

CURRICULUM VITAE

Family name : LAI
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Present employment

- Independent consultant on health systems, research, policy development and assessment

Professional career

- 2017-2018 Senior Adviser (Health Systems and Universal Health Coverage), World Health Organization Country Office Ukraine, Ukraine
I am responsible for advising Ministry of Health of Ukraine on health care reforms (i.e. health financing, primary health care, specialised care, public health, laboratory network, pharmaceutical market, e-health and NCD prevention), coordination of technical assistance and capacity building to national counterparts provided by WHO in the aforementioned areas. Additionally, I'm engaged in donor coordination in Ukraine in these areas as well as fundraising and project management.
- 2015-2017 Scientific Coordinator for Taskforce on Reduction of Care Burden, the Government Office, Estonia
I was responsible for planning, commissioning, coordination and supervision of scientific studies and evidence for the Taskforce for evidence-based policy development and creation of the reform agenda. The Taskforce was created to address the burden of care patients and their family members face due to ageing population, increasing level of co-morbidities, high level of disability in the face of low level of services that would enable full engagement in labour market and population in general. The Taskforce is positioned in the crossroads of health, social and labour sectors to create a system where co-morbidities and disabilities are prevented to a higher degree, needed support services in acute and long-term health care are provided along in integration with full scope of innovative social and labour market services.
- 2014-2017 Senior Health Analyst, Fourth View Consulting, Estonia
I was responsible for overall development of the company and integration of health and social care streams. In addition, I was also responsible for activities in the area of health. The focus in this area was on population health analysis including mortality, morbidity, burden of disease and risk factor impact, health policy and system analysis including performance assessment with the goal to provide evidence for evidence informed policy development.
- 2013 Head of Department of eHealth, Ministry of Social Affairs, Estonia
I was responsible for reorganisation of e-health governance and policy development in Estonia. This included firstly delegation of project management to subordinating institution and initiation of national intersectoral e-health strategy development. Latter covers all registries in health system, electronic patient record, information/knowledge generation from electronic sources in health system, automatic monitoring systems based on health data, developments in telemedicine and e-health in general that the Department of eHealth covers as its responsibility. I was also national contact point for health system performance assessment.

- 2007-2012 Senior Analyst in Department of Health Information and Analysis, Ministry of Social Affairs, Estonia
I was responsible for planning, coordination, development and analysis of national health surveys as well as development and analysis of national health system performance assessment framework. I was also the coordinating author of Estonian „National Health Plan 2009-2020“ and responsible for outcome monitoring and performance measurement of the strategy. Additionally, I was Estonian national contact point in the areas of health technology assessment, social determinants of health including matters of health inequalities. Finally, I was also performing or involved in various analyses (e.g. modelling HIV epidemiology and burden of disease of infectious diseases, calculation of avoidable mortality and hospitalisation etc.) for evidence based policy making in Estonia.
- 2000–2012 Research Fellow and lecturer in Department of Public Health, University of Tartu, Estonia.
I was conducting research on performance, service use and financial incentives of health systems, health impact assessments as well as patient pathways and quality of life issues in these contexts. My research has also involved first national burden of disease studies, modelling of effectiveness and cost-effectiveness of public health interventions and health policy research. I was and also am supervisor of several master’s theses and co-supervisor of a PhD thesis in the University of Tartu.
- 2006–2007 Health Policy Analyst in PRAXIS Centre for Policy Studies, Estonia where I focused on evaluation of screening programmes and organisational development of primary healthcare in Estonia.
- 2001–2003 Research Fellow in Estonian Genome Foundation and EGeen Inc., Estonia where I designed comprehensive data collection system for collecting phenotype and health behaviour data of the whole Estonian adult population. This involved design of surveys, survey tools, data linkage systems and was carried out in close collaboration with software development team to create electronic data collection, management, warehousing and automated analysis systems.
- 2001 Visiting Scientist in International Agency for Research on Cancer (IARC) in Lyon, France where I did research on epidemiology of nutrition and cancer as well as on design of population health surveys
- 2000–2001 Pärnu Hospital, physician in the Department of General Surgery

