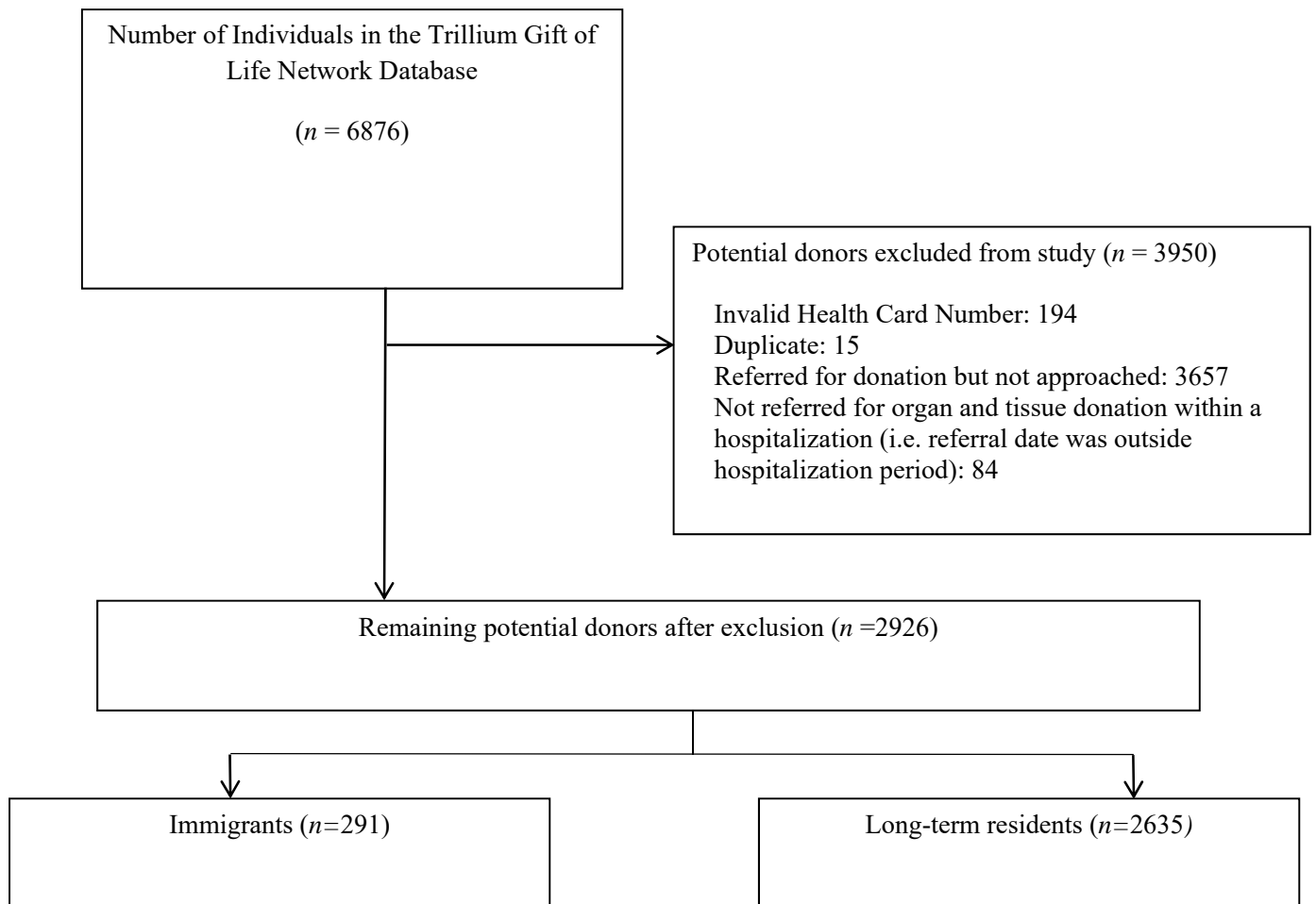


Supplemental Figure 1: Flowchart of Study Selection



Supplemental Table 1. Checklist of recommendations for reporting of observational studies using the REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) Statement

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	Item No	STROBE items	RECORD items	Reported
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract. (b) Provide in the abstract an informative and balanced summary of what was done and what was found.	(1.1) The type of data used should be specified in the title or abstract. When possible, the name of the databases used should be included. (1.2) If applicable, the geographic region and time frame within which the study took place should be reported in the title or abstract. (1.3) If linkage between databases was conducted for the study, this should be clearly stated in the title or abstract.	Title and abstract
Introduction				
Background/ rationale	2	Explain the scientific background and rationale for the investigation being reported.		Introduction
Objectives	3	State specific objectives, including any prespecified hypotheses.		Introduction
Methods				
Study design	4	Present key elements of study design early in the paper.		Study Design and Setting
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection.		Study Design and Setting
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up. (b) For matched studies, give matching criteria and number of exposed and unexposed.	(6.1) The methods of study population selection (such as codes or algorithms used to identify subjects) should be listed in detail. If this is not possible, an explanation should be provided. (6.2) Any validation studies of the codes or algorithms used to select the population should be referenced. If validation was conducted for this study and not published elsewhere, detailed methods and results should be provided. (6.3) If the study involved linkage of databases, consider use of a flow diagram or other graphical display to demonstrate the data linkage process, including the number of individuals with linked data at each stage.	Study Population
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable.	(7.1) A complete list of codes and algorithms used to classify exposures, outcomes, confounders, and effect modifiers should be provided. If these	Data Sources

