



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de la Santé
et de la Sécurité sociale
Inspection générale de la sécurité sociale

Luxembourg
Microdata
Platform
on Labour
and Social
Protection

Luxembourg Microdata Platform on Labour and Social Protection

Data Dictionary

Inspection générale de la sécurité sociale

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Data User's Guide

Sources of data

Microdata available in the Platform are administrative data that have been transformed and prepared for statistical purposes. They come from different national institutions:

- the centre commun de la sécurité sociale (CCSS),
- the agence pour le développement de l'emploi (ADEM)
- the service national de la statistique (STATEC)
- the caisse nationale de santé (CNS)
- the caisse nationale d'assurance pension (CNAP)
- the fonds national de solidarité (FNS)
- the caisse pour l'avenir des enfants (CAE)
- pension public schemes.

Administrative data field

Administrative data provided in the platform are related to people living in Luxembourg or directly related to the Luxembourgish social protection system. For people living in Luxembourg but not registered in the Luxembourgish social protection system (as international civil servants), only few sociodemographic characteristics are known.

How is data organized and delivered?

Microdata are organized in thematic registers. Provided variables are defined according to the "need to know" rule. Registers can be joined using different key variables:

- reference_period
- individual_IDnumber (pseudonymised individual identification number),
- employer_IDnumber (pseudonymised employer identification number)
- job_IDnumber (job identification number).

In the field of health, registers can be joined using the following key variables: act_IDnumber, hosp_stay_treat_IDnumber, invoicer_IDnumber, prescriber_IDnumber, provider_IDnumber, practitioner_IDnumber and hospital_IDnumber.





Most of the time, variables are prefixed:

- for variables which concern individuals, the prefix is i_
- for variables which concern jobs, the prefix is j_
- for variables which concern employers, the prefix is e_
- for variables which concern work absences, the prefix is a_
- for variables which concern medical acts, the prefix is act_
- for variables which concern stays and treatments in hospital, the prefix is hosp_
- for variables which concern healthcare providers, the prefix is provider_

Specific values of variables: -9 = not applicable / -8 = not available / -1 = not provided

By default, variables are available since January 2002, except for health data which are available since January 2012 or 2018, depending on the type of variables.

By default and to limit the risk of re-identification, only months and years are provided for date variables (the day is always recoded in 01). If the project requires more precise dates, it is up to the applicant to justify in order to comply with the "need to know" rule.

Signs  and  indicate that measures of protection for personal data have been taken. Two levels of protection have been introduced.



These variables are provided at an aggregate level. If the project requires a more detailed level of information, it will be up to the applicant to justify it in order to comply with the "need to know" rule.



These variables are not provided by default. If the project requires this variable, it will be up to the applicant to justify it in order to comply with the "need to know" rule. Where appropriate, the level of aggregation provided to the applicant will also be decided according to the "need to know" rule.



Content of administrative data registers

1.	Individual data	5
1.1	Individual sociodemographic characteristics	5
1.2	Characteristics of individuals registered in the Luxembourgish social security	8
1.3	Child-parents relationships	8
1.4	Spouses relationships	9
1.5	Household characteristics	9
2.	Labour market data	11
2.1	Characteristics of jobs	11
2.2	Characteristics of employers	20
2.3	Work absences	21
2.4	Redeployments	22
3.	Social benefits data	23
3.1	Family benefits	23
3.2	Replacement benefits	27
3.3	Social assistance benefits	31
4.	Health data	34
4.1	Medical acts	34
4.2	Auxiliary services related to medical acts	39
4.3	Stays and treatments in hospital	41
4.4	Secondary identified diagnosis related to stays or treatment in hospital	47
4.5	Hospital activities	48
4.6	Healthcare providers	51
4.7	Medications	56



1. Individual data

1.1 Individual sociodemographic characteristics

All individual sociodemographic variables are related to a reference period (year and month). Some variables can change from month to month (like the age or the residence). Others do not change (like the country of birth).

Name of the variable	reference_period
Description	Year and month
Format	Character (yyyymm)
Values	
Comments	
Source(s)	

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	i_gender
Description	
Format	Character
Values	0 Male 1 Female
Comments	
Source(s)	CCSS

Name of the variable	i_age
Description	Age at the end of the month
Format	Character
Values	0 less than 20 years 1 20-24 years 2 25-29 years 3 30-34 years 4 35-39 years 5 40-44 years 6 45-49 years 7 50-54 years 8 55-59 years 9 60-64 years 10 65 years and more
Comments	
Source(s)	CCSS




Name of the variable	i_civil_status
Description	
Format	Character
Values	0 Single 1 Married or civil partnership 2 Separated-divorced Widow(er)
Comments	This variable is not reliable for people living outside Luxembourg. For them, the value is -8 (not available).
Source(s)	CCSS

Name of the variable	i_residence_country
Description	
Format	Character
Values	0 Luxembourg 1 Germany 2 Belgium 3 France 4 Other
Comments	Residence country refers to the administrative address. When the country of residence is outside the Greater Region, one would assume the person lives in Luxembourg, at least during the week.
Source(s)	CCSS

Name of the variable	i_location_residence
Description	Individual location residence refers to the following levels: "canton" for Luxembourg, "département" for France, "province" for Belgium and "Regierungsbezirk" for Germany.
Format	Character
Values	
Comments	For countries other than Luxembourg, France, Germany and Belgium, the variable is not available. More detailed variables are available about residence. They will be provided according to the "need to know" rule.
Source(s)	CCSS

Name of the variable	i_citizenship
Description	
Format	Character
Values	0 Luxembourg 1 Germany 2 Belgium 3 France 4 Portugal 5 Other EU-27 6 Other
Comments	This variable refers to the main citizenship during the reference period. It can change from month to month for people who acquire another citizenship. In case of dual citizenship, the provided citizenship is the one considered as the first by the administration. For people who take Luxembourgish nationality, this is the one that is indicated. The groups of countries are established in accordance with the current list of EU27 countries (List of 27 European Union member countries).
Source(s)	CCSS



Name of the variable	i_birth_country	
Description		
Format	Character	
Values		0 Luxembourg
		1 Germany
		2 Belgium
		3 France
		4 Portugal
		5 Other EU-27
		6 Other
Comments	In the context of the Great Region, a woman living in France, Belgium or Germany can give birth in Luxembourg. In this case, the country of birth is Luxembourg and not the country of residence. The groups of countries are established in accordance with the current list of EU27 countries (List of 27 European Union member countries).	
Source(s)	CCSS	

Name of the variable	i_NIN_creation_date
Description	Date of creation of the national identification number
Format	Date yyyy-mm
Values	
Comments	The variable refers to the date of creation of the national identification number. For people registered before the 1 st January 1977, the date is always January 1977.
Source(s)	CCSS

Name of the variable	i_first_job_Luxembourg_date
Description	
Format	Date yyyy-mm
Values	
Comments	"Not applicable" concerns people who have never worked. Student internships and summer jobs are not considered as a first job.
Source(s)	CCSS

Name of the variable	i_death_date
Description	
Format	Date yyyy-mm
Values	
Comments	
Source(s)	CCSS



1.2 Characteristics of individuals registered in the Luxembourgish social security

All variables concerning people registered in the Luxembourgish social security are related to a reference period (year and month). All of them can change from month to month.

Name of the variable	reference_period
Description	Year and month
Format	Character (yyyymm)
Values	
Comments	
Source(s)	

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	i_coinsurance
Description	
Format	Character
Values	0 Personal insurance 1 Co-insured
Comments	"Not applicable" concerns people not registered in the Luxembourgish social security system
Source(s)	CCSS

1.3 Child-parents relationships

Name of the variable	parent_individual_IDnumber
Description	Parent pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	child_individual_IDnumber
Description	Child pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	



1.4 Spouses relationships

Name of the variable	reference_period
Description	Year and month
Format	Character (yyyymm)
Values	
Comments	
Source(s)	

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	spouse_individual_IDnumber
Description	Spouse pseudonymised individual identification number
Format	Character
Values	
Comments	Spouses relationships include married people or civil partnership.
Source(s)	

1.5 Household characteristics

Name of the variable	reference_period
Description	Year and month
Format	Character (yyyymm)
Values	
Comments	
Source(s)	

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	h_household_IDnumber
Description	Pseudonymised household identification number in December of the year
Format	Numeric
Values	
Comments	Information available since 2016 only, as of the 31st of December of each year. Information only available for residents. The household is defined as all persons living together in the same dwelling (dwelling-household) except for people living in the City of Luxembourg for whom this information is not available. For the latest, a dwelling-household has been built for the beneficiaries of a benefit calculated at the household level (minimum income and/or cost-of-living allowance) and, for the other persons, a fiscal-household has been built defined as married or civil partner persons with or without children living together. The composition of the household is as of the 31st of December of each year.
Source(s)	NRNP, IGSS (Calculated)



Name of the variable	h_household_type
Description	Household identification type
Format	Numeric
Values	0 dwelling-household 1 fiscal household
Comments	Information available since 2016 only, as of the 31st of December of each year.
Source(s)	NRNP, IGSS (Calculated)

Name of the variable	h_month_total_income
Description	Monthly gross total income
Format	Numeric
Values	
Comments	$i_month_total_income = j_month_total_wage + i_family_allowance + i_school_allowance + i_birth_allowance + i_maternity_allowance + i_childrear_allowance + i_child_bonus + i_parental_leave_benefit + i_unemployment_benefit + i_compensation_benefits + i_tideover_benefit + i_early_retirement + i_invalid_pension + i_oldage_pension + i_survivor_pension + i_orphan_pension + i_child_rearing_fixed_allow + i_min_income + i_lifecost_allowance + i_disable_allowance$
Source(s)	CCSS

Name of the variable	h_equi_disp_income
Description	Equivalised disposable income (Euros/year)
Format	Numeric
Values	
Comments	<p>Information available since 2016 only, as of the 31st of December of each year.</p> <p>The equivalised disposable income is the total income of a household, after tax and social contributions, that is available for spending or saving, divided by the number of household members converted into equalised adults; household members are equalised or made equivalent by weighting each according to their age, using the so-called modified OECD equivalence scale (1.0 to the first adult; 0.5 to the second and each subsequent person aged 14 and over; 0.3 to each child aged under 14) and according to the number of months present in the national system of social protection during the year.</p> <p>The equivalised disposable income is attributed equally to each member of the household and it permits to compare persons belonging to households of different size and composition. Due to unavailability, the equivalised disposable income does not include capital income (rents, interest payments, dividends), private transfers (alimonies, gifts) and income from the rest of the world (income from international civil servants living in Luxembourg or income from abroad). Users of this variable must be aware of these limitations.</p> <p>As specified in the description of the variable h_household_IDnumber, the concept of household in the City of Luxembourg corresponds to a fiscal-household defined as married or civil partner persons with or without children living together and not as a dwelling-household as for the other communes in Luxembourg. So, the equivalised disposable income for inhabitants of the City of Luxembourg could also be impacted by this pitfall.</p>
Source(s)	Calculation made by IGSS using information from the CCSS and using a microsimulation model to estimate the income tax.