Education and degrees

- 2011 Defended PhD thesis “Population health measures to support evidence-based health policy in Estonia” and received a degree of Doctor of Medical Sciences
- 2000 graduated (MD) from the Faculty of Medicine, University of Tartu

Language competence

English, Russian

Main fields of previous research

- Performance assessment of health system
- Burden of disease, national burden of disease studies and regional variation of ill health
- Population health measures of mortality, life expectancy, morbidity and health behaviour
- Inequalities in population health
- Comparison of health policies and health systems in European countries
- Design and analysis of population health surveys and bridging these for secondary analysis
- Cost-effectiveness of public health interventions (esp. mental health, alcohol, tobacco, HIV)
- Disease and population modelling with special regard to HIV/AIDS
- Health related quality of life of general population and special disease groups

International projects and collaboration

2016	Support to national authorities on developing policy briefs with the focus on primary care development as part of the creation of the national primary care strategy in Slovenia in collaboration with WHO Euro.
2016-2017	Capacity building and support to primary care reform in Kharkiv region, Ukraine in collaboration with the regional health authorities.
2016-2017	Analysis of health care financing models in Azerbaijan and support to health care financing reform in collaboration with European Commission.
2015-2017	Training and research coordination in national health care research centre of Kazakhstan to conduct mapping of health inequalities (with focus on mortality) in the Kyzilorda region, Kazakhstan in relation to social-determinants of health and performance of health and social care as underlying causes of ill-health and mortality for policy development in collaboration with WHO Euro
2015-2017	Research on foresight and modelling of the health and financial burden of non-communicable diseases in European health systems for policy and regulation development as part of a research consortium including the OECD, University Aix-Marseille, Austrian Institute for Technology and others in an EU Horizon2020 project FRESHER.
2015	Continuous capacity building of senior policy makers on strategic planning, monitoring and evaluation in health system in the Republic of Moldova in collaboration with WHO Euro
2015	Assessment "Better non-communicable disease outcome challenges and opportunities for health systems" in the Former Yugoslav Republic of Macedonia in collaboration with WHO Euro.
2015	Assessment of organisation and cost-effectiveness of tuberculosis care in community setting in the Republic of Moldova in collaboration with WHO Euro and GFATM.
2014	Assessment "Better non-communicable disease outcome challenges and opportunities for health systems" in Estonia in collaboration with WHO Euro.
2014	Modelling of cost-effectiveness of interventions to prevent road traffic injuries in global regions in collaboration with WHO.
2013-2015	Development of health system performance assessment in collaboration with Ministry of Health of Republic of Malta and WHO Euro.
2013-2014	Support to development of a system of regional health profiles in in collaboration with Ministry of Health of Republic of Moldova and WHO Euro.
2013	Development of health system performance assessment in collaboration with Ministry of Health of Republic of Slovenia.
2012-2013	Consultation and capacity building to develop health system performance assessment system including reporting and policy relevant health analysis to support evidence-based health policy in Republic of Kazakhstan for Ministry of Health there in collaboration with WHO Euro.
2012-2013	Consultation and capacity building to develop health system performance assessment system including reporting and policy relevant health analysis to support evidence-based health policy in Republic of Moldova for Ministry of Health there in collaboration with WHO Euro.
2012-2013	Chair of OECD Expert group for Economics of Prevention
2012	Review and assessment of Estonian mental health system as part of an EU project "European Profile of Prevention and Promotion of Mental Health" (EuroPoPP-MH)
2012	Review and assessment of health system performance assessment system and

