international ranking for health research.
- Implement research proposals and initiatives in the NHS England research plan.
- Measurable improvement in NHS uptake of affordable and cost-effective new innovations.
- To assure and monitor NHS Genomic Medicine Centre performance to deliver the 100,000 genomes commitment.

2016-17 deliverables:

- Implement the agreed recommendations of the Accelerated Access Review including developing ambition and trajectory on NHS uptake of affordable and cost-effective new innovations.

7.2 Technology

Overall 2020 goals:

- Support delivery of the National Information Board Framework 'Personalised Health and Care 2020' including local digital roadmaps, leading to measurable improvement on the new digital maturity index and achievement of an NHS which is paper-free at the point of care.
- 95% of GP patients to be offered e-consultation and other digital services; and 95% of tests to be digitally transferred between organisations.

2016-17 deliverables:

- Minimum of 10% of patients actively accessing primary care services online or through apps, and set trajectory and plan for achieving a significant increase by 2020.
- Ensure high quality appointment booking app with access to full medical record and agreed data sharing opt-out available from April 2016.
- Robust data security standards in place and being enforced for patient confidential data.
- Make progress in delivering new consent-based data services to enable effective data sharing for commissioning and other purposes for the benefit of health and care.
- Significant increase in patient access to and use of the electronic health record.

7.3 Health and work

Overall 2020 goal:

- Contribute to reducing the disability employment gap.
- Contribute to the Government's goal of increasing the use of Fit for Work.

2016-17 deliverables:

- Continue to deliver and evaluate NHS England's plan to improve the health and wellbeing of the NHS workforce.
- Work with Government to develop proposals to expand and trial promising interventions to support people with long-term health conditions and disabilities back into employment.

Note: CCG: clinical commissioning groups. GP: general practitioner.
Source: https://www.gov.uk/government/publications/nhs-mandate-2016-to-2017

Table 8 – Overview of the "Shared delivery plan: 2015 to 2020" of the Department of Health

Priorities
1. Improving out-of-hospital care
• Ensure by 2020 everyone should be able to see a GP 7 days a week from 8am to 8pm • Restore the right to a specific, named GP • Guarantee same-day GP appointments for all over 75s who need them • Invest more in primary care to help prevent health problems before they start • Continue to integrate the health and social care systems, joining up services between homes, clinics and hospitals, including through new approaches like the pooling of around £6 billion of health and social care funding in Greater Manchester and the £5.3 billion Better Care Fund • Increase funding for mental health care • Provide significant support for mental health • Ensure there are therapists in every part of the country providing treatment for those who need it, with a commitment to increase access to psychological therapies from 15% to 25% of those who might benefit by 2020 • Expand intensive home treatment and psychiatric liaison services as part of our commitment to improving 24/7 access to mental health support • Ensure proper provision of health and community based places of safety for people suffering mental health crises • Ensure that women have access to mental health support, during and after pregnancy, while strengthening the health visitor programme for new mothers • Enforce the new access and waiting time targets for people experiencing mental ill-health, including children and young people • Increase support for full-time unpaid carers • Cap charges for residential social care from April 2020 • Guarantee that people will not have to sell their home to fund social care • Allow deferred payment agreements, so no one has to sell their home • Limit individual liabilities from April 2020, protecting people from unlimited costs if they develop very serious care needs
2. Creating the safest, highest quality healthcare services
• Ensure English hospitals and GP surgeries are among the safest in the world • Roll out 7-day services in hospital to 100% of the population (4 priority clinical standards in all relevant specialities, with progress made on the other 6 standards) so patients receive the same standards of care, 7 days a week • Continue to eliminate mixed-sex wards and hospital infections • Ensure the NHS is accountable when mistakes are made • Implement the recommendations of the independent review into the Stafford Hospital scandal • Ensure the Care Quality Commission rates all hospitals, care homes and GP surgeries • Continue to back expert chief inspectors to promote excellence and root out poor care • Continue to ensure that we have enough doctors, nurses and other staff to meet patients' needs and consider how to best recognise and reward high performance • Improve standards in all areas of care

- Maintain and increase the number of people recommending services in the Friends and Family Test
- Implement the NHS's own plan, the Five Year Forward View, to improve health care even further
- Continue to invest in the Cancer Drugs Fund
- Deliver the new strategy recommended by NHS England's cancer taskforce, working with the NHS, charities and patient groups
- Ensure hospitals are properly staffed so the quality of care is the same every day of the week
- Support commissioners to combine better health and social care services for terminally ill

