

| Name of register | Description of registers |
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| The CPR number and the Danish civil registration system (CRS) | In Denmark (and other Nordic countries), researchers have exceptional opportunities to perform register-based research because every person with a permanent residence in Denmark has a unique personal identification number. At birth or immigration, all citizens in Denmark are allocated a personal 10-digit identification number, the CPR number. This number is registered in the Danish civil registration system (CRS) and allows linkage between all national registers at the individual level. The CRS contains information about vital status (dead or alive) and residence |
| The Primary Care Referral Registry | An online shared database with all electronic referral letters sent from general practices to hospitals. Contains information about sender, receiver and patient incl. amnesia. We will develop an algorithm to identify patients referred for cancer investigation. |
| The Danish National Patient Registry (NPR) comprises The Patient Administrative System (PAS) | The NPR is a national database unifying information from the five regional Patient Administrative System (PAS). The NPR is run by the National board of health who carries out ongoing validation of the data from PAS. Both the NPR and PAS are continuously updated. They comprise variables like the patient CPR-number, dates of admission and discharge, diagnoses classified according to the International Classification of Diseases (ICD-10) (Comorbidity), codes for undertaken procedures, the GP's provider number and different additional codes. Of particular relevance for this study, we identified patients referred to fast-track cancer pathways by the additional code DZ031 in PAS every second week. |
| List of patients referred to fast track pathway for breast cancer from four Radiological Departments | Since patients referred to the fast-track pathway for breast cancer are not registered with a DZ031 code, like other investigations in fast-track pathways, an additional data list was periodically received from the four Radiological Departments in Central Denmark Region. |
| The Danish Cancer Registry (DCR) | The DCR has been recording primary cases of cancer on a nationwide basis since 1943 and has been shown to be accurate and to have a nearly complete registration of cancer cases. The files of the DCR provide information on cancer type, site morphology and history of cancer. Tumours in the registry are coded according to the ICD-10 (7 th revision before 2004), which includes a four-digit code for tumour morphology. If a person develops more than one primary tumour, each tumour is generally registered and counted as an individual record. We used the DCR to find prior and incident cancer diagnoses among referred patients and to obtain information on date of diagnosis and tumour stage. |
| Danish National Health Service Registry (NHSR) | The NHSR for primary care is a national register of all health professionals contracted with the tax-funded healthcare system, e.g. GPs. The register is run by the National Board of Health and its data are based on the health professionals' invoices to the regional health administrations. Among others, the NHSR holds information on name and addresses of every provider number. A provider number may refer to several providers if, for example, several GPs form a medical practice partnership. |
| Patient list | List of patients connected to each provider number. The list contains information on patients' CPR-number, including age and sex. |
| The provider number and the Provider Number Registry | Every health professionals contracted with the tax-funded healthcare system has a provider number. The provider number system is used to control the supply of GPs and, to a certain extent, to control expenditures. GPs are allowed to sell or share their provider number and office facilities. GPs can choose to work in solo practices or in group practices (in the latter case, the GPs can share a provider number or have one provider number per GP). Danish citizens are free to choose their own GP unless the GP list is closed (GPs are allowed to close their lists when the number of persons on the list reaches 1600 persons). The list system enables the GP to develop a better knowledge of the individual patient which ensures continuity of care. The Provider Number Registry contains information on the name and addresses of every health professionals with a provider number |
| Statistics Denmark | As a central authority, Statistics Denmark is responsible for collecting, processing and publishing statistical information and for making statistical analyses and prognoses. Researchers can apply for data from Statistics Denmark for further analysis. We will use data from the Integrated Database for Labour Market Research which is owned by Statistics Denmark to calculate a deprivation score for each GP's practice population. This Danish deprivation index (DADI) has eight variables that are scored individually and sum up to a score between 10 and 100; the higher the number, the greater the extent of deprivation in the practice population. The variables used are: (i) Proportion of adults aged 20-59 with no employment, (ii) proportion of adults aged 25-59 with no professional education, (iii) proportion of adults aged 25-59 with low income, (iv) proportion of adults aged 18-59 receiving public welfare payments (transfer income or social benefits), (v) proportion of children from parents with no education and no professional skills, (vi) proportion of immigrants, (vii) proportion of adults aged 30+ living alone and (viii) proportion of adults aged 70+ with low income (= the lowest national quartile). |

Table 4