2. Labour market data

2.1 Characteristics of jobs

All variables concerning jobs are related to a reference period (year and month).

Some variables can change from month to month (like the number of worked hours or the wage).

Others do not change over time (like the starting date of the job).


Name of the variable	reference_period
Description	Year and month
Format	Character (yyyymm)
Values	
Comments	
Source(s)	

Name of the variable	job_IDnumber
Description	Identification number of the job
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	employer_IDnumber
Description	Pseudonymised employer identification number
Format	Character
Values	
Comments	If the employer is self-employed or a private person, the value is "Not applicable".
Source(s)	

Name of the variable	temporary_jobs_employer_IDnumber
Description	Pseudonymised employer identification number for temporary jobs
Format	Character
Values	-10 Firms established abroad
Comments	"Not applicable" concerns non temporary jobs.
Source(s)	

Name of the variable	j_job_start_date
Description	Date the job starts
Format	Date yyyymm
Values	
Comments	
Source(s)	CCSS



Name of the variable	j_job_end_effective_date
Description	Date the job ends
Format	Date yyyyymm
Values	
Comments	Not applicable concerns current jobs.
Source(s)	CCSS

Name of the variable	j_contract_type
Description	
Format	Character
Values	0 Permanent contract 1 Fixed-term contract 2 Temporary contract 3 Apprenticeship contract 4 Summer or student job
Comments	Not applicable concerns self-employed. Information is unavailable before 2005. Summer or student jobs correspond to jobs for which the person has worked less than two months per year. Otherwise, the job is fixed-term contract or a temporary contract.
Source(s)	CCSS

Name of the variable	j_job_end_planned_date
Description	
Format	Date yyyyymm
Values	
Comments	Not applicable concerns permanent contracts and self-employed. This variable refers to the date when the contract is expected to end (as decided at the moment of recruitment).
Source(s)	CCSS

Name of the variable	j_contract_planned_duration
Description	Duration of the contract as planned when hiring
Format	character
Values	0 < 2 weeks 1 [2 weeks - 1 month[2 [1 - 2 months[3 [2 - 6 months[4 [6 - 12 months[5 [12 - 24 months[6 ≥ 24 months
Comments	Not applicable concerns permanent contracts and self-employed. This variable refers to the duration fixed at the moment of recruitment. $j_contract_planned_duration = j_end_planned_date - j_start_date$
Source(s)	CCSS



Name of the variable	j_job_status
Description	
Format	Character
Values	0 Private sector worker 1 Civil servant 2 Self-employed
Comments	
Source(s)	CCSS





Name of the variable	j_blue-collar
Description	Whether the worker performs manual tasks
Format	Character
Values	0 No 1 Yes
Comments	This variable is not reliable for self-employed and civil servants. For them, the value is -8.
Source(s)	CCSS

Name of the variable	j_posted_worker
Description	Whether the worker is posted abroad during the month
Format	Character
Values	0 No 1 Yes
Comments	"Not applicable" concerns self-employed.
Source(s)	CCSS

Name of the variable	j_assisting_family_member
Description	
Format	Character
Values	0 No 1 Yes
Comments	Person living with the owner of the unit and working regularly for the unit, but do not have a contract of service and do not receive a fixed sum for the work they perform. This is limited to those persons who are not included on the payroll of another unit as their principal occupation. For assisting family members, relevant variables are j_job_start_date, j_job_end_planned_date and employer_IDnumber.
Source(s)	CCSS

Name of the variable	j_activation_measure
Description	Whether the worker is registered in an active labour market policy at the public employment service (ADEM)
Format	Character
Values	  0 No 1 Yes
Comments	"Not applicable" concerns self-employed. Only activation measures assimilated to jobs are registered in the file.
Source(s)	CCSS

Name of the variable	j_activation_measure_type
Description	Name of the activation measure
Format	Character
Values	  Changing values according to new measures
Comments	"Not applicable" concerns self-employed and workers out of activation schemes. http://www.adem.public.lu/fr/demandeurs-demploi/aides-financieres-mesures/mesures-emploi/index.html
Source(s)	ADEM



Name of the variable	j_internal_redeployment
Description	Whether the worker is concerned by an internal redeployment (<i>reclassement interne</i>), due to a loss of working capacity
Format	Character
Values	0 No 1 Yes
Comments	"Not applicable" concerns self-employed.
Source(s)	CCSS

Name of the variable	j_trial_period
Description	Whether the contract has a trial period
Format	Character
Values	0 No 1 Yes
Comments	"Not applicable" concerns self-employed and workers without trial period. The variable is available from 2008 on. Before 2008, the value is -8
Source(s)	CCSS

Name of the variable	j_trial_period_end_date
Description	
Format	Date yyyymm
Values	
Comments	"Not applicable" concerns self-employed and workers without trial period. The variable is available from 2008 on. Before 2008, the value is -8.
Source(s)	CCSS

Name of the variable	j_trial_period_length
Description	
Format	Numeric
Values	Number of weeks (rounded to the nearest integer)
Comments	"Not applicable" concerns self-employed and workers without trial period. The variable is available from 2008 on. Before 2008, the value is -8. $j_trial_period_length = j_trial_period_end_date - j_job_start_date$
Source(s)	CCSS

Name of the variable	j_F_short_time_working
Description	Whether the worker is concerned by short-time working during the month
Format	Character
Values	0 No 1 Yes
Comments	"Not applicable" concerns self-employed.
Source(s)	CCSS

Name of the variable	j_short_time_working_benefit
Description	Monthly amount of short-time working
Format	Numeric
Values	
Comments	"Not applicable" concerns self-employed. Short time working benefit is included in $j_F_month_base_wage$.
Source(s)	CCSS



Name of the variable	j_short_time_working_hours
Description	Monthly hours concerned by short-time working
Format	Numeric
Values	
Comments	"Not applicable" concerns self-employed. Short time working hours are included in j_nb_base_worked_hours.
Source(s)	CCSS

Name of the variable	j_F_month_base_wage
Description	Whether receiving a base wage during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	"Not applicable" concerns self-employed. This variable is missing before January 2009. Before this date, corresponding to the introduction of the single status (<i>statut unique</i>), the different components of the wage were not distinguishable.
Source(s)	CCSS

Name of the variable	j_month_base_wage
Description	Monthly gross base wage
Format	Numeric
Values	
Comments	
Source(s)	CCSS

Name of the variable	j_F_month_additionnal_wage
Description	Whether receiving an additionnal wage during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	"Not applicable" concerns self-employed. This variable is missing before January 2009. Before this date, corresponding to the introduction of the single status (<i>statut unique</i>), the different components of the wage were not distinguishable.
Source(s)	CCSS

Name of the variable	j_month_additionnal_wage
Description	Monthly gross additionnal wage, excluding overtime wage
Format	Numeric
Values	
Comments	
Source(s)	CCSS

Name of the variable	j_F_month_overtime_wage
Description	Whether receiving an overtime wage during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	"Not applicable" concerns self-employed. This variable is missing before January 2009. Before this date, corresponding to the introduction of the single status (<i>statut unique</i>), the different components of the wage were not distinguishable.
Source(s)	CCSS



Name of the variable	j_month_overtime_wage
Description	Monthly gross overtime wage
Format	Numeric
Values	
Comments	
Source(s)	CCSS

Name of the variable	j_F_month_total_wage
Description	Whether receiving a wage during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	"Not applicable" concerns self-employed.
Source(s)	CCSS

Name of the variable	j_month_total_wage
Description	Monthly gross total wage
Format	Numeric
Values	
Comments	After 2009, $j_month_total_wage = j_month_base_wage + j_month_additionnal_wage + j_month_overtime_wage$
Source(s)	CCSS

Name of the variable	j_F_nb_base_worked_hours
Description	Flag for base worked hours during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	"Not applicable" concerns self-employed. This variable is missing before January 2009. Before this date, corresponding to the introduction of the single status (<i>statut unique</i>), the different components of the worked hours were not distinguishable. Only the total number of worked hours was declared (base hours + overtime)
Source(s)	CCSS

Name of the variable	j_nb_base_worked_hours
Description	
Format	Numeric
Values	
Comments	The number of worked base hours is related to the number of working days in the month. Thus, depending on the month and the number of days off, the number of worked hours can vary from 144 hours to 184 hours.
Source(s)	CCSS



Name of the variable	j_F_nb_overtime_paid_hours
Description	Flag for overtime paid hours during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	This variable is missing before January 2009. Before this date, corresponding to the introduction of the single status (<i>statut unique</i>), the different components of the worked hours were not distinguishable. Only the total number of worked hours was declared (base hours + overtime)
Source(s)	CCSS

Name of the variable	j_nb_overtime_paid_hours
Description	
Format	Numeric
Values	
Comments	
Source(s)	CCSS

Name of the variable	j_F_nb_total_worked_hours
Description	Flag for total worked hours during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	This variable exists before January 2009. "Not applicable" concerns self-employed.
Source(s)	CCSS

Name of the variable	j_nb_total_worked_hours
Description	
Format	Numeric
Values	
Comments	After 2009, $j_nb_total_worked_hours = j_nb_base_worked_hours + j_nb_overtime_paid_hours$ As the number of contractual worked hours, the number of total worked hours is related to the number of working days in the month.
Source(s)	CCSS

Name of the variable	j_F_nb_base_worked_hours_ADJ
Description	Flag for adjusted base worked hours during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	This variable is missing before January 2009. "Not applicable" concerns self-employed.
Source(s)	CCSS