3. Maintaining and improving performance against core standards while achieving financial balance

- Increase NHS funding in real terms every year (by a minimum of £8 billion over the next 5 years)
- Support the Sustainability and Transformation Fund
- Implement the Carter programme

4. Improving efficiency and productivity of the health and care system

- Implement the NHS's own plan, the Five Year Forward View, to improve health care even further
- Recover up to £500 million from migrants who use the NHS by the middle of the Parliament

5. Preventing ill health and supporting people to live healthier lives

- Review how best to support those suffering from long-term, but treatable, conditions (such as drug and alcohol addiction or obesity) back into work. People who might benefit from treatment should get the medical help they need and if they refuse treatment we will review whether their benefits should be reduced
- Reduce childhood obesity
- Continue to promote clear food information
- Implement a national, evidence-based diabetes prevention programme
- Deliver the Prime Minister's 2020 Dementia Challenge
- Continue to combat antibiotic resistance, taking forward the findings of the independent review

6. Supporting research, innovation and growth

- Support a long-term economic plan by fostering research, innovation and jobs in the life science industry
- Support modern industrial approaches, such as the Life Sciences strategy, to help people compete and win in the intense global race for high value, high knowledge jobs
- Increase the use of cost-effective new medicines and technologies, and encourage large-scale trials of innovative technologies and health services
- Speed up access to new medicines by implementing the findings of Accelerated Access Review
- Continue to support research to improve the diagnosis and treatment of rare diseases and cancers, including through decoding 100,000 whole genomes
- Prioritise funding for dementia research

7. Enabling people and communities to make decisions about their own health and care

- Ensure family doctor appointments and repeat prescriptions are routinely available online
- Boost transparency even further, ensuring you can access full information about the safety record of your hospital and other NHS or independent providers, and give patients greater choice over where they receive care
- Give patients access to their electronic health records, while retaining their right to opt-out of their records being shared electronically

8. Building and developing the workforce
• Ensure hospitals are properly staffed so the quality of care is the same every day of the week • Ensure by 2020 everyone can see a GP at evenings and weekends • Continue to ensure that we have enough doctors, nurses and other staff to meet patients' needs and consider how to best recognise and reward high performance • Ensure there are therapists in every part of the country providing treatment for those who need it
9. Improving services through the use of digital technology, information and transparency
• Ensure family doctor appointments and repeat prescriptions are routinely available online • Boost transparency even further, ensuring you can access full information about the safety record of your hospital and other NHS or independent providers, and give patients greater choice over where they receive care • Give patients access to their electronic health records, while retaining their right to opt-out of their records being shared electronically
10. Delivering efficiently: supporting the system more efficiently
• Devising a new operating model and organisation design to make our policy making and the health and care system more flexible • Continuing to develop an integrated technology infrastructure, which can be used by any of our organisations • Reducing accommodation costs through better use of space, relocation and rationalisation • Improving the way information is stored and managed • Creating self-service corporate services that can be shared across organisations

Note: GP: general practitioner.
Source: *https://www.gov.uk/government/publications/department-of-health-shared-delivery-plan-2015-to-2020/shared-delivery-plan-2015-to-2020#vision*

5 BREAST CANCER CARE TARGETS

- European Journal of cancer 46 - Quality indicators in breast cancer care (2010)[51]

Table 1 – Summary table of quality indicators in breast cancer care.

	Indicator	Level of evidence	Mandatory/ Recommended	Minimum standard	Target
Diagnosis					
1.	Completeness of clinical and imaging diagnostic work-up (Proportion of women with breast cancer who pre-operatively underwent mammography, ultrasound and physical examination)	III	M	90%	95%
2	Specificity of diagnostic procedures (B/M ratio)	III	M	1:2	1:4
3.	Proportion of women with breast cancer (invasive or in situ) who had a pre-operative definitive diagnosis (B5 or C5)	III	M	80%	90%
4.	*Completeness of prognostic/predictive characterization*				
4a	Proportion of invasive cancer cases for which the following prognostic/ predictive parameters have been recorded: histological type, grading, ER&PgR, HER 2	II	M	90%	95%
4b	Proportion of invasive cancer cases with primary surgery, for which the following prognostic/predictive parameters have been recorded: histological type, grading, ER & PR, HER 2, pathological stage (T and N), size in mm for the invasive component, peritumoral vascular invasion, distance to nearest radial margin	II	M	95%	98%
4c	Proportion of non-invasive cancer cases for which the following prognostic/predictive parameters have been recorded: Dominant histologic pattern, Size in mm (best pathology or radiology estimate if 2 stage pathology), Grading, distance to nearest radial margin	II	M	95%	98%
5.	Waiting time (Time between the date of first diagnostic examination within the unit and the date of surgery or start of treatment within 6 weeks)	IV	R	75%	90%
6.	MRI availability (at least 5% of cancers preoperatively examined)	IV	R	5%	NA
7.	Genetic counselling availability (proportion of cancer cases referred)	IV	R	5%	NA

