Exploring the data on homeless mortality in Poland

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European Observatory on Homelessness Research Conference UTRECHT 2025

NATIONAL SCIENCE CENTRE POLAND

UNIVERSITY OF WARSAW

Statistics Poland

Health inequalities and homelessness

Average age at death
47 years (FIOSPD, 2022)
43 years (HRB, 2023)

Standardized Mortality Ratio (SMR)
5-30 women in Toronto (Cheung & Hwang, 2004)
3,2 compared with poor neighbourhoods in Glasgow (Morrison, 2009)

Causes of death
46% related to substance abuse (HRB, 2023)
10x risk of death from infection (Slockers et al. 2018)

Homelessness in Poland

- Point-in-time national counts 2013, 2015, 2017, 2019, 2024
- Ca. 31 000 people (ca. 7 000 unsheltered)
- Male 84%
- Average age 52 years
- 69% homelessness over 2 years

- Blind spots: migrants, families, young people

Only two other Polish studies on homeless mortality

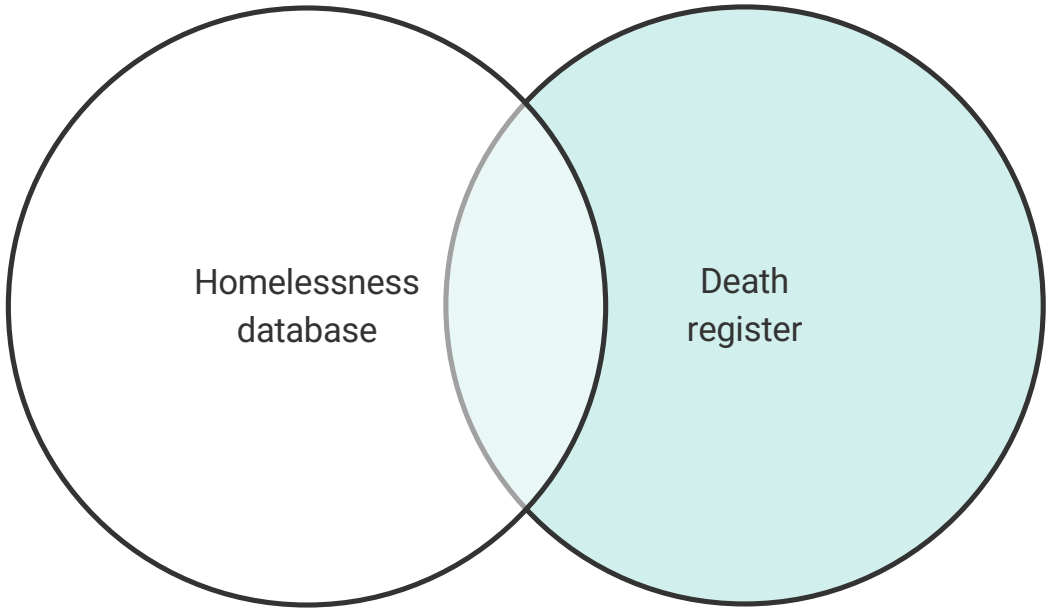
Romaszko et al. 2017

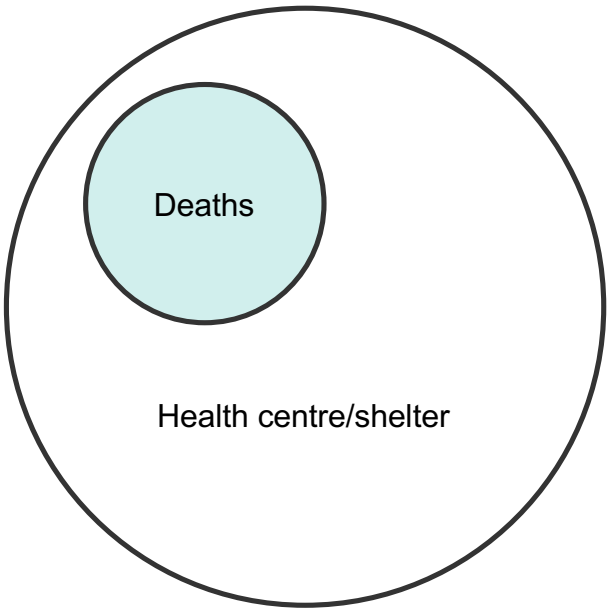
- 2010 – 2016 shelter/clinic population in Olsztyn
- 17,5 years of life lost
- Main causes of death: cardiovascular diseases (34%), external factors and poisonings (21%)

Olech et al. 2021

- Shelter for men population in Bydgoszcz
- 30 people die per year

One or two databases





The Polish case

Two databases

One database

The Polish case

Two databases – no legal way to link registers

One database

One database

No coroners in Poland

One database

Police records
(suspicious deaths, crimes, accidents, suicides)

One database

Police records
(suspicious deaths, crimes, accidents, suicide)

BUT

No infomation on homelessness status (except for hypothermia)

One database

Social security (ZUS and other)

People with no address AND funeral benefit paid to an institution (rather than family)

One database

Social security (ZUS and other)