Name of the variable	j_nb_base_worked_hours_ADJ
Description	Adjusted number of base worked hours
Format	Numeric
Values	.
Comments	Since j_nb_base_worked_hours refers to the effective time spent working, this variable is dependent on the number of working days in the month. Then, it is IMPOSSIBLE to calculate a correct hourly base wage using this variable. Indeed, the hourly wage of a worker receiving the same monthly wage would change, leading one to consider significant fluctuations in wages while they are purely artificial. This is why we have calculated adjusted base worked hours, ADJUSTED for calendar effects.
Source(s)	CCSS

Name of the variable	j_F_nb_total_worked_hours_ADJ
Description	Flag for adjusted total worked hours during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	This variable is missing before January 2009. "Not applicable" concerns self-employed.
Source(s)	CCSS

Name of the variable	j_nb_total_worked_hours_ADJ
Description	Adjusted number of total worked hours
Format	Numeric
Values	
Comments	$j_nb_total_worked_hours_ADJ = j_nb_base_worked_hours_ADJ + j_nb_overtime_paid_hours$
Source(s)	CCSS

Name of the variable	j_F_hourly_base_wage
Description	Flag for hourly base wage during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	This variable is missing before January 2009. "Not applicable" concerns self-employed.
Source(s)	CCSS

Name of the variable	j_hourly_base_wage
Description	
Format	Numeric
Values	
Comments	$j_hourly_base_wage = j_month_base_wage / j_nb_base_worked_hours_ADJUSTED$ For jobs with a duration of 12 months or less, the monthly hourly wage adjusted for the calendar effect is not provided. For these jobs, the researcher can compute by himself an average hourly wage over the entire occupation.
Source(s)	CCSS



Name of the variable	j_F_hourly_total_wage
Description	Flag for hourly total wage during the month
Format	Character
Values	-9 Not applicable -8 Missing data 1 Yes
Comments	"Not applicable" concerns self-employed.
Source(s)	CCSS

Name of the variable	j_hourly_total_wage
Description	
Format	Numeric
Values	
Comments	$j_hourly_total_wage = \sum (j_month_base_wage + j_month_additionnal_wage + j_month_overtime_wage) / j_nb_total_worked_hours \text{ ADJUSTED}$ <p>For jobs with a duration of 12 months or less, the monthly hourly wage adjusted for the calendar effect is not provided. For these jobs, the researcher can compute by himself an average hourly wage over the entire occupation.</p>
Source(s)	CCSS

Name of the variable	j_F_official_stat
Description	Whether the job is included in monthly official employment statistics
Format	Character
Values	0 No 1 Yes
Comments	<p>This flag has to be used to select jobs retained for calculation of monthly official employment statistics published by IGSS.</p> <p>These monthly statistics refer to the number of persons working the last working day of the month. Consequently, official statistics exclude jobs that end before the last working day and secondary jobs. That means that in case of multiple jobs, we keep only one job per worker (the main one).</p>
Source(s)	CCSS




2.2 Characteristics of employers

All variables concerning employers are related to a reference period (year and month). All of them can change from month to month.

Name of the variable	reference_period
Description	Year and month
Format	Character (yyyymm)
Values	
Comments	
Source(s)	

Name of the variable	employer_IDnumber
Description	Pseudonymised employer identification number
Format	Character
Values	
Comments	Employers can change their registration number from one period to another just because they change their status.
Source(s)	CCSS

Name of the variable	e_activity_sector
Description	Activity sector according to the NACE Rev.2 classification
Format	Character
Values	 Nace 2 digits See https://environnement.public.lu/content/dam/environnement/documents/offall_a_ressourcen/codes-d%C3%A9chets/code-nace-rev2.pdf
Comments	
Source(s)	CCSS/STATEC

Name of the variable	e_legal_status
Description	
Format	Character
Values	0 Private 1 Public 2 Other
Comments	The value "other" includes associations, NGOs, etc.
Source(s)	CCSS

Name of the variable	e_size_employer
Description	Number of workers working for the employer
Format	Character
Values	0 1-4 workers 1 5-19 workers 2 20-49 workers 3 50-249 workers 4 250 workers and more
Comments	The number of workers is calculated at the end of the month. Temporary workers are excluded. People in parental leave full time are excluded as well. By using the "jobs characteristics" register, it is possible to compute many indicators about the composition of the workforce of the employer. To that end, select the existing jobs at the end of the month (variable j_flag_jobs_official_stat = 'yes') and aggregate by employer and by the variables you want to split the workforce by.
Source(s)	CCSS



2.3 Work absences

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	



Name of the variable	a_absence_type
Description	
Format	Character
Values	0 Illness 1 Maternity/special leave for adopted child 2 Work exemption for pregnant women 3 Injury 4 Family reasons leave 5 Palliative care leave (<i>congé d'accompagnement</i>)
Comments	Absences concern only workers from private scheme.
Source(s)	CCSS

Name of the variable	a_start_date
Description	
Format	Date yyyyymmdd
Values	
Comments	Absences concern only workers from private scheme.
Source(s)	CCSS



Name of the variable	a_end_date
Description	
Format	Date yyyyymmdd
Values	
Comments	Absences concern only workers from private scheme.
Source(s)	CCSS

Name of the variable	a_length_absence
Description	Length of absence taking into account calendar days
Format	Numeric
Values	
Comments	Absences concern only workers from private scheme.
Source(s)	CCSS





Name of the variable	a_diagnosis
Description	
Format	Character
Values	  See "Art. 5 Les codes de diagnostic employés dans le cadre du constat d'incapacité de travail" in the Annex of the document "Cahier des charges - Convention entre la CNS et l'Association des médecins et médecins-dentistes" https://cns.public.lu/fr/legislations/ammd_dent/cns-ammd-cahier-des-charges.html
Comments	Absences concern only workers from private scheme. Diagnosis is only available for resident persons.
Source(s)	CCSS

2.4 Redeployments

Name of the variable	r_date_decision
Description	
Format	Date yyyymm
Values	 
Comments	
Source(s)	CCSS

Name of the variable	Individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	employer_IDnumber
Description	Pseudonymised employer identification number
Format	Character
Values	
Comments	Employers can change their registration number from one period to another just because they change their status.
Source(s)	CCSS

Name of the variable	r_redeployment_type
Description	Whether the worker is concerned by an internal or external redeployment (<i>reclassement interne ou externe</i>), due to a loss of working capacity
Format	Character
Values	  0 External 1 Internal
Comments	"Not applicable" concerns self-employed.
Source(s)	CCSS



3. Social benefits data

All variables concerning social benefits are related to a reference period (year and month).

Name of the variable	reference_period
Description	Year and month
Format	Character (yyyymm)
Values	
Comments	
Source(s)	

Name of the variable	Individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

3.1 Family benefits

Name of the variable	i_F_family_allowance_right
Description	Whether the individual has children entitled for family allowances (<i>allocations familiales</i>)
Format	Character
Values	0 No 1 Yes
Comments	Family allowances are a right of the child and not of the parent. Therefore, the variable is 'yes' for both parents if appropriate. For a part of the crossborder workers, the information is not available at the individual level. Consequently, this variable is not provided for the crossborder workers. Since October 2010, family allowances eligibility conditions have changed after the introduction of the law concerning the State scholarships and loans to students grant system.
Source(s)	CAE

Name of the variable	i_family_allowance
Description	Monthly amount of the family allowances (<i>allocations familiales</i>)
Format	Numeric
Values	
Comments	Family allowances are a right of the child and not of the parent. So, it is not an individualised income which is impossible to calculate according to the ignorance of the income sharing rules between parents (the latest may be living in couple or be separated). Therefore, considering the whole amount for estimating the financial situation of the individual results of an overestimation of the latest. For a part of the crossborder workers, the information is not available at the individual level. Consequently and to keep coherence of data, this variable is not provided for the crossborder workers. Since October 2010, family allowances eligibility conditions have changed after the introduction of the law concerning the State scholarships and loans to students grant system.
Source(s)	CAE



Name of the variable	i_F_school_allowance_right
Description	Whether the individual has children entitled to the new school year allowance (<i>allocation de rentrée scolaire</i>)
Format	Character
Values	0 No 1 Yes
Comments	<p>The school year allowance is a right of the child and not of the parent. Therefore, the variable is 'yes' for both parents if appropriate.</p> <p>For a part of the crossborder workers, the information is not available at the individual level. Consequently and to keep coherence of data, this variable is not provided for the crossborder workers.</p> <p>Since October 2010, the school year allowance eligibility conditions have changed substantially after the introduction of the law concerning the State scholarships and loans to students grant system.</p> <p>Data on the school year allowance are not available before 2003.</p>
Source(s)	CAE

Name of the variable	i_school_allowance
Description	Monthly amount of the school year allowance (<i>allocation de rentrée scolaire</i>)
Format	Numeric
Values	
Comments	<p>The school year allowance is a right of the child and not of the parent. So, it is not an individualised income which is impossible to calculate according to the ignorance of the income sharing rules between parents (the latest may be living in couple or be separated). Therefore, considering the whole amount for estimating the financial situation of the individual results of an overestimation of the latest.</p> <p>For a part of the crossborder workers, the information is not available at the individual level. Consequently and to keep coherence of data, this variable is not provided for the crossborder workers.</p> <p>Since October 2010, the school year allowance eligibility conditions have changed substantially after the introduction of the law concerning the State scholarships and loans to students grant system.</p> <p>Data on the school year allowance are not available before 2003.</p>
Source(s)	CAE

Name of the variable	i_F_birth_allowance
Description	Whether receiving the birth allowance (<i>allocation de naissance</i>)
Format	Character
Values	0 No 1 Yes
Comments	<p>The birth allowance which is paid in three instalments (prenatal, natal, postnatal) during a three years period is made conditional to different medical examinations the mother and the child must have undergone at different moment of the pregnancy or during the early years of the child's life. For recent beneficiaries, all instalments may not have been paid.</p> <p>The absence of the birth allowance for an eligible mother that should benefit it could therefore indicate a certain type of behaviour. That is why, by default, the variable is not provided.</p>
Source(s)	CAE



Name of the variable	i_type_birth_allowance
Description	Rank of the instalment
Format	Character
Values	0 prenatal 1 natal 2 postnatal
Comments	The birth allowance is paid in three instalments (prenatal, natal, postnatal) during a three years period. Eligibility is made conditional to different medical examinations for mothers and children. For recent beneficiaries, all instalments may not have been paid. The absence of the birth allowance for an eligible mother could therefore indicate a certain type of behaviour. That is why, by default, the variable is not provided.
Source(s)	CAE