	strategic policy development system in health system of Republic of Moldova for Ministry of Health there in collaboration with WHO Euro.
2012	Review and assessment of public health strategy of Republic of Moldova for Ministry of Health there in collaboration with WHO Euro.
2012	Review and assessment of monitoring and evaluation system in health sector of Republic of Kazakhstan for Ministry of Health there in collaboration with WHO Euro.
2012-2013	Member of the ECDC expert group on infectious disease burden
2011-2013	Research on Financing Systems' Effect on the Quality of Mental Health Care in Europe (project REFINEMENT)
2011-2013	Member of the EC (European Commission) Working Group on Measuring and Monitoring the Effectiveness of Health Investments
2011-2012	Collaboration with WHO Euro in development of international guidelines on health system performance assessment
2011	Consultation of Moldovan Ministry of Health on modelling cost-effectiveness of tobacco and alcohol interventions in collaboration with WHO Euro and WHO HQ
2011	Consultation of Moldovan Ministry of Health on health system performance assessment in collaboration with WHO Euro
2010-2011	Research on burden of disease of infectious diseases in collaboration with ECDC (European Centre for Disease Prevention and Control) and RIVM (National Institute for Public Health and the Environment, the Netherlands) (project BCoDe)
2009-2011	Mapping of chronic disease management systems in three Baltic States in collaboration with RAND Europe (project DISMEVAL)
2008-2010	Health system performance assessment of Estonian health system in collaboration with WHO Euro and London School of Economics (LSE)
2008-2011	European Network for Promoting the Health of Residents in Psychiatric and Social Care Institutions (project HELPS)
2008-2009	Modelling of HIV/AIDS epidemiology in Estonia in collaboration with WHO Euro and WHO/UNAIDS
2008-2012	Member of OECD Expert group for Economics of Prevention
2006-2009	Mental Health Economics European Network (project MHEEN II)
2005-2006	Modelling cost-effectiveness of tobacco and alcohol interventions using WHO-CHOICE in collaboration with WHO HQ
2004	Estonian national burden of disease study in collaboration with WHO HQ

Main publications

- Goroshko A, Shapoval N, Lai T. Can people afford to pay for health care? New evidence on financial protection in Ukraine. Copenhagen: WHO Office for European Region; 2018.
- Lai T, Stachenko S, Milevska N, Ristovska G, Spiroski I. Better Non-communicable Disease Outcomes: Challenges and Opportunities for Health Systems. Country Assessment for FYR Macedonia. Copenhagen: WHO Office for European Region; 2016.
- Lai T, Leinsalu M. Trends and inequalities in mortality of noncommunicable diseases: Case Study for Estonia. Copenhagen: WHO Office for European Region; 2016.
- Murray CJ, Barber RM, Foreman KJ, /.../, Lai T, /.../, Vos T. Global, regional, and national disability-adjusted life years (DALYs) for 306 diseases and injuries and healthy life expectancy (HALE) for 188 countries, 1990-2013: quantifying the epidemiological transition. *Lancet*. 2015 Aug 27
- Vos T, Barber RM, Bell B, /.../, Lai T, /.../, Murray CJ. Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Global Burden of Disease Study 2013 Collaborators. Lancet*. 2015 Aug 22
- Lai T, Taube M, Knai C. Latvia. In Nolte E, Knai C (eds). *Assessing chronic disease management in European health systems: Country reports*. Copenhagen: WHO Office for European Region; 2015.
- Lai T, Murauskiene L, Veniute M, Knai C. Lithuania. In Nolte E, Knai C (eds). *Assessing chronic disease management in European health systems: Country reports*. Copenhagen: WHO Office for European Region; 2015.
- Lai T, Knai C. Estonia. In Nolte E, Knai C (eds). *Assessing chronic disease management in European health systems: Country reports*. Copenhagen: WHO Office for European Region; 2015.
- Lai T, Stæhr Johansen A, Dorner T, Mantingh F, Breda J, Jewell J, Reinap M, Jakab M. Better Non-communicable Disease Outcomes: Challenges and Opportunities for Health Systems. Estonia Country Assessment. Copenhagen: WHO Office for European Region; 2015.
- Lai T, Habicht T, Jesse M. Monitoring and Evaluating Progress towards Universal Health Coverage in Estonia. *PLoS Med* 2014 Sep;11(9):e1001677.
- Lai T, Leinsalu M. Trends and inequalities in mortality of non-communicable diseases. Case study for Estonia. Copenhagen: WHO Office for European Region; 2014.
- Murray CJ, Ortblad KF, Guinovart C, Lim SS, /.../, Lai T, /.../, Vos T. Global, regional, and national incidence and mortality for HIV, tuberculosis, and malaria during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 2014 Sep 13;384(9947):1005-70.
- Ng M, Fleming T, Robinson M, Thomson B, /.../, Lai T, /.../, Gakidou E. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 2014 Aug 30;384(9945):766-81.
- Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, Shackelford KA, /.../, Lai T, /.../, Murray CJL. Global, regional, and national levels and causes of maternal mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 2014 Sep 13;384(9947):980-1004.
- Wang H, Liddell CA, Coates MM, Mooney MD, /.../, Lai T, /.../, Murray CJL. Global, regional, and national levels of neonatal, infant, and under-5 mortality during 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* Sep 13;384(9947):957-79.

