

Jonas Samuelsson

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SUMMARY

Data analyst and demographer with 5+ years of experience transforming complex healthcare and government datasets into actionable insights using R, Python, and SQL. Currently developing machine learning risk assessment models and GIS analytics at Sweden's Dental and Pharmaceutical Benefits Agency, with published research at the European Centre for Disease Prevention and Control and Karolinska Institutet. Proven ability to deliver policy-influencing analysis and technical solutions for diverse stakeholders.

WORK EXPERIENCE

Dental and Pharmaceutical Benefits Agency (TLV)

Nov. 2022 – present

Analyst

Stockholm, Sweden

- Develops ML risk assessment models using survival analysis on 4M+ patient procedure histories for government dental health initiatives.
- Conducts policy-influencing analysis on dental market pricing that was featured in nationwide ministerial broadcast, directly contributing to government dental subsidy reform launching January 2026.
- Analyzes geographical accessibility across 1,400 pharmacies nationwide, identifying optimal locations for 300 emergency pharmacies; creates interactive GIS dashboards in R/Shiny used by 10+ colleagues.
- Builds automated pricing supervision dashboards detecting mispricings worth \$2-4 million USD annually across Sweden's regulated pharmacy network.
- Maintains a Linux server infrastructure and ETL tools through the agency's digitalization efforts, supporting around 30 users.
- Updates annual reference prices for 200+ dental procedures nationwide, incorporating salary data, procedure times, and material costs.
- Maintains public price comparison website (Tandpriskollen) serving 20,000 monthly visitors with accurate pharmacy pricing data.
- Authors health economics reports on pharmaceutical and dental markets; provides analytical support to multidisciplinary teams.

Karolinska Institutet (KI)

Nov. 2021 – Oct. 2022

Research Assistant

Stockholm, Sweden

- Conducted and published research on mental well-being and the experience of working from home during the COVID-19 pandemic. Publication: [10.1097/JOM.0000000000002623](https://doi.org/10.1097/JOM.0000000000002623)
- Managed, cleaned and analysed data for the ALERT (Action Leveraging Evidence to reduce perinatal mortality and morbidity in Sub-Saharan Africa) project in Benin, Malawi, Tanzania and Uganda.
- Handled large sets of sensitive survey- and register data following strict data protection regulations.
- Assisted Master and PhD students with statistical analysis and coding in R and Stata.

European Centre for Disease Prevention and Control (ECDC)

May 2020 – Jul. 2021

Project officer / trainee, Scientific Methods and Standards Unit

Stockholm, Sweden

- Performed advanced time series analysis in R studying Legionnaires' disease trends and seasonality across European populations. Publication: <https://doi.org/10.2807/1560-7917.ES.2023.28.11.2200114>
- Conducted data preparation for the Annual Epidemiological Report and analysed antimicrobial consumption and resistance for JIACRA III.

- Helped organise the ESCAIDE conference, and harmonised large amounts of data from many years of the conference and created a Shiny application that makes it easy for co-workers to find and extract tables and graphs of information.

United Nations Economic Commission for Europe (UNECE)

Jan. 2019 – Apr. 2019

Intern, Population Unit

Geneva, Switzerland

- Conducted demographic analysis and wrote a chapter for a report on the challenges of an ageing population in Belarus.

Additional experience

- **Statistics Sweden (SCB)** - Research intern contributing to demographic policy report (2019)
- **Consulate General of Sweden, Chicago** - International experience in diplomatic services (2016 – 2017)

EDUCATION

Stockholm University

Graduation Oct. 2020

Master of Science in Demography

Stockholm, Sweden

- Thesis topic: *Parental age gap and child health in Sub-Saharan Africa* (awarded highest grade)

Corvinus University

Graduation Jul. 2017

Bachelor of arts in International Relations

Budapest, Hungary

SKILLS

- **Languages:** Swedish (native), English (fluent)
- **Programming tools:** R, Shiny, Python, SQL, Git, Docker, Linux
- **Specialized Methods:** Machine learning, survival analysis, time series analysis, GIS, econometrics