Name of the variable	i_birth_allowance
Description	Monthly amount of the birth allowance (<i>allocation de naissance</i>)
Format	Numeric
Values	
Comments	The birth allowance is paid in three instalments (prenatal, natal, postnatal) during a three years period. Eligibility is made conditional to different medical examinations for mothers and children. For recent beneficiaries, all instalments may not have been paid. The absence of the birth allowance for an eligible mother could therefore indicate a certain type of behaviour. That is why, by default, the variable is not provided.
Source(s)	CAE

Name of the variable	i_F_maternity_allowance
Description	Whether receiving the maternity allowance (<i>allocation de maternité</i>)
Format	Character
Values	0 No 1 Yes
Comments	This allowance has been abolished since the 1st of June 2015.
Source(s)	CAE

Name of the variable	i_maternity_allowance
Description	Monthly amount of the maternity allowance (<i>allocation de maternité</i>)
Format	Numeric
Values	
Comments	This allowance has been abolished since the 1st of June 2015.
Source(s)	CAE

Name of the variable	i_F_childrear_allowance
Description	Whether receiving child rearing allowance (<i>allocation d'éducation</i>)
Format	Character
Values	0 No 1 Yes
Comments	This allowance has been abolished since the 1st of June 2015 but persons receiving this allowance the 31 May 2015 continue to benefit from this allowance until the end of the entitlement of the allowance. For a part of the crossborder workers, the information is not available at the individual level. Consequently and to keep coherence of data, this variable is not provided for none of the crossborder workers.
Source(s)	CAE



Name of the variable	i_childrear_allowance
Description	Monthly amount of the child rearing allowance (<i>allocation d'éducation</i>)
Format	Numeric
Values	
Comments	<p>This allowance is abolished since the 1st of June 2015 but persons receiving this allowance the 31 May 2015 continue to benefit from this allowance until the end of the entitlement of the allowance.</p> <p>For a part of the crossborder workers, the information is not available at the individual level. Consequently and to keep coherence of data, this variable is not provided for none of the crossborder workers.</p>
Source(s)	CAE

Name of the variable	i_F_child_bonus_right
Description	Whether the individual has children entitled to the child bonus (<i>boni pour enfant</i>)
Format	Character
Values	0 No 1 Yes
Comments	<p>The child bonus is a tax reduction (introduced in 2008) but can be compared to a family benefit. It is linked to the child and not to the parent. Therefore, the variable is 'yes' for both parents if appropriate.</p> <p>For a part of the crossborder workers, the information is not available at the individual level. Consequently, the variable is not provided for crossborder workers.</p> <p>Since October 2010, child bonus eligibility conditions have changed substantially after the introduction of the law concerning the State scholarships and loans to students grant system. Since August 2016, the child bonus is merged with the family allowances (<i>allocations familiales</i>).</p>
Source(s)	CAE

Name of the variable	i_child_bonus
Description	Monthly amount of the child bonus (<i>boni pour enfant</i>)
Format	Numeric
Values	
Comments	<p>The child bonus is a tax reduction (introduced in 2008) but can be compared to a family benefit. It is linked to the child and not to the parent. So, it is not an individualised income which is impossible to calculate according to the ignorance of the income sharing rules between parents (the latest may be living in couple or be separated). Therefore, considering the whole amount for estimating the financial situation of the individual results of an overestimation of the latest.</p> <p>For a part of the crossborder workers, the information is not available at the individual level. Consequently, this variable is not provided for none of the crossborder workers.</p> <p>Since October 2010, child bonus eligibility conditions have changed substantially after the introduction of the law concerning the State scholarships and loans to students grant system. Since August 2016, the child bonus is merged with the family allowances (<i>allocations familiales</i>).</p>
Source(s)	CAE



3.2 Replacement benefits

Name of the variable	i_F_parental_leave
Description	Whether the individual is on parental leave (<i>congé parental</i>)
Format	Character
Values	0 No 1 Yes
Comments	
Source(s)	CCSS

Name of the variable	i_parental_leave_start_date
Description	
Format	Date yyyy-mm
Values	
Comments	
Source(s)	CCSS

Name of the variable	i_parental_leave_end_date
Description	
Format	Date yyyy-mm
Values	
Comments	
Source(s)	CCSS

Name of the variable	i_parental_leave_type
Description	
Format	Character
Values	0 Full time 1 Part time 2 Split parental leave (4 months over 20 months max) 3 Split parental leave (1 day/week during 20 months)
Comments	Workers on full time parental leave or on split leave (4 months over 20 months max) are not considered as employees. Therefore they are not present in the employment register during the parental leave. In contrast, workers on part-time parental leave or on split parental leave (1 day/week during 20 months) are in work simultaneously to the parental leave. The parental leave was reformed the 1st of December 2016. This reform introduced the split parental leave.
Source(s)	CCSS

Name of the variable	i_parental_leave_rank
Description	
Format	Character
Values	PL1 PL2
Comments	The parent can request: - either the "first parental leave" (PL1), which must be taken immediately after the maternity or adoption leave; - or the "second parental leave", which must be taken before the child's 6th birthday (the 12th birthday for adopted children).
Source(s)	CAE



Name of the variable	i_parental_leave_childIDnumber
Description	Individual IDnumber of the child reared during the parental leave
Format	Character
Values	
Comments	Prior to parental leave reform of the 1st of December 2016, the ID of the child reared during the parental leave was unknown. For this reason the value is -8.
Source(s)	CCSS

Name of the variable	i_parental_leave_benefit
Description	Gross monthly amount of the parental leave benefit (<i>congé parental</i>)
Format	Numeric
Values	
Comments	
Source(s)	CCSS

Name of the variable	i_F_unemployment_benefit
Description	Whether receiving unemployment benefits (<i>indemnité de chômage</i>)
Format	Character
Values	0 No 1 Yes
Comments	Included individuals receiving unemployment benefits because of an external redeployment (<i>reclassement externe</i>)
Source(s)	CCSS

Name of the variable	i_unemployment_benefit
Description	Gross monthly amount of unemployment benefit (<i>indemnité de chômage</i>)
Format	Numeric
Values	
Comments	
Source(s)	CCSS

Name of the variable	i_F_tideover_benefit
Description	Whether receiving tideover benefit (<i>indemnité d'attente or indemnité professionnelle d'attente</i>)
Format	Character
Values	0 No 1 Yes
Comments	Workers in external redeployment receive this benefit when the unemployment benefit ends. The calculation of this benefit changed with the 2015 law on the professional redeployment. Before the law, this benefit was called "indemnité d'attente". After the law, it is called indemnité professionnelle d'attente.
Source(s)	ADEM/CNAP

Name of the variable	i_tideover_benefit
Description	Gross monthly amount of tideover benefit (<i>indemnité d'attente or indemnité professionnelle d'attente</i>)
Format	Numeric
Values	
Comments	Workers in external redeployment receive this benefit when the unemployment benefit ends. The calculation of this benefit changed with the 2015 law on the professional redeployment.
Source(s)	ADEM/CNAP



Name of the variable	i_F_early_retirement
Description	Whether receiving early retirement (<i>préretaire</i>)
Format	Character
Values	0 No 1 Yes
Comments	Admission to early retirement concerns in principle only employees of the private sector, except for civil servants concerned by shift work and night work.
Source(s)	CCSS

Name of the variable	i_early_retirement
Description	Gross monthly amount of early retirement (<i>préretaire</i>)
Format	Numeric
Values	
Comments	Admission to early retirement concerns in principle only employees of the private sector, except for civil servants concerned by shift work and night work.
Source(s)	CCSS



Name of the variable	i_F_invalid_pension
Description	Whether receiving an invalidity pension (<i>pension d'invalidité</i>)
Format	Character
Values	0 No 1 Yes
Comments	The pension is paid by the general or the public scheme. From the entitlement to old-age pension (at the age of 65 years), invalidity pension is replaced by old-age pension.
Source(s)	CNAP/ public schemes



Name of the variable	i_invalid_pension
Description	Gross monthly amount of the invalidity pension (<i>pension d'invalidité</i>)
Format	Numeric
Values	
Comments	The pension is paid by the general or the public scheme. From the entitlement to old-age pension (at the age of 65 years), invalidity pension is replaced by old-age pension
Source(s)	CNAP/ public schemes







Name of the variable	i_F_oldage_pension
Description	Whether receiving an old-age pension (<i>pension de vieillesse</i>)
Format	Character
Values	0 No 1 Yes
Comments	Including old-age anticipated pension and invalidity pension replaced by old-age pension at the age of 65 years. The pension is paid by the general or the public scheme.
Source(s)	CNAP/ public schemes

Name of the variable	i_oldage_pension
Description	Gross monthly amount of the old-age pension (<i>pension de vieillesse</i>)
Format	Numeric
Values	
Comments	Including old-age anticipated pension and invalidity pension replaced by old-age pension at the age of 65 years. The pension is paid by the general or the public scheme.
Source(s)	CNAP/ public schemes

Name of the variable	i_F_survivor_pension
Description	Whether receiving a survivor pension (<i>pension de survie</i>)
Format	Character
Values	  0 No 1 Yes
Comments	The pension is paid by the general or the public scheme.
Source(s)	CNAP/ public schemes

Name of the variable	i_survivor_pension
Description	Gross monthly amount of the survivor pension (<i>pension de survie</i>)
Format	Numeric
Values	 
Comments	The pension is paid by the general or the public scheme.
Source(s)	CNAP/ public schemes

Name of the variable	i_F_orphan_pension
Description	Whether receiving an orphan pension (<i>pension d'orphelin</i>)
Format	Character
Values	  0 No 1 Yes
Comments	
Source(s)	CNAP/ public schemes



Name of the variable	i_orphan_pension
Description	Gross monthly amount of the orphan pension (<i>pension d'orphelin</i>)
Format	Numeric
Values	 
Comments	
Source(s)	CNAP/ public schemes





Name of the variable	i_F_child_rearing_fixed_allow
Description	Whether receiving fixed allowance for child-rearing (<i>forfait d'éducation=Mammerent</i>)
Format	Character
Values	0 No 1 Yes
Comments	The allowance is paid by the general or the public scheme or by the FNS.
Source(s)	CNAP/ public schemes/ FNS