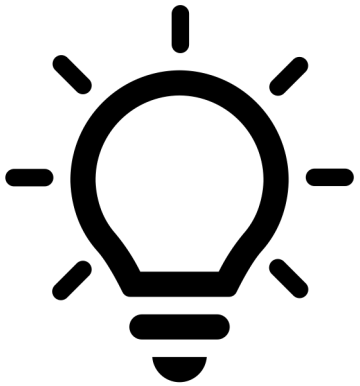
People with no address AND funeral benefit paid to an institution (rather than family)

BUT

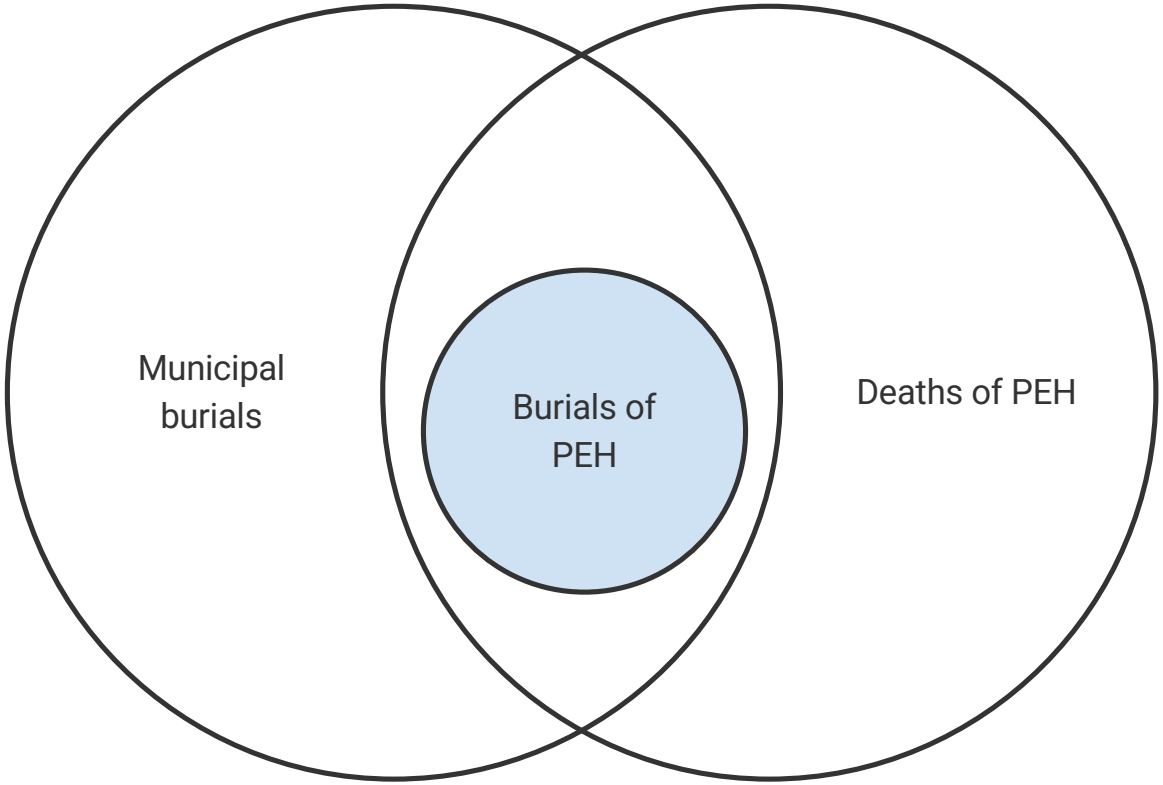
99% MISSING DATA

One database

Funeral benefit!



Municipal burials as proxy for death



ZUS benefits paid to institutions, but no data on the deceased

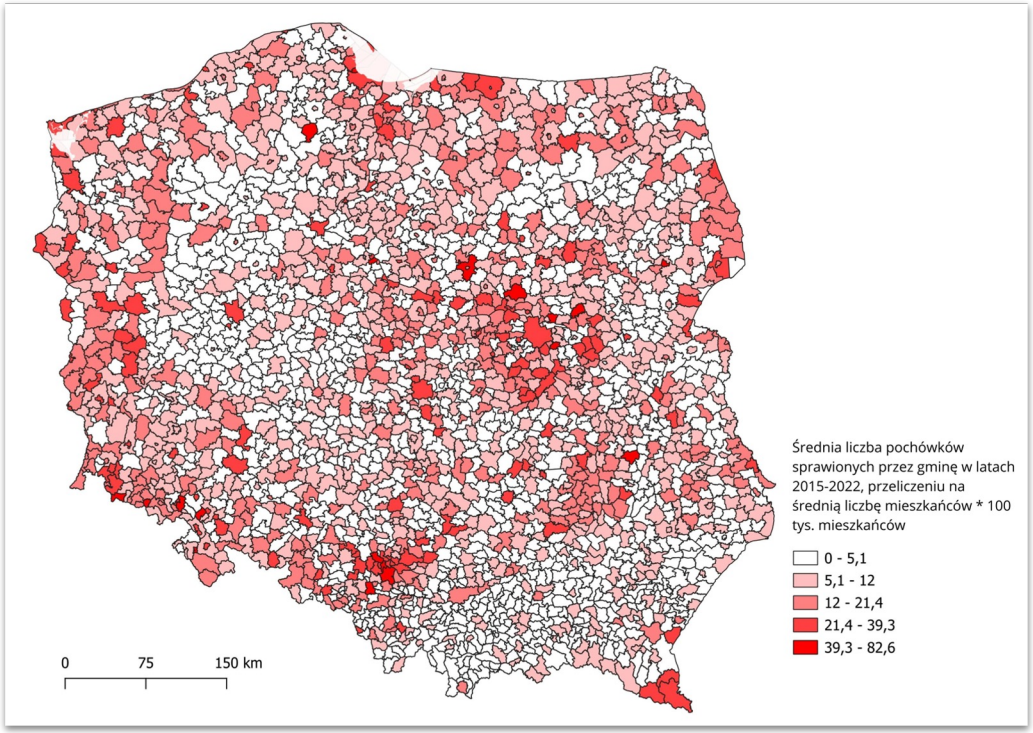
Municipal burials – municipality pays for funeral even if no benefit can be claimed