- Evans-Lacko S, Courtin E, Fiorillo A, Knapp M, /.../, Lai T, /.../, Thornicroft G. The state of the art in European research on reducing social exclusion and stigma related to mental health: A systematic mapping of the literature. *Eur Psychiatry* 2014 Apr 9.
- Lai T, Habicht T, Kahur K, Kiivet RA, Reinap M, van Ginneken E. Estonia: health system review. *Health Systems in Transition*. Copenhagen: WHO Office for European Region; 2013.
- Kulzhanov M, Lai T, Yegeubayeva S, Tanirbergenov S, Yermakhanova G. Health system and population health in Kazakhstan: Short overview. Astana: Ministry of Health of the Republic of Kazakhstan; 2013.
- Mangen MJ, Plass D, Havelaar AH, Gibbons C, Cassini A, Mühlberger N, van Lier A, Haagsma J, Brooke J, Lai T, de Waure C, Kramarz P, Kretzschmar ME. The Pathogen- and Incidence-Based DALY Approach: An Appropriated Methodology for Estimating the Burden of Infectious Diseases. *PLoS One* 2013;8(11):e79740.
- Lai T. Mental health system in Estonia. In: Samele C, Frew S, Urquia N. (Eds.) *Mental health Systems in the European Union Member States, Status of Mental Health in Populations and Benefits to be Expected from Investments into Mental Health: European profile of prevention and promotion of mental health (EuroPoPP-MH)*. Nottingham: Institute of Mental Health; 2013.
- Plass D, Mangen MJ, Havelaar AH, Gibbons C, Haagsma J, Jahn B, Lai T, van Lier A, Longhi S, McDonald SA, Kraemer A, Kramarz P, Cassini A, Kretzschmar ME. The incidence-based and pathogen-based disability-adjusted life-years approach for measuring infectious disease burden in Europe: the Burden of Communicable Diseases in Europe (BCoDE) project. *The Lancet* 381, S114. 17-6-2013.
- Kretzschmar M, Mangen MJ, Pinheiro P, Jahn B, Fevre E, Longhi S, Lai T, Havelaar A, Stein C, Cassini A, Kramarz P. New methodology for estimating the burden of infectious diseases in Europe. *PLoS Med.* 2012 Apr;9(4):e1001205.
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- Baburin A, Lai T, Leinsalu M. Avoidable mortality in Estonia: exploring the differences in life expectancy between Estonians and non-Estonians in 2005-2007. *Public Health*. 2011 Nov;125(11):754-62.
- Lai T, Oja L, Ruuge M, Käbin M, Aaben L. Health in Estonian regions. In: Servinski M. (Ed.) *Regional development in Estonia*. Tallinn: Statistics Estonia; 2011
- Lai T, Habicht J. Decline in alcohol consumption in Estonia: combined effects of strengthened alcohol policy and economic downturn. *Alcohol Alcohol*. 2011; 46(2):200–203.
- Lai T, Veillard J, Bevan G. Estonia, health system performance assessment: 2009 snapshot. Copenhagen: WHO Regional Office for Europe and Estonian Ministry of Social Affairs; 2010.
- Lai T. [Gender differences in health in Estonia]. In: Järviste L, Marling R, Sander K. (Eds.) [Toward balanced society: men and women in Estonia II], Tallinn, Ministry of Social Affairs; 2010
- Köhler K, Lai T. Injuries in Estonia. Tallinn: Ministry of Social Affairs; 2010
- Lai T, Köhler K. Burden of disease of Estonian population. Tallinn: Ministry of Social Affairs; 2009
- Orru H, Maasikmets M, Lai T, Tamm T, Kaasik M, Kimmel V, Orru K, Merisalu E, Forsberg B. Health impacts of particulate matter in five major Estonian towns: main sources of exposure and local differences. *Air Qual Atmos Health*. 2010; 1–12.