Name of the variable	i_child_rearing_fixed_allow
Description	Gross monthly amount of fixed allowance for child-rearing (<i>forfait d'éducation=Mammerent</i>)
Format	Numeric
Comments	The allowance is paid by the general or the public scheme or by the FNS.
Source(s)	CNAP/ public schemes / FNS



3.3 Social assistance benefits



Name of the variable	i_F_min_income
Description	Whether the person belongs to a domestic community receiving the guaranteed minimum income supplementary allowance (<i>allocation complémentaire au titre du revenu minimum garanti – RMG ou du revenu d'inclusion sociale - REVIS</i>)
Format	Character
Values	  0 No 1 Yes and the person is beneficiary 2 Yes and the person is non-beneficiary
Comments	The supplementary allowance is fixed according to the composition and the incomes of the domestic community. Persons of the domestic community that could not fulfil the eligibility conditions for being beneficiary of the guaranteed minimum income supplementary allowance is a non-beneficiary.
Source(s)	FNS



Name of the variable	i_min_income
Description	Gross monthly amount of the guaranteed minimum income supplementary allowance (<i>allocation complémentaire au titre du RMG ou du REVIS</i>) paid to the domestic community
Format	Numeric
Values	 
Comments	If several members composed the domestic community, the amount of the guaranteed minimum income supplementary allowance indicated for each is the same and corresponds to the total amount paid to the domestic community. So, it is not an individualised income which is impossible to calculate according to the ignorance of the sharing rules within the domestic community and of the financial situation of their members. Therefore, considering the whole amount for estimating the financial situation of the person results of an overestimation of the latest.
Source(s)	FNS





Name of the variable	i_F_lifecost_allowance
Description	Whether the person belongs to a domestic community receiving the cost-of-living allowance (<i>allocation de vie chère</i>)
Format	Character
Values	  0 No 1 Yes
Comments	Before 2012, only the person of the domestic community to whom the cost-of-living is paid is known. Before this date, the information concerning the other members of the domestic community is not available. Before 2009, the cost-of-living allowance was named heating allowance (<i>allocation de chauffage</i>).
Source(s)	FNS



Name of the variable	i_lifecost_allowance
Description	Gross monthly amount of the cost-of-living allowance (<i>allocation de vie chère</i>) paid to the domestic community
Format	Numeric
Values	 
Comments	If several members compose the domestic community, the amount of cost-of-living allowance indicated for each is the same and corresponds to the total amount paid to the domestic community. So, it is not an individualised income which is impossible to calculate according to the ignorance of the sharing rules within the domestic community and of the financial situation of their members. Therefore, considering the whole amount for estimating the financial situation of the person results of an overestimation of the latest.
Source(s)	FNS



Name of the variable	i_nb_ind_lifecost
Description	Size of the domestic community receiving the cost-of-living allowance (<i>allocation de vie chère</i>)
Format	Numeric
Values	 
Comments	This variable is provided in view of an individualisation of the cost-of-living allowance. $nb_ind_alloc_vie_chere = nb_adul_alloc_vie_chere + nb_enf_alloc_vie_chere$
Source(s)	FNS

Name of the variable	i_nb_adults_lifecost
Description	Number of adults (14 years old and more) in the domestic community receiving the cost-of-living allowance (<i>allocation de vie chère</i>)
Format	Numeric
Values	 
Comments	This variable is provided in view of an individualisation of the cost-of-living allowance
Source(s)	FNS

Name of the variable	i_nb_children_lifecost
Description	Number of children (less than 14 years old) in the domestic community receiving the cost-of-living allowance (<i>allocation de vie chère</i>)
Format	Numeric
Values	 
Comments	This variable is provided in view of an individualisation of the cost-of-living allowance
Source(s)	FNS



Name of the variable	i_F_disable_allowance
Description	Whether receiving the income for seriously disabled persons (<i>revenu pour personnes gravement handicapées</i>) and/or the specific allowance for seriously disabled persons (<i>allocation spéciale pour personnes gravement handicapées</i>)
Format	Character
Values	  0 No 1 Yes
Comments	
Source(s)	FNS

Name of the variable	i_disable_allowance
Description	Gross monthly amount of the income for seriously disabled persons (<i>revenu pour personnes gravement handicapées</i>) and/or the specific allowance for seriously disabled persons (<i>allocation spéciale pour personnes gravement handicapées</i>)
Format	Numeric
Values	 
Comments	
Source(s)	FNS



4. Health data


4.1 Medical acts

All variables concerning medical acts are related to a reference period (year and month).

Name of the variable	reference_period
Description	Reference period of the execution of the act
Format	Date (yyyymm)
Values	
Comments	More detailed date information is available on demand according to the “Need to know” rule.
Source(s)	

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	act_IDnumber
Description	Act identification number
Format	Character
Values	
Comments	This identification number links the act with its auxiliary services which are performed for an individual on the same day, such as anaesthesia, operating assistance or rental of medical equipment or material. A person may have several principal services on a same day. Auxiliary services are in the register " Auxiliary services related to medical acts "
Source(s)	

Name of the variable	act_code
Description	Type of the medical act
Format	Character
Values	 See <i>Nomenclature des actes et services des médecins et médecins-dentistes</i> Livre bleu CNS
Comments	Data only rely to medical acts performed by doctors and dentists. Those performed by other healthcare providers than doctors and dentists (e.g. nurses, physiotherapists etc.) are not included. Data only rely to medical acts covered by social security and which take place in Luxembourg, for residents and non-residents directly related to the Luxembourgish social protection system. The <i>Nomenclature des actes et services des médecins et médecins-dentistes</i> was designed to define the fees for acts. As a result, it can include codes that do not necessarily relate to medical procedures. For example, codes ending with “X” or “M” are replaced by a corresponding auxiliary service of type “Rental equipment or material”.
Source(s)	CNS

Name of the variable	act_F_medical_imaging_equipment
Description	Whether the medical act requires a medical imaging equipment
Format	Character
Values	0 No 1 Yes
Comments	The variable is “Yes” if act requires a medical imaging equipment.
Source(s)	CNS



Name of the variable	act_medical_imaging_equipment
Description	Type of medical imaging equipment required
Format	Character
Values	00 Conventional digital radiography 01 Angiography 02 Various examinations including image intensifier 03 Mammography 04 Bone densitometry 05 Computed tomography (CT), scanography, tomography 06 Sonogram/ Ultrasound scan 07 Doppler echography of vessels 08 Magnetic Resonance Imaging (MRI) 09 Scintigraphy 10 PET CT, PET-scan 11 Colofibroscopy
Comments	
Source(s)	CNS

Name of the variable	act_F_auxiliary_services
Description	Whether auxiliary services exist for the medical act
Format	Character
Values	0 No 1 Yes
Comments	Medical acts by doctors and dentists may need auxiliary services. Auxiliary services can be an anaesthesia, an operating assistance or rental of medical equipment or material. They are considered as auxiliary services if they are performed on the same day than the principal medical act. If any, they are recorded in the register " Auxiliary services related to medical acts ". These auxiliary services are linked with the medical act using the variable act_IDnumber.
Source(s)	CNS



Name of the variable	act_coefficient
Description	Composite indicator of the complexity, the time and the medical specialty required for the execution of the act
Format	Numeric
Values	
Comments	This coefficient can be used instead of costs to exclude inflation or other kinds of price increases of a given medical service.
Source(s)	CNS

Name of the variable	act_F_accident
Description	Whether the act is linked to workplace accidents, commuting accidents or occupational illnesses
Format	Character
Values	0 No 1 Yes
Comments	
Source(s)	CNS



Name of the variable	act_in_hospital
Description	Whether the act is carried out in a hospital setting
Format	Character
Values	0 No 1 Yes - Inpatient case (at least one night in hospital) 2 Yes - Day case (entry and exit on same day) 3 Yes - Outpatient case (ambulatory treatment)
Comments	
Source(s)	CNS

Name of the variable	hosp_stay_treat_IDnumber
Description	Pseudonymised identification number of stay or treatment in hospital
Format	Character
Values	
Comments	Not applicable (-9) when act_in_hospital = 0
Source(s)	

Name of the variable	provider_IDnumber
Description	Pseudonymised identification number of the executing healthcare provider
Format	Character
Values	 
Comments	Information about the provider is in register " Healthcare providers ".
Source(s)	



Name of the variable	provider_specialty
Description	Medical specialty of the provider
Format	Character
Values	A0 General practitioner A7 Emergency medicine B0 Anaesthesiology C0 Clinical biology C1 Pathological anatomy C2 Biological chemistry C3 Biological haematology C4 Microbiology-bacteriology C5 Forensic medicine C6 Neuro-pathology D0 Cardiology E0 General surgery E1 Thoracic surgery E2 Plastic surgery E3 Vessel surgery E4 Pediatric surgery E5 Maxillo-facial surgery E6 Dental, oral and maxilla-facial surgery E7 Gastrointestinal surgery F0 Dermato-venerology F1 Dermatology F3 Allergology G0 Radiodiagnosis G1 Nuclear medicine G2 Radiotherapy H0 Endocrinology I0 Gastroenterology J0 Gynaecology-obstetrics K0 General haematology L0 Internal medicine L1 Nephrology L3 Contagious diseases L4 Medical oncology L5 Genetic medicine M0 Neurosurgery MT Occupational medicine N0 Neuropsychiatry O0 Neurology P0 Psychiatry P1 Child psychiatry Q0 Physical medicine and rehabilitation R0 Ophthalmology S0 Orthopaedics S1 Traumatology and emergency medicine SP Public health and social medicine T0 Oto-rhino-laryngology U0 Paediatrics V0 Pneumonology W0 Rheumatology X0 Urology



Comments	Z0	Dentist
	Z1	Stomatology
	Z2	Orthodontics
	Z3	Oral surgery
	-8	if missing
Based on Grand-ducal Regulation (<i>Règlement grand-ducal du 10 juillet 2011 fixant la liste des spécialités en médecine et médecine dentaire reconnues au Luxembourg</i>)		
Source(s)	CNS	

Name of the variable	act_cost
Description	
Format	Numeric
Values	
Comments	In some cases, the cost might be different to the amount indicated in the <i>Nomenclature des actes et services des médecins et médecins-dentistes</i> (e.g. first class in hospitals, personal convenience fees etc.).
Source(s)	CNS

Name of the variable	act_cost_paid_SS
Description	Part of the act cost covered by the Social Security
Format	Numeric
Values	
Comments	
Source(s)	CNS

Name of the variable	act_nb_invoices
Description	Number of invoiced services linked to the act_cost
Format	Numeric
Values	
Comments	Number of times the same act has been repeated on the same patient, on the same date and performed by the same practitioner. (Ex: Multiple tooth extractions during a visit to the dentist)
Source(s)	CNS

Name of the variable	act_total_cost
Description	Cost of the medical act and auxiliary services if any
Format	Numeric
Values	
Comments	Medical acts by doctors and dentists may need auxiliary services. Auxiliary services can be an anaesthesia, an operating assistance or rental of medical equipment or material. They are considered as auxiliary services if they are performed on the same day than the principal medical act. If any, their cost is added to act_cost. Auxiliary services are in the register " Auxiliary services related to medical acts ".
Source(s)	CNS

Name of the variable	act_total_cost_paid_SS
Description	Part of the total cost (act_total_cost) covered by the Social Security
Format	Numeric
Values	
Comments	Auxiliary services are in the register " Auxiliary services related to medical acts "
Source(s)	CNS



4.2 Auxiliary services related to medical acts

All variables concerning auxiliary services are related to a reference period (year and month).