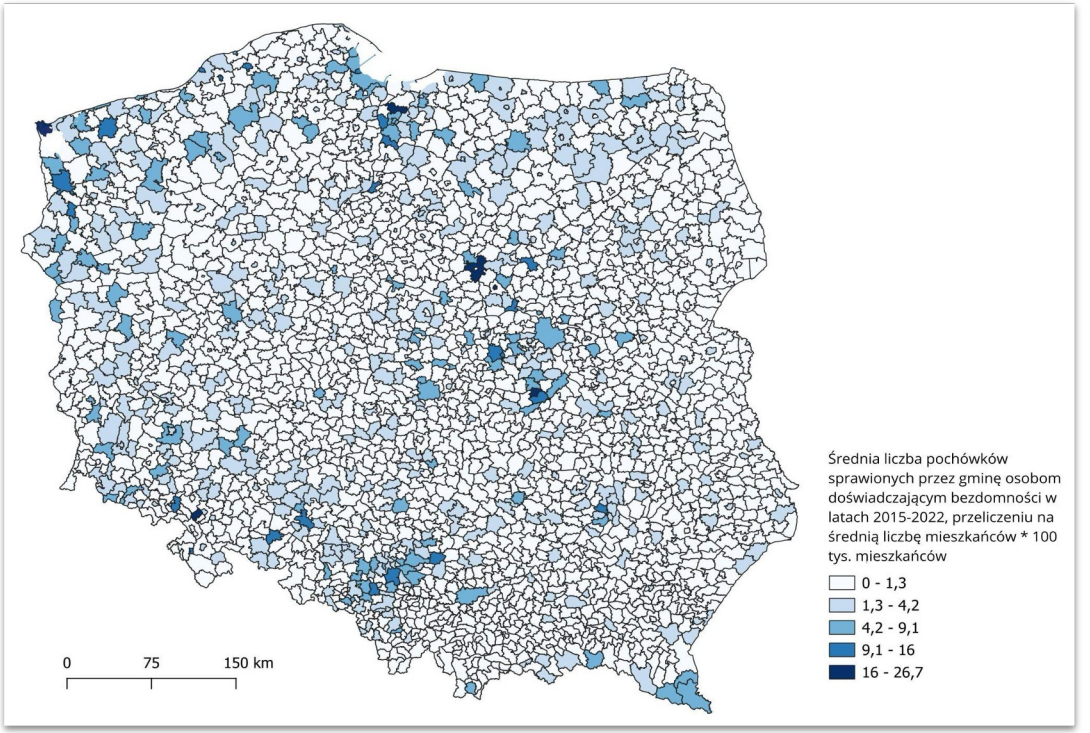
Municipal burials 2015-2022

Data from the Ministry of Family, Labour and Social Policy

- Around 5 thousand burials per year
- Of those around 1 thousand burials „of homeless people”

Municipal burials rate per municipality





Statistics Poland databases

- PERSONS database 2011-2022 – around 135 000 unique persons experiencing homelessness (around 25 000 per year)
- BENEFITS database 2011-2022 – 2 789 686 benefits