Surgery and loco-regional treatment					
8.	Multidisciplinary discussion (proportion of cancer patients to be dicussed)	IV	M	90%	99%
9. *Appropriate surgical approach*					
9. a	Proportion of patients (invasive cancers) who received a single (breast) operation for the primary tumour (excluding reconstruction)	III	M	80%	90%
9. b	Proportion of patients (DCIS only) who received just one operation	II	M	70%	90%
9. c	Proportion of patients (invasive cancers) and a clinically negative axilla (+US ±FNA/CNB) who had sentinel lymph-node biopsy	II	M	90%	95%
9d	Proportion of patients with invasive cancer and axillary clearance performed with at least 10 lymph nodes examined	III	M	95%	98%
10	*Appropriate post-operative RT*				
10. a	Proportion of patients (invasive cancer M0) who received postoperative radiotherapy after surgical resection of the primary tumour and appropriate axillary staging/ surgery in the framework of BCT.	I	M	90%	95%
10b	Proportion of patients with involvement of axillary lymph nodes (⩾ pN2a) who received post-mastectomy radiotherapy	I	M	90%	95%
11. *Avoidance of overtreatment*					
11a	Proportion of patients with invasive breast cancer not greater than 3 cm (total size, including DCIS component) who underwent BCT.	I	M	70%	80%
11b	Proportion of patients with non-invasive breast cancer not greater than 2 cm who underwent BCT	II	M	70%	80%
11c	Proportion of patients with DCIS who do not undergo axillary clearance	IV	M	95%	98%
11d	Proportion of invasive breast cancer patients with pN0 who do not undergo axillary clearance	II	M	80%	90%
	Systemic treatment				
12. *Appropriate hormonotherapy*					
12a	Proportion of patients with endocrine sensitive invasive carcinoma who received hormonotherapy, out of the total number of patients with this diagnosis	I	M	80%	90%
12b	Proportion of patients with ER– and PgR– carcinoma who did not receive adjuvant hormonotherapy out of the total number of patients with the same diagnosis	I	M	98%	100%

13. *Appropriate chemotherapy and other medical therapy*					
13a	Proportion of patients with ER– (T > 1 cm or Node+) invasive carcinoma who received adjuvant chemotherapy, out of the total number of patients with the same diagnosis	I	M	80%	90%
13b	Proportion of patients with N+ or N– T > 1 cm HER2+ (IHC 3+ or in situ hybridisation positive FISH +) invasive carcinoma treated with chemotherapy and who had adjuvant trastuzumab, out of the total number of patients with the same diagnosis.	I	M	80%	90%
13c	Proportion of patients with HER2 negative invasive carcinoma who did not have adjuvant trastuzumab, out of the total number of patients with the same diagnosis.	II	M	98%	100%
13d	Proportion of patients with HER2+ invasive carcinoma who had adjuvant chemotherapy, out of the total number of patients with the same diagnosis who had adjuvant trastuzumab	IV	M	95%	100%
13e	Proportion of patients with inflammatory breast cancer (IBC) or locally advanced non-respectable ER carcinoma who had neoadjuvant chemotherapy over the total of patients with the same diagnosis	II	M	90%	95%
Staging, counselling, follow-up and rehabilitation					
14. *Appropriate staging procedure*					
14a	Proportion of women with stage I breast cancer who do not undergo baseline staging tests (US of liver, chest X-ray and bone scan).	III	M	95%	99%
14b	Proportion of women with stage III breast cancer who undergo baseline staging tests (US of liver, chest X-ray and bone scan)	III	M	95%	99%
15	*Perform appropriate follow up*				
15.	Proportion of asymptomatic patients who undergo routine annual mammographic screening and clinical evaluation every 6 months in the first 5 years after the operation.	I	M	95%	99%
16. *Avoid inappropriately intensive follow up*					
16.	Proportion of asymptomatic patients who do not undergo a follow up protocol more intensive than routine annual mammographic screening and clinical evaluation every 6 months in the first 5 years after the operation.	1	R	95%	99%