Auxiliary services, if any, are always linked to a principal medical act recorded in the register "[Medical acts](#)". Auxiliary services can be an anaesthesia, an operating assistance or rental of medical equipment or material. They are considered as auxiliary services if they are performed on the same day than the principal medical act.

Name of the variable	reference_period
Description	Reference period of the execution of the auxiliary service
Format	Date (yyyymm)
Values	
Comments	More detailed date information is available on demand according to the "Need to know" rule.
Source(s)	

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	act_IDnumber
Description	Act identification number
Format	Character
Values	
Comments	This act_ID number links the auxiliary service with the principal act reported in the register " Medical acts ".
Source(s)	

Name of the variable	auxiliary_service_type
Description	Type of the auxiliary service
Format	Character
Values	0 Anaesthesia 1 Surgical assistance 2 Rental equipment or material
Comments	
Source(s)	CNS

Name of the variable	provider_IDnumber
Description	Pseudonymised identification number of the executing healthcare provider
Format	Character
Values	 
Comments	Information about the provider is in register " Healthcare providers ".
Source(s)	



Name of the variable	auxiliary_service_cost
Description	
Format	Numeric
Values	
Comments	The cost might be different to the amount indicated in the <i>Nomenclature des actes et services des médecins et médecins-dentistes</i> (e.g. first class in hospitals, personal convenience fees etc.).
Source(s)	CNS

Name of the variable	auxiliary_service_cost_paid_SS
Description	Part of the cost covered by the Social Security
Format	Numeric
Values	
Comments	
Source(s)	CNS

Name of the variable	auxiliary_service_nb_invoices
Description	Number of invoiced auxiliary services
Format	Numeric
Values	
Comments	Number of times the same act has been repeated on the same patient, on the same date and perform by the same practitioner. (Ex: Multiple tooth extractions during a visit to the dentist)
Source(s)	CNS



4.3 Stays and treatments in hospital

Name of the variable	hosp_start_date
Description	Start date of stay or treatment in hospital
Format	Date (yyyymm)
Values	
Comments	More detailed date information is available on demand according to the "Need to know" rule.
Source(s)	CNS


Name of the variable	hosp_end_date
Description	End date of stay or treatment in hospital
Format	Date (yyyymm)
Values	
Comments	More detailed date information is available on demand according to the "Need to know" rule.
Source(s)	CNS


Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	hosp_stay_treat_IDnumber
Description	Pseudonymised identification number of the stay or treatment in hospital
Format	Character
Values	
Comments	<p>hosp_stay_treat_IDnumber allows to link the stay or treatment in hospital with medical acts carried out during the stay or treatment in hospital (registered in "Medical acts") and with "Hospital activities" register.</p> <p>The information of stays or treatments in hospital results from the merge between the data of hospitalization declarations sent to CNS by hospitals on a monthly basis and the hospital documentation data ("Documentation et Classification des séjours hospitaliers-DCSH"), which has been operational since 2016 (first dataset refers to 2018). Thus, variables coming from DCSH are only provided from 2018 onwards, while CNS hospital declarations go back until 2012.</p>
Source(s)	

Name of the variable	hospital_IDnumber
Description	Pseudonymised identification number of the establishment in which the stay or treatment took place
Format	Character
Values	
Comments	To get information about the hospital, hospital_IDnumber can be linked to provider_IDnumber in register " Healthcare providers ".
Source(s)	



Name of the variable	hosp_length_in_days
Description	Length in days of the stay or treatment in hospital
Format	Character
Values	 0 2 days 1 3-4 days 2 5-6 days 3 7-10 days 4 11 days and more
Comments	hosp_length_in_days = hosp_end_date - hosp_start_date + 1 -9 if hosp_stay_treatment_type ≠ 1
Source(s)	CNS

Name of the variable	hosp_length_in_nights
Description	Length in nights of the stay or treatment in hospital
Format	Character
Values	 0 1 night 1 2-3 nights 2 4-5 nights 3 6-9 nights 4 10 nights and more
Comments	hosp_length_in_nights = hosp_end_date - hosp_start_date -9 if hosp_stay_treatment_type ≠ 1
Source(s)	CNS

Name of the variable	hosp_stay_treatment_type
Description	Type of the stay or treatment in hospital
Format	Character
Values	1 Inpatient case (at least one night in hospital) 2 Day case (entry and exit on same day) 3 Outpatient case (ambulatory treatment)
Comments	
Source(s)	CNS

Name of the variable	hosp_F_death
Description	Whether the patient died during the stay or treatment in hospital
Format	Character
Values	0 No 1 Yes
Comments	Not applicable (-9) for outpatient cases (hosp_stay_treatment_type = 3). Not available (-8) before 2018. For inpatient cases (hosp_stay_treatment_type = 1), the information is practically exhaustive (more than 90%) except in 2020 (because of a relief from hospital obligations during the pandemic). For day cases (hosp_stay_treatment_type = 2), the information is not exhaustive due to different reasons. For example, the encoding system has been changed from 2017, or a long hospital stay can include a lot of nested stays that refer to daily psychiatric sessions. The code of these daily psychiatric sessions is missing but corresponds to the one indicated for the long stay.
Source(s)	CNS



Name of the variable	grouping_stay_IDnumber
Description	Pseudonymized grouping stay identification number
Format	Character
Values	
Comments	<p>Not applicable (-9) for isolated stay or treatment</p> <p>In most cases, a period of hospitalization for an individual translates into one single hospital stay in the register “Stays and treatments in hospital”. However, for administrative reasons mainly linked to invoicing, a continuous hospitalization period can be composed of multiple hospital stays in the same register. For example:</p> <ul style="list-style-type: none">- An individual can change the hospital during the hospitalization. In that case, the hospitalization period is composed of two contiguous hospital stays in the register “Stays and treatments in hospital”- A hospitalized individual may need a short transfer to another hospital for a specific medical treatment. In that case, the hospitalization period is composed of two nested hospital stays in the register “Stays and treatments in hospital”- During a hospitalization period in the same hospital, there can be multiple stays, for example in some cases a change of hospital services may lead to an additional hospital stay in the register “Stays and treatments in hospital” <p>This identification number links the different stays or treatment in hospital with nested or contiguous dates for the same patient.</p> <p>The grouping described above is only based on dates. Therefore, it is possible that the variable <code>grouping_stay_IDnumber</code> combines hospital stays with potentially very different medical diagnosis codes.</p> <p>For a very limited number of cases, one long hospital stay can include a lot of nested stays that refer to daily psychiatric sessions.</p> <p>The variable <code>grouping_rank</code> provides the specific chronological order of those daily sessions.</p>
Source(s)	



Name of the variable	grouping_rank
Description	Chronological position of the current stay or treatment within the grouping
Format	Character
Values	1.1 ...
Comment	<p>Not applicable (-9) for isolated stay or treatment</p> <p>Based on the beginning date of the treatment or stay</p> <p>In case of grouping, different configurations can be observed: nested stays, contiguous stays, nested stays within contiguous stays.</p> <p>The variable grouping_rank identifies the chronologic position of each hospital stay with the hospitalization period of the individual.</p> <p>Contiguous stays have a grouping_rank of one position/number. Contiguous stays are characterized by an end date of the first stay that is identical to the starting date of the second stay. In some rare cases, the start date of second stay precedes the end date of the first one (overlapping).</p> <p>Nested stays have a grouping_rank of two positions/numbers. Nested stays are characterized by a stay or treatment that begins the same day or after the start date and ends the same day or before the end date of an inpatient stay.</p> <p>Example 1: Two contiguous stays</p> <p>Example 2: Two nested stays</p> <p>Example 3: Two contiguous stays with several nested stays</p>

Source(s)



Name of the variable	hosp_ICD_code
Description	Principal diagnosis code related to the stay or treatment in hospital (declared at hospital exit)
Format	Character
Values	See nomenclature ICD-10
Comments	<p>Not applicable (-9) for outpatient cases (hosp_stay_treatment_type = 3).</p> <p>For inpatient cases (hosp_stay_treatment_type = 1), the ICD code is practically exhaustive (more than 90%) except in 2017 (because of a change of encoding system) and in 2020 (because of a relief from hospital obligations during the pandemic).</p> <p>For day cases (hosp_stay_treatment_type = 2), the ICD code is not exhaustive due to different reasons. For example, the encoding system has been changed from 2017, or a long hospital stay can include a lot of nested stays that refer to daily psychiatric sessions. The ICD code of these daily psychiatric sessions is missing but corresponds to the one indicated for the long stay.</p> <p>Aggregation level of the variable is decided according to research needs.</p>
Source(s)	CNS

Name of the variable	hosp_F_secondary_diag
Description	Whether secondary diagnosis have been declared during the stay or treatment in hospital
Format	Character
Values	0 No 1 Yes
Comments	<p>Not applicable (-9) for outpatient cases (hosp_stay_treatment_type = 3).</p> <p>Not available (-8) before 2018.</p> <p>For several reasons (change of encoding system in 2017 or relief from hospital obligations during the pandemic in 2020), the completeness of the variable cannot be guaranteed. Thus, the value 0 corresponds either to the absence of a second diagnosis, or to the existence of a second diagnosis but which is not fulfilled.</p> <p>If any other diagnosis, hosp_stay_treat_IDnumber can be linked to "Secondary identified diagnostics related to hospital stays"</p>
Source(s)	CNS