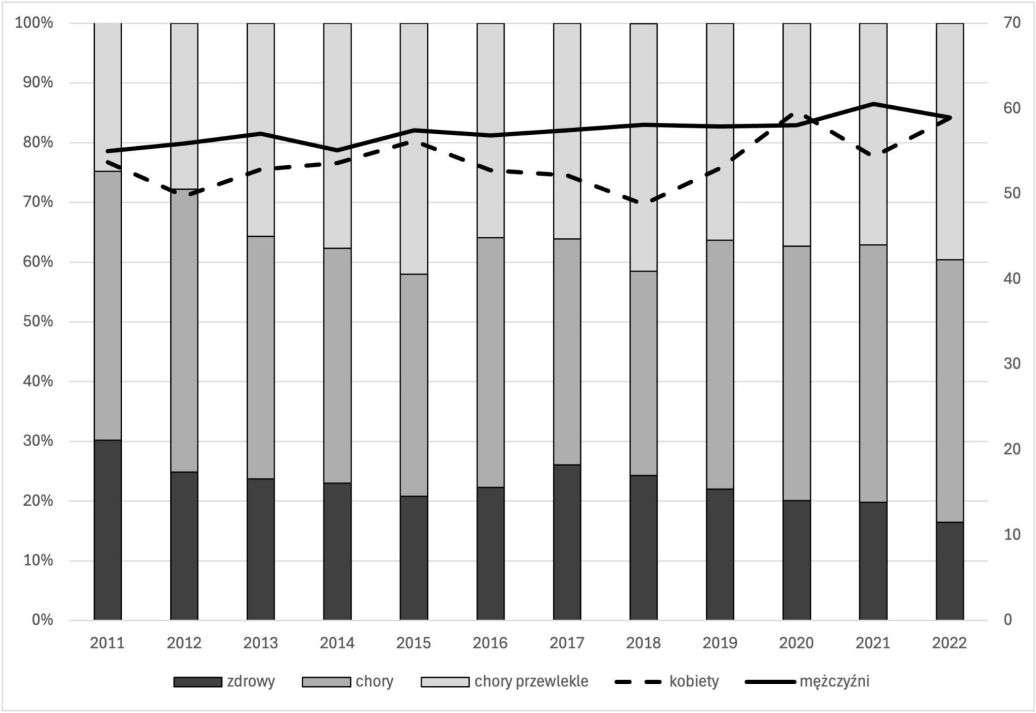
- LINKED dataset: 2623 with a municipal burial
  - Only around 25% of the number registered by the Ministry

Results from the LINKED database

4,5%-9,6% women

Average age at death among men: 55 in 2011; 59 in 2022

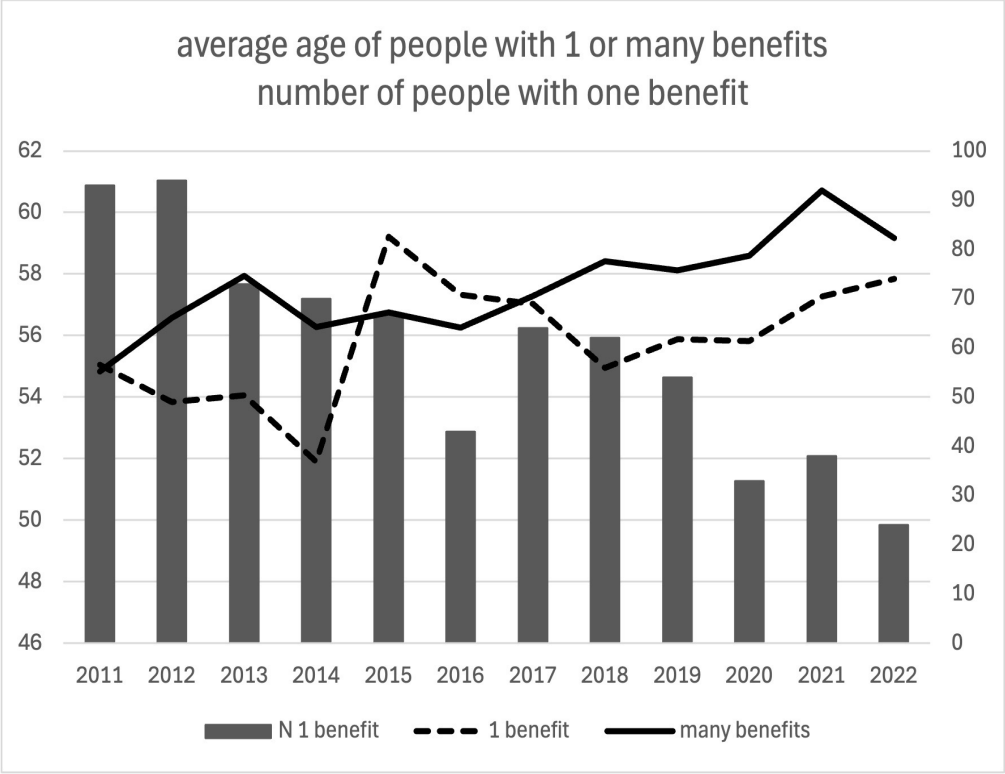
More people with ill health and registered disability