- Lai T, Rätsep M, Rüütel K, Trummal K, Kahur K, Nielsen S, Lauer J, Politi C, Habicht J. Modelling Estonia's concentrated HIV epidemic: A case study. Copenhagen: WHO Regional Office for Europe; 2009.
- Lai T, Habicht J, Kiivet RA. Measuring burden of disease in Estonia to support public health policy. Eur J Public Health. 2009 Oct;19:541-7.
- Lai T, Habicht J, Rüütel K. [Prevalence of HIV in Estonia and possible future changes until 2015]. Eesti Arst 2009; 88(4):267–273
- Orru H, Teinemaa E, Lai T, Tamm T, Kaasik M, Kimmel V, Kangur K, Merisalu E, Forsberg B. [Health impact of outdoor air quality of particulate pollution in cities of Tartu, Kohtla-Järve, Narva and Pärnu: Health impact assessment of particulate pollution]. Tartu: University of Tartu; 2009.
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- Krikmann Ü, Taba P, Lai T, Asser T. Validation of an Estonian version of the Parkinson's Disease Questionnaire (PDQ-39). Health Qual Life Outcomes. 2008; 6: 23.
- Orru H, Teinemaa E, Lai T, Tamm T. [Health impacts of air quality in Tallinn]. Tallinn: Ministry of Environment; 2008.
- Habicht J, Lai T, Aaviksoo A. Inequalities in health: an unsolved challenge. In: Social Inequalities, ed. Toomse M. Tallinn: Statistics Estonia; 2007.
- Lai T, Habicht J, Reinap M, Baltussen R, Chisholm D. Costs, health effects and cost-effectiveness of alcohol and tobacco control strategies in Estonia. Health Policy 2007 Nov;84(1):75-88.
- Lai T. [Regional Distribution of Burden of Disease in Estonia in 2000-2003]. Tallinn: Ministry of Social Affairs; 2006.
- Reinap M, Lai T, Janno S, Tamme T, Tamm M. Cost-effectiveness of Mental Health Interventions in Estonia. Tallinn: Ministry of Social Affairs; 2005.
- Lai T, Baburin A, Vals K, Kiivet R. [Health losses of Estonian population caused by premature mortality and lifetime morbidity]. Eesti Arst 2005;84(7).
- Vals K, Lai T, Kiivet R. [Losses in population health: methodological review of burden of disease]. Eesti Arst 2005;84(7).
- Lai T, Vals K, Kiivet R. [Burden of Disease in Estonia: burden of disease and health risks]. Tallinn: Ministry of Social Affairs; 2005.