Name of the variable	hosp_MDC_code
Description	Major Disease Category (MDC) of the principal diagnosis code related to the stay or treatment in hospital
Format	Character
Values	See nomenclature MDC: cms.gov
Comments	<p>Not applicable (-9) for outpatient cases (hosp_stay_treatment_type = 3).</p> <p>Not available (-8) before 2018.</p> <p>For inpatient cases (hosp_stay_treatment_type = 1), the MDC code is practically exhaustive (more than 90%) except in 2020 (because of a relief from hospital obligations during the pandemic).</p> <p>For day cases (hosp_stay_treatment_type = 2), the MDC code is not exhaustive due to different reasons. For example, the encoding system has been changed from 2017, or a long hospital stay can include a lot of nested stays that refer to daily psychiatric sessions. The code of these daily psychiatric sessions is missing but corresponds to the one indicated for the long stay.</p>
Source(s)	CNS



Name of the variable	hosp_DRG_code
Description	Diagnosis-Related Group (DRG) of the patient during the stay or treatment in hospital
Format	Character
Values	See nomenclature DRG: cms.gov
Comments	<p>Not applicable (-9) for outpatient cases (hosp_stay_treatment_type = 3).</p> <p>Not available (-8) before 2018.</p> <p>For inpatient cases (hosp_stay_treatment_type = 1), the DRG code is practically exhaustive (more than 90%) except in 2020 (because of a relief from hospital obligations during the pandemic).</p> <p>For day cases (hosp_stay_treatment_type = 2), the DRG code is not due to different reasons. For example, the encoding system has been changed from 2017, or a long hospital stay can include a lot of nested stays that refer to daily psychiatric sessions. The code of these daily psychiatric sessions is missing but corresponds to the one indicated for the long stay.</p>
Source(s)	CNS


Name of the variable	hosp_severity_illness								
Description	Patient disease severity factor								
Format	Character								
Values	<table><tr><td>1</td><td>Minor</td></tr><tr><td>2</td><td>Moderate</td></tr><tr><td>3</td><td>Major</td></tr><tr><td>4</td><td>Severe</td></tr></table>	1	Minor	2	Moderate	3	Major	4	Severe
1	Minor								
2	Moderate								
3	Major								
4	Severe								
Comments	<p>Not applicable (-9) for outpatient cases (hosp_stay_treatment_type = 3).</p> <p>Not available (-8) before 2018.</p> <p>For inpatient cases (hosp_stay_treatment_type = 1), the severity of illness is practically exhaustive (more than 90%) except in 2020 (because of a relief from hospital obligations during the pandemic).</p> <p>For day cases (hosp_stay_treatment_type = 2), the severity of illness is not exhaustive due to different reasons. For example, the encoding system has been changed from 2017, or a long hospital stay can include a lot of nested stays that refer to daily psychiatric sessions. The code of these daily psychiatric sessions is missing but corresponds to the one indicated for the long stay.</p> <p>For more information see https://www.mdclarity.com/glossary/severity-of-illness-soi</p>								
Source(s)	CNS								

Name of the variable	hosp_risk_mortality								
Description	Risk of patient mortality during the stay								
Format	Character								
Values	<table><tr><td>1</td><td>Minor</td></tr><tr><td>2</td><td>Moderate</td></tr><tr><td>3</td><td>Major</td></tr><tr><td>4</td><td>Severe</td></tr></table>	1	Minor	2	Moderate	3	Major	4	Severe
1	Minor								
2	Moderate								
3	Major								
4	Severe								
Comments	<p>Not applicable (-9) for outpatient cases (hosp_stay_treatment_type = 3).</p> <p>Not available (-8) before 2018.</p> <p>For inpatient cases (hosp_stay_treatment_type = 1), the risk of mortality is practically exhaustive (more than 90%) except in 2020 (because of a relief from hospital obligations during the pandemic).</p> <p>For day cases (hosp_stay_treatment_type = 2), the risk of mortality is not exhaustive due to different reasons. For example, the encoding system has been changed from 2017, or a long hospital stay can include a lot of nested stays that refer to daily psychiatric sessions. The code of these daily psychiatric sessions is missing but corresponds to the one indicated for the long stay.</p>								
Source(s)	CNS								



4.4 Secondary identified diagnosis related to stays or treatment in hospital

Name of the variable	hosp_stay_treat_IDnumber
Description	Pseudonymised identification number of the stay or treatment in hospital
Format	Character
Values	
Comments	If hosp_F_secondary_diag = 1 then this register can be linked to the " Stays and treatments in hospital " register using the variable hosp_stay_treat_IDnumber.
Source(s)	

Name of the variable	secondary_diag_ICD_code
Description	Code ICD10 of secondary diagnosis if any
Format	Character
Values	See nomenclature ICD-10
Comments	 Not applicable (-9) for outpatient cases (hosp_stay_treatment_type = 3). Not available (-8) before 2018. For inpatient cases (hosp_stay_treatment_type = 1), the secondary diagnosis is more often missing in 2020 because of a relief from hospital obligations during the pandemic. For day cases (hosp_stay_treatment_type = 2), the secondary diagnosis is more often missing in 2018 and 2020.
Source(s)	CNS



4.5 Hospital activities



All variables concerning hospital activities are related to a reference period (year and month).

Hospital activities represent the costs invoiced by a hospital establishment during a stay or treatment in hospital. This is to be considered as the counterpart to medical acts that are performed in a hospital setting. In most cases (due to administrative imprecision), you can find a medical act in the register "[Medical Acts](#)" on the same date for the same individual than the hospital activity in this register. However, this register can also be used standalone if the request is based on research that focuses on hospital planning and/or budgeting.

Name of the variable	reference_period
Description	Reference period of the beginning of the hospital activity
Format	Date (yyyymm)
Values	
Comments	More detailed date information is available on demand according to the "Need to know" rule.
Source(s)	

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	hosp_stay_treat_IDnumber
Description	Pseudonymised identification number of the stay or treatment in hospital
Format	Character
Values	
Comments	
Source(s)	

Name of the variable	invoicer_IDnumber
Description	Pseudonymised identification number of the hospital establishment in which hospital activities are invoiced.
Format	Character
Values	 
Comments	To get information about the hospital, invoicer_IDnumber can be linked to provider_IDnumber in register " Healthcare providers ".
Source(s)	



Name of the variable	hosp_activity_code
Description	Functional entity code linked to the hospital activity
Format	Character
Values	01 Hospitalisation – normal care 02 Hospitalisation – intensive care 03 Operating rooms and recovery rooms 04 Delivery rooms 05 Laboratories 06 Medical imaging 07 Magnetic Resonance Imaging (MRI) 08 Radiotherapy 09 Extracorporeal lithotripsy 10 Hyperbaric oxygen therapy chamber 11 Hemodialysis 12 Physiotherapy 13 Polyclinic 14 Chemotherapy 15 Lump sum for medication in case of accommodation 16 Cardiac surgery 17 Interventional cardiology 18 Psychiatric day hospital 19 Nuclear medicine 20 PET-Scan 21 Ambulatory patients monitoring places 22 Occupational therapy 23 Hydrotherapy 24 Palliative care 25 In Vitro Fertilisation (IVF) 26 Gymnasium 27 Therapeutic apartments 29 Brachytherapy 30 Endoscopic polyclinic 31 Emergencies/SMTNPT (« Services médico-techniques non programmes triés ») 33 Human genetics 34 Pathological anatomy 35 Pediatric day hospital 36 Surgical day hospital 37 Non-surgical day hospital
Comments	<p>Every passage inside a hospital, whether it is in the context of an inpatient stay or an ambulatory treatment, leads to an invoicing of one or more hospital activity(ies) (“unité(s) d’œuvre”) inside the functional entities of the hospital.</p> <p>The term “functional entity” designates a cost center of the establishment, which produces billable activities invoiced to the healthcare insurance.</p> <p>Generally, these complementary hospital activities represent a hospital counterpart to medical and dental practitioner bills, in the sense that they can possibly refer to a same medical treatment but they give additional information about what has been done in the hospital setting. However, due to the nature of administrative data, it is possible that a medical service has been performed in a hospital setting, but no hospital activity can be found in this register, or inversely, a hospital activity exists, but no medical service can be found for the same day and the same patient. If such a link between both exists, it is purely artificial based on the patient identifier and the date.</p> <p>No data before 2019 for emergency, surgical day hospital and non-surgical day hospital.</p>
Source(s)	CNS



Name of the variable	hosp_activity_nb_invoices
Description	Number of invoiced services of a given hospital activity
Format	Numeric
Values	
Comments	Number of times the same hospital activity has been repeated on the same patient, on the same day and invoiced by the same hospital. For example, several laboratory analysis.
Source(s)	CNS

Name of the variable	hosp_activity_F_accident
Description	Whether the hospital activity is linked to workplace accidents, commuting accidents or occupational illnesses
Format	Character
Values	0 No 1 Yes
Comments	It is useful to note that the CNS might initially reimburse the medical service, but the cost will be subsequently charged to accident insurance.
Source(s)	CNS

Name of the variable	hosp_activity_cost
Description	Cost of hospital activity
Format	Numeric
Values	
Comments	This variable includes fixed costs of the hospital.
Source(s)	CNS

Name of the variable	hosp_activity_cost_paid_SS
Description	Part of the cost of hospital activity covered by the Social Security
Format	Numeric
Values	
Comments	In Luxembourg, only extra costs are not reimbursed by CNS as supplements for personal convenience as well as excess fees for doctors in first class hospitalizations.
Source(s)	CNS



4.6 Healthcare providers

All variables concerning healthcare providers are related to a reference period (year and month).