17. *Availability of nurse counselling*					
17a	Proportion of patient referred for nurse counselling at the time of primary treatment	IV	R	85%	95%
17b	All women with a diagnosis of breast cancer should have direct access to a breast care nurse specialist for information and support with treatment related symptoms and toxicity during follow up and rehabilitation after initial treatment	IV	R	95%	99%

Source: http://www.eusoma.org/doc/guideline.recommendations.Eusoma.QI.pdf

6 CANCER SCREENING RECOMMENDATIONS BY EC

- European Union performance indicators and reference standards for breast, cervical and colorectal cancer screening[52]

Table 7.1 European Union performance indicators and reference standards

Breast Cancer Screening (50-69 years old)			
Performance indicators	**EU mean**	**Acceptable standard**	**Desirable standard**
Invitation coverage (by Eurostat 2013 population)	78.9%		
Examination coverage (by Eurostat 2013 population)	49.2%		
Participation rate	60.2%	70.0%	75.0%
Further asseessment rate*	4.4%	<5.0%	<3.0%
Further assessment participation rate*	97.3%		
Treatment referral rate*	6/1,000		
Detection rate of invasive cancer*	4.6/1,000		
Detection rate of CIS*	0.9/1,000		
% of CIS of all cancers*	16.9%	>10.0%	10.0-20.0%
Positive predictive value to detect CIS+ disease*	11.4%		
Benign open biopsy rate*	0.7/1,000		
Benign / malignant ratio*	0.13	<0.5	<0.25
Cervical Cancer Screening (30-59 years old)			
Performance indicators	**EU mean**	**Acceptable standard**	**Desirable standard**
Invitation coverage (by Eurostat 2013 population)	59.2%		
Examination coverage (by Eurostat 2013 population)	29.8%		
Participation rate	50.7%	70%	>85%
Colposcopy referral	2.1%		
Colposcopy participation	71.4%		
Detection of CIN2+	4.4/1,000		
Detection of CIN3+	2.8/1.000		
Positive predictive value for CIN2+	33.8%		
Positive predictive value for CIN3+	22.9%		
Colorectal Cancer Screening			
Performance indicators	**EU mean**	**Acceptable standard**	**Desirable standard**
Invitation coverage (by Eurostat 2013 population, age 50-74)[1]	32.6%		
Examination coverage (by Eurostat 2013 population, age 50-74)[2]	14.0%		
Participation rate[3]	38.2%	45.0%	65.0%
Further assessment participation rate[3]	74.5%	85.0%	90.0%
Completion rate of follow-up colonoscopy[3]	94.9%	90.0%	95.0%

*Subsequent screening

[1]As described in the text, most EU MSs are adopting narrower age ranges, based on cost-effectiveness considerartions and availability of resources. The actual figures for invitation coverage over the target populations of population based programmes is 62.0%.

[2]As described in the text, most EU MSs are adopting narrower age ranges, based on cost-effectiveness considerartions and availability of resources. The actual figures for invitation coverage over the target populations of population based programmes is 26.2%.

[3]Programme age range.

- European Commission - European Guidelines for Quality Assurance in Breast Cancer Screening and Diagnosis (2006)[53]

Table 9 – Inventory of the key performance indicators in Breast Cancer Screening and Diagnosis

PERFORMANCE INDICATORSa	Acceptable level	Desirable level
Proportion of women invited that attend for screening	> 70%	> 75%
Proportion of eligible women reinvited within the specified screening interval	> 95%	100%
Proportion of eligible women reinvited within the specified screening interval + 6 months	> 98%	100%
Proportion of women with a radiographically acceptable screening examination	97%	> 97%
Proportion of women informed of procedure and time scale of receiving results	100%	100%
Proportion of women undergoing a technical repeat screening examination	< 3%	< 1%
Proportion of women undergoing additional imaging at the time of the screening examination in order to further clarify the mammographic appearances	< 5%	< 1%
Proportion of women recalled for further assessment: • initial screening examinations • subsequent screening examinations	 < 7% < 5%	 < 5% < 3%
Proportion of screened women subjected to early recall following diagnostic assessment	< 1%	0%
Breast cancer detection rate, expressed as a multiple of the underlying, expected, breast cancer incidence rate in the absence of screening (IR): • initial screening examinations • subsequent-regular screening examinations	 3 x IR 1.5 x IR	 > 3 x IR > 1.5 x IR
Interval cancer rate as a proportion of the underlying, expected, breast cancer incidence rate in the absence of screening: • within the first year (0-11 months) • within the second year (12-23 months)	 30% 50%	 < 30% < 50%
Proportion of screen-detected cancers that are invasive	90%	80-90%
Proportion of screen-detected cancers that are stage II+: • initial screening examinations • subsequent-regular screening examinations	 NA 25%	 < 30% < 25%
Proportion of invasive screen-detected cancers that are node-negative: • initial screening examinations • subsequent-regular screening examinations	 NA 75%	 > 70% > 75%