			cannot be reported, an explanation should be provided.	
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group.		Data Sources
Bias	9	Describe any efforts to address potential sources of bias.		N/A
Study size	10	Explain how the study size was arrived at.		Supplemental Figure 1
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why.		Data sources
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding. (b) Describe any methods used to examine subgroups and interactions. (c) Explain how missing data were addressed. (d) If applicable, explain how loss to follow-up was addressed. (e) Describe any sensitivity analyses.		Statistical Analysis
Data access and cleaning methods	N/A		(12.1) Authors should describe the extent to which the investigators had access to the database population used to create the study population. (12.2) Authors should provide information on the data cleaning methods used in the study.	Data Sources
Linkage	N/A		(12.3) State whether the study included person-level, institutional-level, or other data linkage across two or more databases. The methods of linkage and methods of linkage quality evaluation should be provided.	Methods
Results				
Participants	13	(a) Report numbers of individuals at each stage of study--e.g. numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analyzed. (b) Give reasons for non-participation at each stage. (c) Consider use of a flow diagram.	(13.1) Describe in detail the selection of the persons included in the study (i.e., study population selection), including filtering based on data quality, data availability, and linkage. The selection of included persons can be described in the text and/or by means of the study flow diagram.	Results, Supplemental Figure 1
Descriptive data	14	(a) Give characteristics of study participants (e.g. demographic, clinical, social) and information on exposures and potential confounders. (b) Indicate number of participants with missing data for each variable of interest. (c) Summarize follow-up time (e.g. average and total amount).		Table 1
Outcome data	15	Report numbers of outcome events or summary measures over time.		Results, Table 2

Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g. 95% confidence interval). Make clear which confounders were adjusted for and why they were included. (b) Report category boundaries when continuous variables were categorized. (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period.	Results
Other analyses	17	Report other analyses done (e.g. analyses of subgroups and interactions, and sensitivity analyses).	N/A
Key results	18	Summarize key results with reference to study objectives.	Results
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias.	(19.1) Discuss the implications of using data that were not created or collected to answer the specific research question(s). Include discussion of misclassification bias, unmeasured confounding, missing data, and changing eligibility over time, as they pertain to the study being reported. Discussion
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence.	Discussion
Generalizability	21	Discuss the generalizability (external validity) of the study results.	Discussion
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based.	Acknowledgement
Accessibility of protocol, raw data, and programming code	N/A		(22.1) Authors should provide information on how to access any supplemental information such as the study protocol, raw data, or programming code. N/A

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Supplemental Table 2. Familial consent associated with immigrant status examined in subgroups defined by age, sex, type of hospital and cause of death

	Immigrants	Long-term Residents	
Subgroup	Adjusted Rate Ratio	Adjusted Rate Ratio	p-value for interaction
Age			
<44	1.00 [Reference]	1.00 [Reference]	0.89
45-65	1.00 (0.76 to 1.31)	0.93 (0.88 to 0.99)	
65+	0.75 (0.51 to 1.09)	0.74 (0.68 to 0.79)	
Sex			
Men	0.85 (0.66 to 1.09)	1.01 (0.96 to 1.07)	0.24
Women	1.00 [Reference]	1.00 [Reference]	
Hospital Type Where Death Occurred			
Academic Hospital	1.00 [Reference]	1.00 [Reference]	0.045
Community Hospital	0.76 (0.57 to 1.00)	1.02 (0.97 to 1.08)	
Cause of Death			
Traumatic Brain Injury	1.00 [Reference]	1.00 [Reference]	0.75
Subarachnoid and Intracranial Hemorrhage	0.91 (0.65 to 1.27)	1.02 (0.94 to 1.10)	
Other Damage to the Brain	0.82 (0.49 to 1.37)	0.98 (0.87 to 1.11)	
Acute Myocardial Infarction, Cardiac Arrest	0.90 (0.46 to 1.72)	0.89 (0.80 to 0.99)	
All Other Causes of Death	1.02 (0.72 to 1.44)	0.88 (0.82 to 0.94)	
All analyses adjusted for World Region of Birth, Sex, Residence, Age Category, Neighborhood Income Quintile, Residential Instability, Material Deprivation, Dependency, Ethnic Concentration, Cause of Death, Academic Hospital Affiliation.			

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