Name of the variable	reference_period
Description	Reference period during which the healthcare provider is providing healthcare services
Format	Date (yyyymm)
Values	
Comments	
Source(s)	

Name of the variable	provider_IDnumber
Description	Pseudonymised identification number for healthcare provider
Format	Character
Values	
Comments	A provider appears in the file for a given month if he has invoiced at least one medical act or service during the month. provider_IDnumber can be linked by the provider_IDnumber (Medical acts), invoicer_IDnumber, prescriber_IDnumber or hospital_IDnumber of other registers
Source(s)	

Name of the variable	provider_type
Description	Type of healthcare providers
Format	Character
Values	0 Doctors and dentists 1 Hospital establishments (as defined in the <i>Loi hospitalière 04/2018</i>)
Comments	Doctors and dentists can practice their medical activity in several ways simultaneously or according to different statuses also simultaneously (salaried and liberal). In this case, they are considered as several providers. A same practitioner can therefore have several provider_IDnumber. The practitioner_IDnumber variable is used to group the provider_IDnumber relating to the same practitioner. If the provider_IDnumber corresponds to an association, the information of provider_type refers to the association type (e.g. association of doctors).
Source(s)	CNS

Name of the variable	provider_F_is_association
Description	If the provider is an association of more than one provider
Format	Character
Values	0 No 1 Yes
Comments	Not applicable (-9) if provider_type = 1
Source(s)	CNS

Name of the variable	practitioner_IDnumber
Description	Pseudonymised identification number for healthcare provider when physical person
Format	Character
Values	
Comments	Not applicable (-9) if provider_F_is_association = 1 or provider_type = 1
Source(s)	



Name of the variable	hosp_estab_type
Description	Type of hospital establishment
Format	Character
Values	0 Centre hospitalier 1 Etablissement hospitalier spécialisé 2 Other
Comments	Not applicable (-9) if provider_type ≠ 1 These types are defined according to the law of 8 mars 2018 relative aux établissements hospitaliers et à la planification hospitalière.
Source(s)	CNS

Name of the variable	hosp_estab_group
Description	Group to which the hospital establishment belongs
Format	Character
Values	0 CHL (Centre Hospitalier de Luxembourg) 1 HRS (Hôpital Robert Schuman) 2 CHEM (Centre Hospitalier Emile Mayrisch) 3 CHdN (Centre Hospitalier du Nord) 4 INCCI (Institut National de Chirurgie Cardiaque et de Cardiologie Interventionnelle) 5 HIS (Hôpital Intercommunal de Steinfort) 6 CHNP (Centre Hospitalier Neuro-Psychiatrique) 7 CFB (Centre François Baclesse) 8 RHZ (Centre National de Rééducation Fonctionnelle et de Réadaptation) 9 OMEGA (Haus Omega) 10 COLPACH (Centre de Réhabilitation du Château de Colpach)
Comments	Not applicable (-9) if provider_type ≠ 1
Source(s)	CNS



Name of the variable	provider_specialty
Description	Medical specialty of the provider (doctors and dentists)
Format	Character
Values	A0 General practitioner A7 Emergency medicine B0 Anaesthesiology C0 Clinical biology C1 Pathological anatomy C2 Biological chemistry C3 Biological haematology C4 Microbiology-bacteriology C5 Forensic medicine C6 Neuro-pathology D0 Cardiology E0 General surgery E1 Thoracic surgery E2 Plastic surgery E3 Vessel surgery E4 Pediatric surgery E5 Maxillo-facial surgery E6 Dental, oral and maxilla-facial surgery E7 Gastrointestinal surgery F0 Dermato-venerology F1 Dermatology F3 Allergology G0 Radiodiagnosis G1 Nuclear medicine G2 Radiotherapy H0 Endocrinology I0 Gastroenterology J0 Gynaecology-obstetrics K0 General haematology L0 Internal medicine L1 Nephrology L3 Contagious diseases L4 Medical oncology L5 Genetic medicine M0 Neurosurgery MT Occupational medicine N0 Neuropsychiatry O0 Neurology P0 Psychiatry P1 Child psychiatry Q0 Physical medicine and rehabilitation R0 Ophthalmology S0 Orthopaedics S1 Traumatology and emergency medicine SP Public health and social medicine T0 Oto-rhino-laryngology U0 Paediatrics V0 Pneumonology W0 Rheumatology X0 Urology



	Z0	Dentist
	Z1	Stomatology
	Z2	Orthodontics
	Z3	Oral surgery
Comments	Not applicable (-9) if provider_type ≠ 0 Based on Grand-ducal Regulation (<i>Règlement grand-ducal du 10 juillet 2011 fixant la liste des spécialités en médecine et médecine dentaire reconnues au Luxembourg</i>)	
Source(s)	CNS	

Name of the variable	provider_practice_location	
Description	Practice location refers to the "canton" level	
Format	Character	
Values		
Comments	More detailed variables are available about practice location. They will be provided according to the "need to know" rule. The location corresponds to the official address registered in social security databases.	
Source(s)	CNS	

Name of the variable	practitioner_professional_status	
Description	Professional status of the healthcare provider	
Format	Character	
Values	0	Salaried
	1	Liberal / Self-employed
	2	Mixed
Comments	Not applicable (-9) if provider_type ≠ 0 or provider_F_is_association = 1 This information is calculated using the presence of the practitioner in labour market data as an employee, a self-employed or both	
Source(s)	CNS	

Name of the variable	practitioner_residence_country	
Description		
Format	Character	
Values		
	0	Luxembourg
	1	Germany
	2	Belgium
	3	France
	4	Other
Comments	Not applicable (-9) if provider_type ≠ 0 or provider_F_is_association = 1	
Source(s)	CCSS	

Name of the variable	practitioner_residence_location	
Description	Refers to the "canton" level.	
Format	Character	
Values		
Comments	Not applicable (-9) if provider_type ≠ 0 or provider_F_is_association = 1 More detailed variables are available about residence. They will be provided according to the "need to know" rule.	
Source(s)	CCSS	



Name of the variable	practitioner_citizenship	
Description		
Format	Character	
Values	0	Luxembourg
	1	Germany
	2	Belgium
	3	France
	4	Portugal
	5	Other EU-27
	6	Other
Comments	This variable refers to the main citizenship during the reference period. It can change from month to month for people who acquire another citizenship. In case of dual citizenship, the provided citizenship is the one considered as the first by the administration. Not applicable (-9) if provider_type ≠ 0 or provider_F_is_association = 1 The groups of countries are established in accordance with the current list of EU27 countries (List of 27 European Union member countries).	
Source(s)	CCSS	

Name of the variable	practitioner_age	
Description	Age at the end of the month	
Format	Character	
Values	0	less than 30 years
	1	30-34 years
	2	35-39 years
	3	40-44 years
	4	45-49 years
	5	50-54 years
	6	55-59 years
	7	60 years and more
Comments	Not applicable (-9) if provider_type ≠ 0 or provider_F_is_association = 1	
Source(s)	CCSS	

Name of the variable	practitioner_gender	
Description		
Format	Character	
Values	0	Male
	1	Female
Comments	Not applicable (-9) if provider_type ≠ 0 or provider_F_is_association = 1	
Source(s)	CCSS	





4.7 Medications



All variables concerning medications are related to a reference period (year and month).


Name of the variable	reference_period
Description	Period of the medication purchase
Format	Date (yyyymm)
Values	
Comments	
Source(s)	

Name of the variable	individual_IDnumber
Description	Pseudonymised individual identification number
Format	Character
Values	
Comments	
Source(s)	


Name of the variable	pharmacy_IDnumber
Description	Pseudonymised pharmacy identification number
Format	Character
Values	 
Comments	
Source(s)	

Name of the variable	pharmacy_location
Description	refers to the "canton" level
Format	Character
Values	
Comments	More detailed variables are available about residence. They will be provided according to the "need to know" rule.
Source(s)	CNS

Name of the variable	prescriber_IDnumber
Description	Pseudonymised identification number of the prescribing healthcare provider
Format	Character
Values	 
Comments	To get information about the prescriber, prescriber_IDnumber can be linked to provider_IDnumber in register " Healthcare providers ".
Source(s)	

Name of the variable	medication_code
Description	
Format	Character
Values	
Comments	Aggregation level of the variable is decided according to research needs. Only prescribed medications reimbursed by the CNS are included. Medications prescribed in the context of an inpatient stay or treatment in hospital are not included.
Source(s)	CNS



Name of the variable	medication_ATC_code
Description	Anatomical Therapeutic Chemical (ATC) Classification System
Format	Character
Values	 WHOCC - Structure and principles
Comments	Aggregation level of the variable is decided according to research needs. The Anatomical Therapeutic Chemical (ATC) classification uses codes to identify the medication active substance. The ATC classification system groups the active medical substances according to the organ or system on which they act and according to their therapeutic, pharmacologic and chemical properties.
Source(s)	CNS

Name of the variable	medication_F_DDD
Description	Flag for Daily Defined Dose (DDD) per packaging of fifth level ATC code
Format	Character
Values	-8 Missing data 1 Yes
Comments	
Source(s)	CNS

Name of the variable	medication_DDD
Description	Daily Defined Dose (DDD) per packaging of fifth level ATC code
Format	Numeric
Values	
Comments	The defined daily dose (DDD) of a medication, which is a unit of measurement and is linked to the ATC code. The definition of the DDD is: "The assumed average maintenance dose per day for a drug used for its main indication in adults". See introductory chapter for more explanations about ATC methodology and the limitations of the DDD concept. WHOCC - Definition and general considerations
Source(s)	CNS

Name of the variable	medication_F_dose_delivered
Description	Flag for Daily Defined Dose (DDD) delivered
Format	Character
Values	-8 Missing data 1 Yes
Comments	
Source(s)	CNS

Name of the variable	medication_dose_delivered
Description	Daily Defined Dose (DDD) delivered
Format	Numeric
Values	
Comments	Calculated by multiplying DDD per packaging (medication_DDD) by the number of packaging
Source(s)	CNS

Name of the variable	medication_nb_packages_delivered
Description	Number of medication packages delivered
Format	Numeric
Values	
Comments	
Source(s)	CNS



Name of the variable	medication_F_delivery_in_hospital	
Description	Whether the medication is delivered in hospital	
Format	Character	
Values	0	No
	1	Yes
Comments		
Source(s)	CNS	

Name of the variable	medication_F_generic	
Description	Whether the medication is a generic	
Format	Character	
Values	0	No
	1	Yes
Comments		
Source(s)	CNS	

Name of the variable	medication_F_accident	
Description	Whether the fee is linked to workplace accidents, commuting accidents or occupational illnesses	
Format	Character	
Values	0	No
	1	Yes
Comments		
Source(s)	CNS	

Name of the variable	medication_cost	
Description		
Format	Numeric	
Values		
Comments	The cost is about the medication_dose_delivered.	
Source(s)	CNS	

Name of the variable	medication_cost_paid_SS	
Description	Part of the cost covered by the Social Security	
Format	Numeric	
Values		
Comments	The cost paid by Social Security is about the medication_dose_delivered.	
Source(s)	CNS	