Proportion of invasive screen-detected cancers that are ≤ 10 mm in size:		
• initial screening examinations	NA	≥ 25%
• subsequent-regular screening examinations	≥ 25%	≥ 30%
Proportion of invasive screen-detected cancers that are < 15 mm in size	50%	> 50%
Proportion of invasive screen-detected cancers < 10 mm in size for which there was no frozen section	95%	> 95%
Absolute sensitivity of FNAC	> 60%	> 70%
Complete sensitivity of FNAC	> 80%	> 90%
Specificity of FNAC	> 55%	> 65%
Absolute sensitivity of core biopsy	> 70%	> 80%
Complete sensitivity of core biopsy	> 80%	> 90%
Specificity of core biopsy	> 75%	> 85%
Proportion of localised impalpable lesions successfully excised at the first operation	> 90%	> 95%
Proportion of image-guided FNAC procedures with insufficient result	< 25%	< 15%
Proportion of image-guided FNAC procedures from lesions subsequently proven to be malignant, with an insufficient result	< 10%	< 5%
Proportion of patients subsequently proven to have breast cancer with a pre-operative FNAC or core biopsy at the diagnosis of cancer	90%	> 90%
Proportion of patients subsequently proven to have clinically occult breast cancer with a pre-operative FNAC or core biopsy that is diagnostic for cancer	70%	> 70%
Proportion of image-guided core/vacuum procedures with an insufficient result	< 20%	< 10%
Benign to malignant open surgical biopsy ratio in women at initial and subsequent examinations	≤ 1 : 2	≤ 1 : 4
Proportion of wires placed within 1 cm of an impalpable lesion prior to excision	90%	> 90%
Proportion of benign diagnostic biopsies on impalpable lesions weighing less than 30 grams	90%	> 90%
Proportion of patients where a repeat operation is needed after incomplete excision	10%	< 10%
Time (in working days) between:		
• screening mammography and result	15 wd[b]	10 wd[b]
• symptomatic mammography and result	5 wd[b]	-
• result of screening mammography and offered assessment	5 wd[b]	3 wd[b]
• result of diagnostic mammography and offered assessment	5 wd[b]	-
• assessment and issuing of results	5 wd[b]	-
• decision to operate and date offered for surgery	15 wd[b]	10 wd[b]

Time (in working days) between:		
• screening mammography and result[c]		
o • ≤ 15 wd[b]	95%	> 95%
o • ≤ 10 wd[b]	90%	> 90%
• symptomatic mammography and result[c]		
o • ≤ 5 wd[b]	90%	> 90%
• result of screening mammography and offered assessment[c]		
o • ≤ 5 wd[b]	90%	> 90%
o • ≤ 3 wd[b]	70%	> 70%
• result of symptomatic mammography and offered assessment[c]		
o • ≤ 5 wd[b]	90%	> 90%
o • assessment and issuing of results[c]		
o • ≤ 5 wd[b]	90%	> 90%
• decision to operate and date offered for surgery[c]		
o • ≤ 15 wd[b]	90%	> 90%
o • ≤ 10 wd[b]	70%	> 70%

Note: [a] As far as possible, targets given refer to women over 50 years of age attending a screening programme. [b]Working days. [c]To assist in monitoring and comparing performance between and within screening programmes, this summary table of indicators includes recommendations on the minimum proportion of women who should observe acceptable and recommended time periods.
Source: http://www.euref.org/european-guidelines

- European Commission – European Guidelines for Quality Assurance in Colorectal Cancer Screening and Diagnosis (2010)[54]

Table 10 – Inventory of the key performance standards in colorectal cancer (CRC) screening and diagnosis