Results from the LINKED database

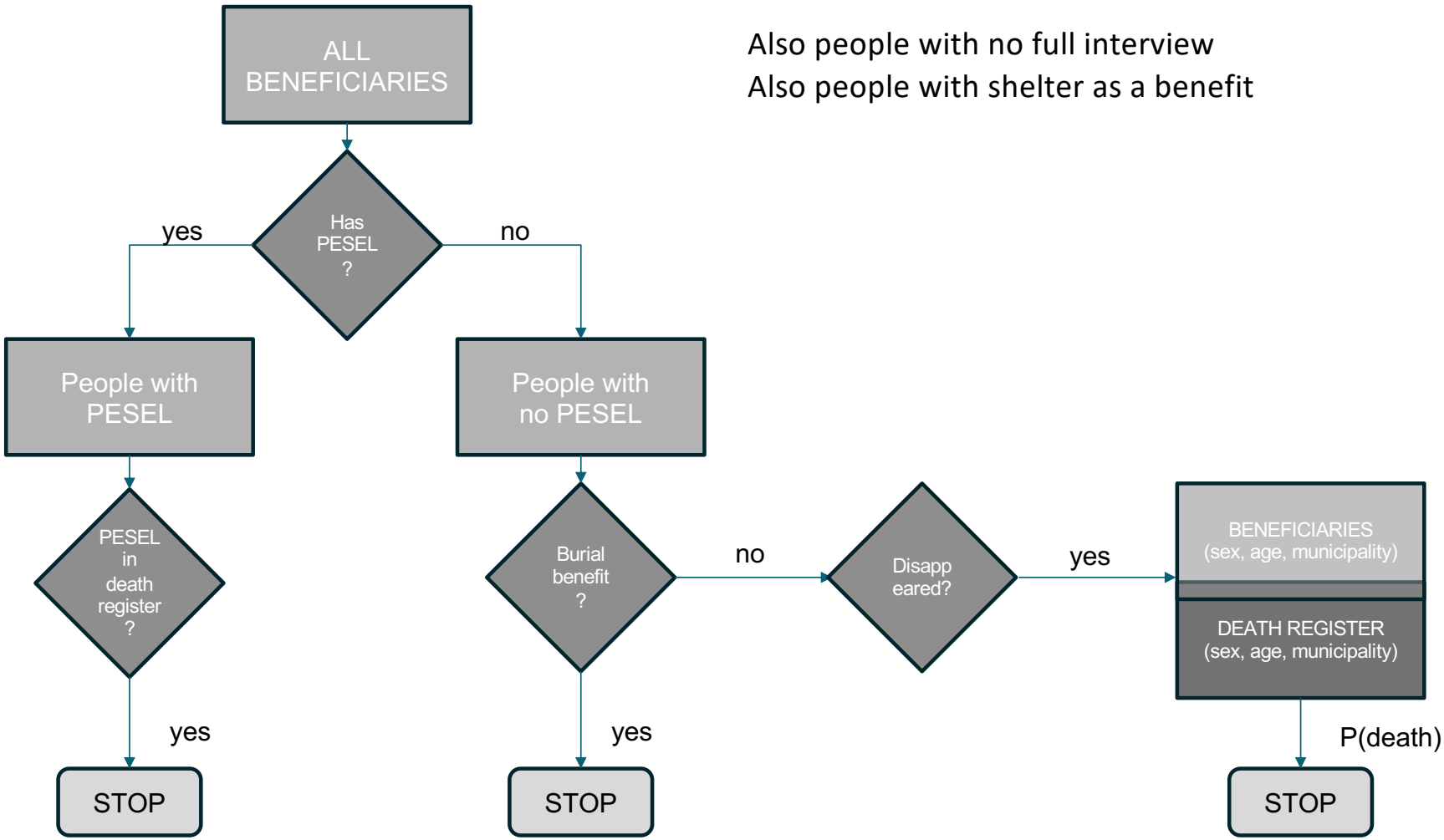
Among 2623 cases, 715 (27,3%) had burial as the only benefit

Mean = 26,52 benefits (for those with more than one) (SD=33,78, MAX=295)



Limitations of the LINKED dataset

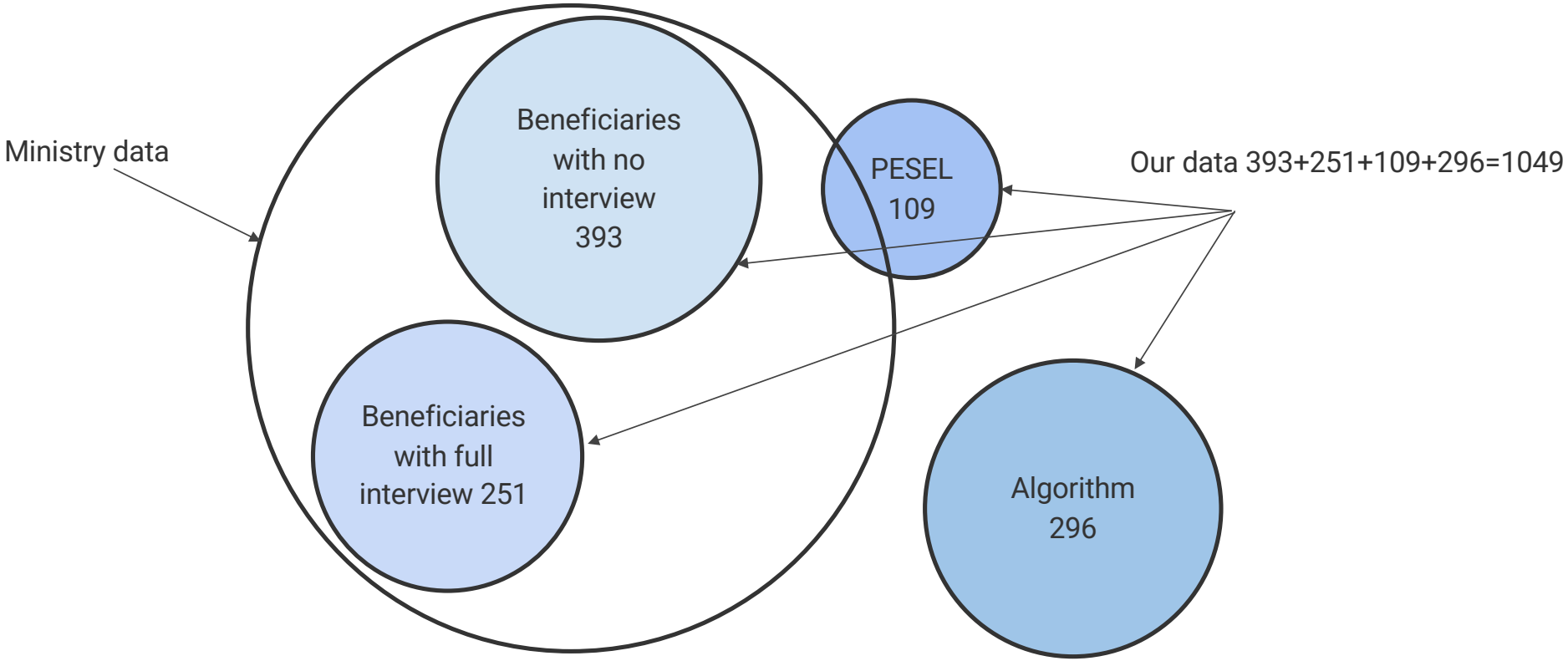
- Burial benefit as proxy for death
- No PESEL number
- Unique identifiers not consistent
- Limited homelessness definition
- Only people with a full interview by social worker
- Only around 25% of the number registered by the Ministry