PERFORMANCE INDICATORSa	Acceptable level	Desirable level
Invitation coverage	95%	>95%
Uptake rate	>45%	>65%
Rate of inadequate Faecal Occult Blood Test (FOBT)	<3%	<1%
Maximum time between test and receipt of result should be 15 days	>90%	-
Rate of referral to follow-up colonoscopy after positive test	90%	>95%
Maximum time between referral after positive screening (any modality) and follow-up colonoscopy should be 31 days	>90%	>95%
Compliance with follow-up colonoscopy after positive flexible sigmoidoscopy (FS)	85%	>90%
Rate of complete colonoscopies. Follow-up and screening colonoscopies to be recorded separately	>90%	>95%
Time interval between positive colonoscopy/FS and definitive management should be within 31 days	>95%	-
Endoscopists participating in a CRC screening programme should perform a minimum no. of procedures per year	300	>300
Biopsies and lesions identified in the screening programme and the subsequent resection specimen should be reported on a proforma	>90%	-
Rate of high-grade neoplasia reported by pathologists in a colonoscopy screening programme	<5%	-
Rate of high-grade neoplasia reported by pathologists in a FOBT screening programme	<10%	-

Note: [a]As far as possible, targets given refer to men and women aged 50–74 years invited to and/or attending a colorectal cancer screening programme.
Source: http://www.kolorektum.cz/res/file/guidelines/CRC-screening-guidelines-EC-2011-02-03.pdf

REFERENCES

1. United Nations. Goal 3: Ensure healthy lives and promote well-being for all at all ages [Web page].2015 [cited 2017-05-08]. Available from: http://www.un.org/sustainabledevelopment/health/
2. Council Recommendation of 22 December 2009 on seasonal influenza vaccination (Text with EEA relevance) (2009/1019/EU), 2009. Available from: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:348:0071:0072:EN:PDF
3. WHO Regional Office for Europe. European Vaccine Action Plan 2015-2020. Denmark: 2014. Available from: http://www.euro.who.int/__data/assets/pdf_file/0007/255679/WHO_EVAP_UK_v30_WEBx.pdf?ua=1
4. WHO Regional Office for Europe. Health 2020 A European policy framework and strategy for the 21st century. WHO Regional Office for Europe; 2013. Available from: http://www.euro.who.int/en/publications/policy-documents/health-2020.-a-european-policy-framework-and-strategy-for-the-21st-century-2013
5. WHO. Global health sector strategy on viral hepatitis 2016-2021. WHO; 2016. Available from: http://who.int/hepatitis/strategy2016-2021/ghss-hep/en/
6. WHO. Global health sector strategy on Sexually Transmitted Infections 2016–2021 Towards ending STIs. WHO; 2016. Available from: http://who.int/reproductivehealth/publications/rtis/ghss-stis/en/
7. WHO Regional Office for Europe. Tuberculosis action plan for the WHO European Region 2016–2020. WHO Regional Office for Europe; 2015. Available from: http://www.euro.who.int/en/about-us/governance/regional-committee-for-europe/past-sessions/65th-session/documentation/working-documents/eurrc6517-rev.1-tuberculosis-action-plan-for-the-who-european-region-20162020
8. WHO. Global health sector strategy on HIV 2016–2021 Towards ending AIDS. WHO; 2016. Available from: http://who.int/hiv/strategy2016-2021/ghss-hiv/en/
9. WHO. Universal eye health: a global action plan 2014–2019. WHO; 2013. Available from: http://who.int/blindness/actionplan/en/

10. WHO. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. WHO; 2013. Available from: http://www.who.int/nmh/publications/ncd-action-plan/en/
11. WHO. The Partnership for Maternal, Newborn & Child Health in support of Every Woman Every Child - Strategic Plan 2016-2020. Switzerland: The Partnership for Maternal, Newborn & Child Health WHO; 2016. Available from: http://who.int/pmnch/knowledge/publications/pmnch_strategic_plan_2016_2020.pdf?ua=1
12. WHO Regional Office for Europe. European Food and Nutrition Action Plan 2015–2020. WHO Regional Office for Europe; 2015. Available from: http://www.euro.who.int/en/health-topics/noncommunicable-diseases/obesity/publications/2015/european-food-and-nutrition-action-plan-20152020
13. Hoge GezondheidsRaad - Conseil Supérieur de la Santé (HGR-CSS). [cited May 15 2017]. Available from: https://www.health.belgium.be/nl/hoge-gezondheidsraad
14. RIZIV. Kwaliteitsindicatoren met betrekking tot het geneesmiddelenvoorschrift resultaten per lok (gegevens 2013). 2015
15. WHO. Mental health action plan 2013 - 2020. Switzerland: WHO; 2013. Available from: http://who.int/mental_health/publications/action_plan/en/
16. WHO. Twelfth General Programme of Work 2014–2019 Not merely the absence of disease. WHO; 2014. Available from: http://www.who.int/about/resources_planning/twelfth-gpw/en/
17. European Commission. EU Action Plan on Childhood Obesity 2014-2020. 2014. Available from: https://ec.europa.eu/health/sites/health/files/nutrition_physical_activity/docs/childhoodobesity_actionplan_2014_2020_en.pdf
18. WHO. Global Nutrition Targets 2025: Childhood overweight policy brief. WHO; 2014. Available from: http://www.who.int/nutrition/publications/globaltargets2025_policybrief_overweight/en/
19. WHO. Global Nutrition Targets 2025: Low birth weight policy brief. WHO; 2014. Available from: http://www.who.int/nutrition/publications/globaltargets2025_policybrief_lbw/en/
20. WHO. Guideline: Sugars intake for adults and children. Switzerland: WHO; 2015. Available from: http://apps.who.int/iris/bitstream/10665/149782/1/9789241549028_eng.pdf
21. WHO Regional Office for Europe. Action Plan for implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012−2016 Denmark: WHO Regional Office for Europe; 2012. Available from: http://www.euro.who.int/__data/assets/pdf_file/0019/170155/e96638.pdf?ua=1
22. De Block M. Persbericht. Overheid en voedingssector gaan samen voor 5% minder calorieën en verbeterde voeding. In; 2016.
23. Cole T, Bellizzi M, Flegal K, Dietz W. Establishing a standard definition for child overweight and obesity worldwide: international survey. BMJ. 2000;320.
24. WHO. Health topics - Noncommunicable diseases [Web page].2014 [cited 2017-05-10]. Available from: http://www.who.int/topics/noncommunicable_diseases/en/
25. WHO. Noncommunicable Diseases Global Monitoring Framework: Indicator Definitions and Specifications. WHO; 2014. Available from: http://www.who.int/nmh/ncd-tools/indicators/GMF_Indicator_Definitions_FinalNOV2014.pdf?ua=1
26. United Nations. Sustainable Development Goals - 17 Goals to Transform Our World [Web page].2016 [cited 2017-05-10]. Available from: http://www.un.org/sustainabledevelopment/
27. WHO Regional Office for Europe. Targets and indicators for Health 2020 (Version 3). Denmark: WHO Regional Office for Europe; 2016. Available from: http://www.euro.who.int/en/health-topics/health-policy/health-2020-the-european-policy-for-health-and-well-being/publications/2016/targets-and-indicators-for-health-2020.-version-3-2016

28. European Commission. Health programme [Web page]. European Union;2014 [cited 2017-05-10]. Available from: http://ec.europa.eu/health/programme/policy_en

29. 18 juli 2013. Koninklijk Besluit houdende vaststelling van de federale beleidsvisie op lange termijn inzake duurzame ontwikkeling,

30. De Block M. Persmededeling. Anti-rook beleidsplan met rookverbod in wagen met kinderen en accijnsverhoging. In; 2016.

31. De Block M, Vandeurzen J, Prévot M, Demotte R, Greoli A, Gosui D, et al. Gemeenschappelijke verklaring inzake het "Actieplan voor de eliminatie van mazelen en rubella in België voor de periode van 2016-2020" als hernieuwing van het bestaande "Actieplan 2012-2015 Bijwerking tot mei 2013". 2016 Available from: http://overlegorganen.gezondheid.belgie.be/sites/default/files/documents/declaration_commune_concernant_le_plan_daction_pour_lelimination_de_la_rougeole_et_de_la_rubeole_pour_la_periode_2016-2020.pdf

32. Belgian Antibiotic Policy Coordination Committee. Beleidsnota legislatuur 2014-2019.

33. INAMI-RIZIV. Objectifs chiffrés. Propositions pour une utilisation rationnelle de l'outil diagnostic et diminuer le risque d'exposition aux rayons ionisants d'origine médicale. 2009

34. RIZIV. Artsen en tandartsen: minimumpercentage goedkope geneesmiddelen voorschrijven [Web page]. Available from: http://www.riziv.fgov.be/nl/professionals/individuelezorgverleners/artsen/verzorging/Paginas/minimumpercentage-goedkope-geneesmiddelen-voorschrijven.aspx#.WRmPA-t96po

35. RIZIV. Overeenkomst tussen het Verzekeringscomité van de Dienst Geneeskundige Verzorging van het RIZIV en erkende verplegingsinrichtingen voor de vergoeding van de totale uni- of bilaterale borstreconstructie 2016 Available from: http://www.riziv.fgov.be/SiteCollectionDocuments/overeenkomst_borstreconstructie.pdf