ALL BENEFICIARIES
Has PESEL ?
yes
no
People with PESEL
People with no PESEL
PESEL in death register ?
Burial benefit ?
no
Disapp eared?
yes
BENEFICIARIES (sex, age, municipality)
DEATH REGISTER (sex, age, municipality)
P(death)
yes
yes
STOP
STOP
STOP
Also people with no full interview
Also people with shelter as a benefit

All beneficiaries dataset

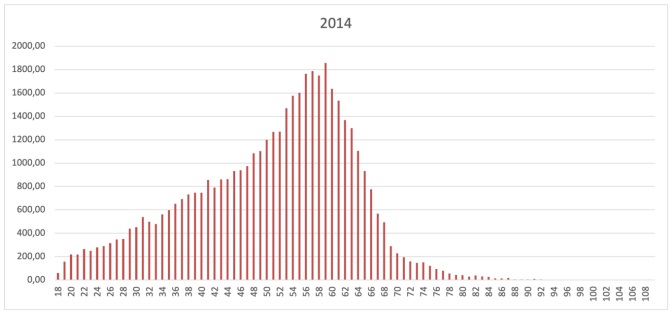
- Extended homelessness definition
- Some people with retrieved PESEL numbers (checked against death register)
- Algorithm calculating the probability of death for other individuals