36. Gurley L. Healthy People 2020: A Methodological Approach. 2010 National Conference on Health Statistics 2010 Available from: https://www.cdc.gov/nchs/ppt/nchs2010/43_gurley.pdf

37. Direction Générale de la Santé en collaboration avec l'INSERM. Rapport du GTNDO Analyse des connaissances disponibles sur des problèmes de santé sélectionnés, leurs déterminants, et les stratégies de santé publique - Définition d'objectifs. 2003. Available from: http://www.eps-polelorraine.fr/actions/S0004/docs/observation_locale/rapport_gtndo.pdf

38. Indicateurs de suivi de l'atteinte des 100 objectifs du rapport annexé à la loi du 9 août 2004 relative à la politique de santé publique. Ministère de l'emploi, de la cohésion sociale et du logement, Ministère de la santé et des solidarités, Direction générale de la santé, Direction de la recherche, des études, de l'évaluation et des statistiques; 2005. Available from: http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/054000601.pdf

39. Haut Conseil de la Santé Publique. Objectifs de santé publique: Évaluation des objectifs de la loi du 9 août 2004 et propositions. 2010. Available from: http://social-sante.gouv.fr/IMG/pdf/Rapport_Haut_conseil_de_la_sante_publique_-_Objectifs_de_sante_publique.pdf

40. Tran B, Danet S. L'évaluation en pratiques. Actualité et dossier en santé publique (adsp). 2009;L'évaluation en santé publique, n° 69 décembre 2009.

41. Direction de la recherche dé, de l'évaluation et des statistiques (DREES), Direction générale de la santé (DGS). Indicateurs de suivi de l'état de santé de la population Révision 2013 – Rapport Final. 2014. Available from: http://drees.social-sante.gouv.fr/IMG/pdf/dt44-sources_et_methodes.pdf

42. Le Galès C. Des objectifs de santé publique: pour quoi faire ? Actualité et dossier en santé publique (adsp). 2012;Les politiques de santé menées depuis 20 ans,n° 80 septembre 2012.

43. Haut Conseil de la santé publique. Principales recommandations et propositions en vue de la prochaine loi pour une politique de santé

publique. 2009. Available from: http://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/104000179.pdf

44. Bundesgesundheitsministerium. Defining national health goals [Web page].2016 [cited May 15 2017]. Available from: https://www.bundesgesundheitsministerium.de/health/national-health-goals.html

45. Agentschap Zorg en Gezondheid en Möbius. Visienota Gezondheidsdoelstellingen. 17.11.2016. 2016.

46. VWS. Kamerbrief over e-health en zorgverbetering. Brief van minister Schippers en staatssecretaris Van Rijn (beiden VWS) aan de Tweede Kamer over e-health en zorgverbetering. 2014 Available from: https://www.rijksoverheid.nl/documenten/kamerstukken/2014/07/02/kamerbrief-over-e-health-en-zorgverbetering

47. Wismar M, McKee M, Ernst K, Srivastava D, Busse R. Health Targets in Europe Learning from experience. . European Observatory on Health Systems and Policies; 2008. Available from: http://www.euro.who.int/__data/assets/pdf_file/0008/98396/E91867.pdf

48. Wismar M, Ernst K, Srivastava D, Busse R. Health targets and (good) governance. Euro Observer - The Health Policy Bulletin of the European Observatory on Health Systems and Policies. 2006;Volume 8, Number 1.

49. Department of Health. Department of Health - About us [Web page].2016 [cited 2017-05-10]. Available from: https://www.gov.uk/government/organisations/department-of-health/about#our-priorities

50. NHS England. NHS Five Year Forward View [Web page].2014 [cited 2017-05-10]. Available from: https://www.england.nhs.uk/five-year-forward-view/

51. Rosselli Del Turco M, Ponti A, Bick U, & al. Quality indicators in breast cancer care. European Journal of Cancer. 2010;46 (2010) 2344-2356.

52. Ponti A, & al. Cancer Screening in the European Union Report on the implementation of the Council Recommendation on cancer screening. European Commission; 2017. Available from: https://ec.europa.eu/health/sites/health/files/major_chronic_diseases/docs/2017_cancerscreening_2ndreportimplementation_en.pdf

53. European guidelines for quality assurance in breast cancer screening and diagnosis. Belgium: European Commission; 2006. Available from: http://www.euref.org/european-guidelines

54. European guidelines for quality assurance in colorectal cancer screening and diagnosis (First Edition). Belgium: European Commission; 2010. Available from: http://www.kolorektum.cz/res/file/guidelines/CRC-screening-guidelines-EC-2011-02-03.pdf