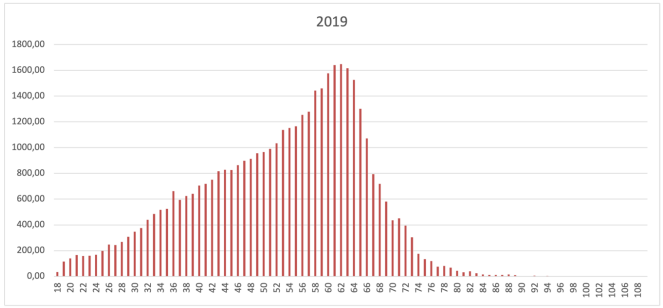
Differences in datasets 2022

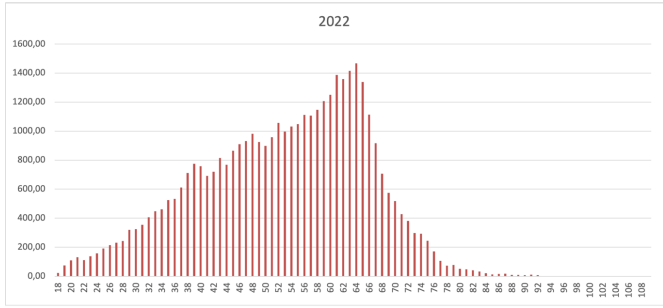


Minimum 1016+296=1312 deaths

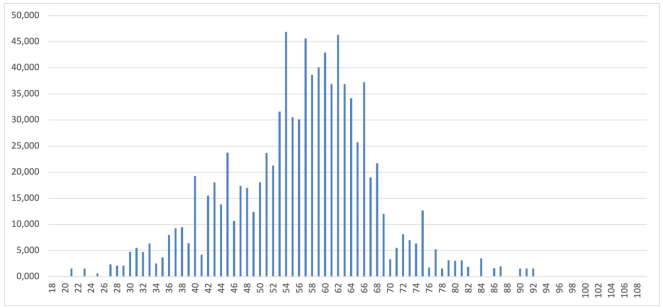
Age distribution population/deceased

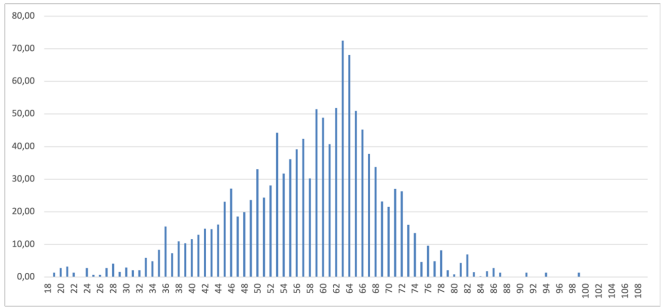


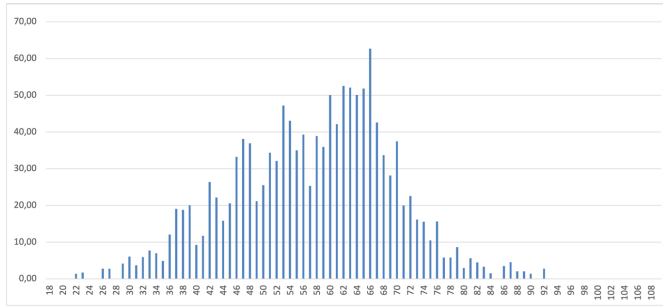




population







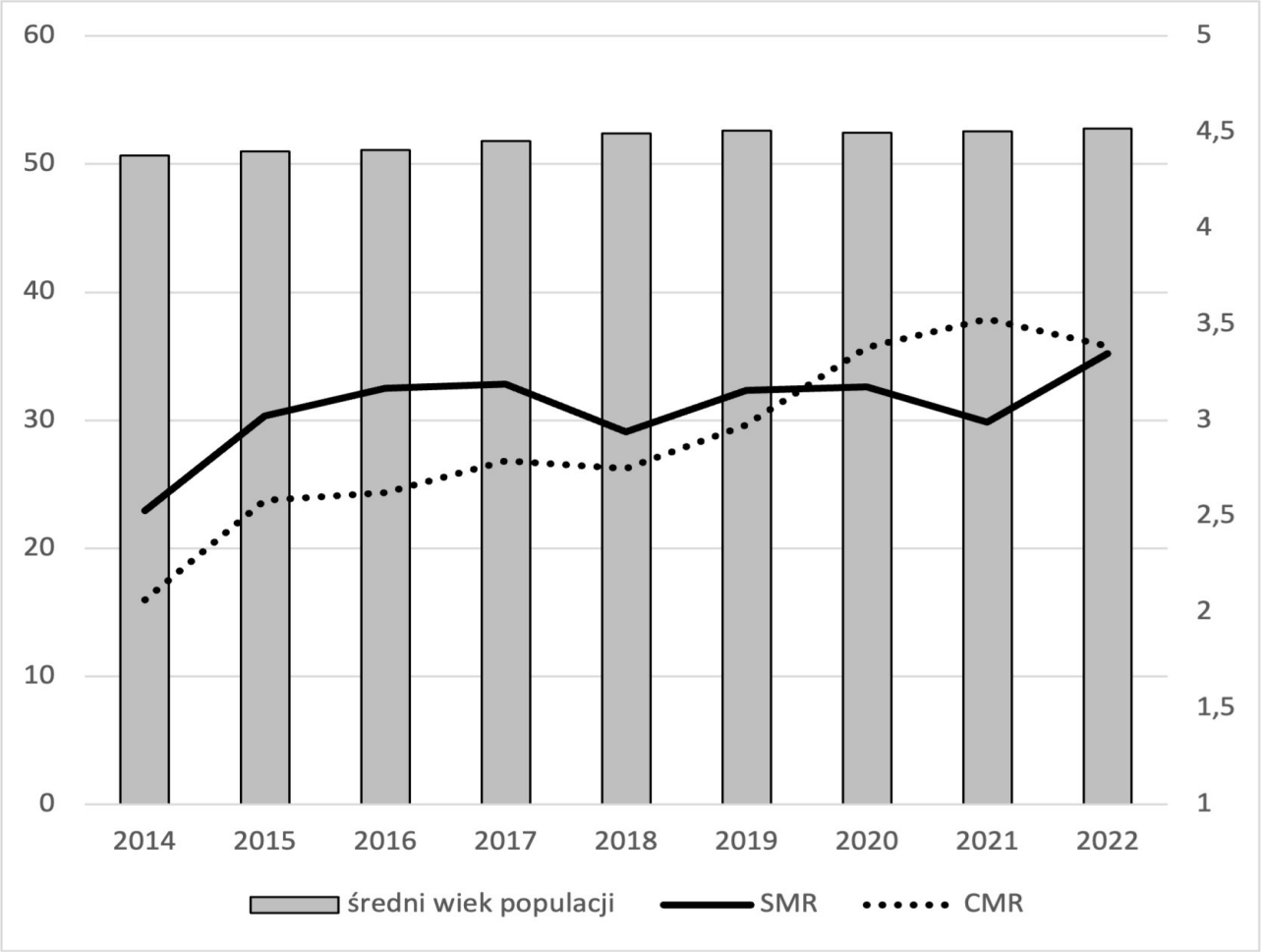
deceased

2014 **2019** **2022**

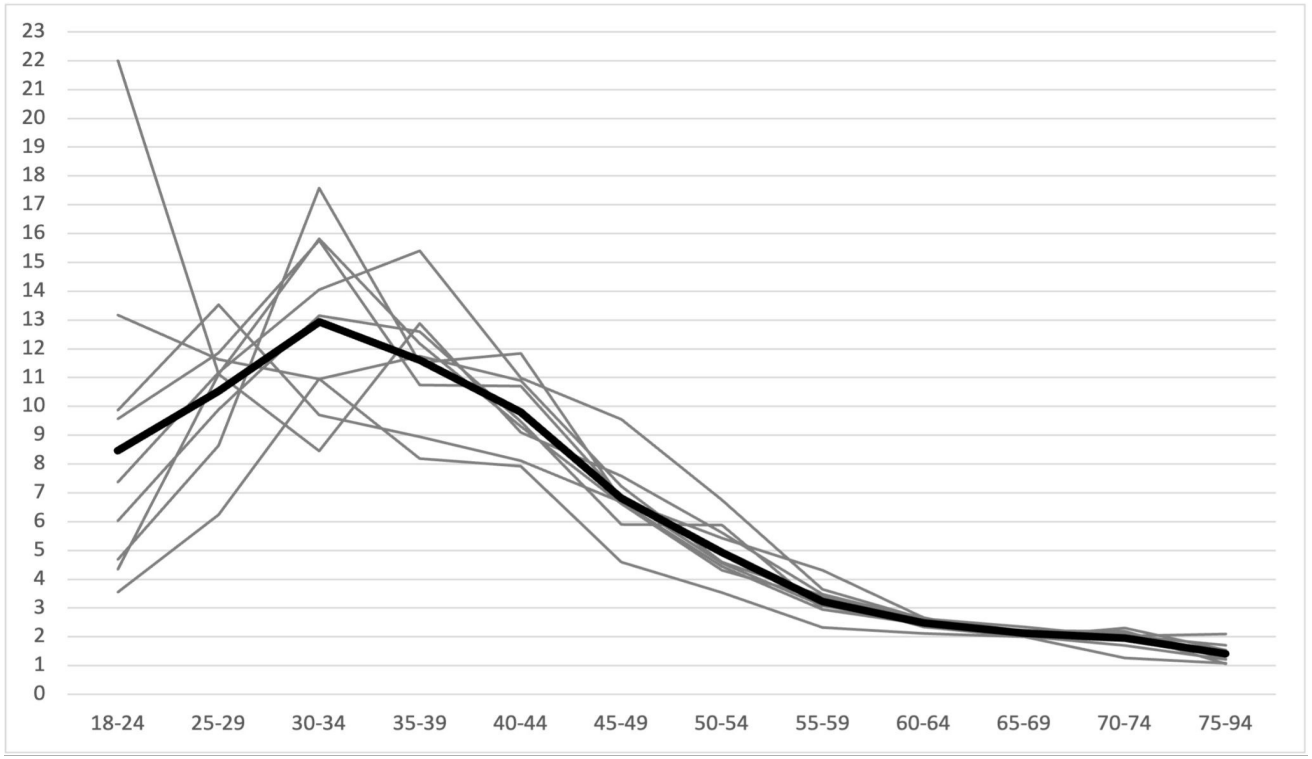
Basic indicators per year

year	population	deaths OBS	deaths EXP	AVE age pop	AVE age death	CMR	SMR
2014	45382	937,18	370,51	50,65	56,38	2,07	2,53
2015	43819	1131,38	374,42	50,98	56,67	2,58	3,02
2016	43031	1128,33	356,29	51,10	56,26	2,62	3,17
2017	44143	1231,73	386,41	51,80	57,48	2,79	3,19
2018	42781	1176,53	400,10	52,39	57,11	2,75	2,94
2019	42529	1265,86	401,27	52,59	57,78	2,98	3,15
2020	40996	1385,39	436,33	52,45	57,87	3,38	3,18
2021	40328	1422,39	475,57	52,58	58,61	3,53	2,99
2022	40453	1369,58	409,20	52,76	57,46	3,39	3,35

Average pop age, CMR and SMR per year



SMR in 5-year age groups



Summary of results

- 57 ave age at death (younger for women)
- 17 years life lost consistent with Romaszko et al. 2017 (however he studied a shelter population) 74 life expectancy for men in Poland
- SMR=3 (consistent with studies from other countries)

Limitations of these results

- No unique identifiers (homelessness as a non-household phenomenon)
- Funeral as a proxy for death
- Not transparent and inconsistent definitions of homelessness
- Assuming no migration between municipalities
- Limiting to one year after dissapearance from beneficiaries dataset
- Assuming that the probability of death is the same for all people with the same data
- Excluding Poznań from analysis (suspected double counts)

What’s next?

First use of this data in homelessness research – bringing these deaths to light

Digging into demographics and benefits in both datasets

We advocate for:

- Better access to register data for research purposes
- Legalizing linking data registers
- Coding PESEL or using a consistent system of unique ID
- Using a consistent definition of homelessness and household

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Thank you!

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