Annexes

Use of Norwegian Municipal Public Health Profiles and Data Bank: A qualitative study

DL Public Health MSc PHM 305

Candidate Number: J09639

Submitted: September 30 2014

Annex Table of Contents

Annex ⁻	Table of Contents	2
Annex /	A. Ethical Approval from RCMHRE, Norway	3
Annex I	B: Literature Search Existing Evaluations	4
Annex (C. Information Letter and Consent Form	5
Annex I	D. Interview Guide	8
Annex I	E. Tasks to be solved using the Municipal Data Dank	12
Annex I	F. Questionnaire	14
Annex (G: Questionnaire Results	16
Annex I	H. Municipal Public Health Profile for Tromsø 2013	17
Annex I	I. Code List	21
Annex J	J. Theme List	24
Annex I	K. Recommendations	27
1.1.	Theme A: MDB Functionality Wishlist	28
1.2.	Theme B: MDB/MDPH Indicator Wishlist	28
1.3.	Theme C: MPHP Midsection Wishlist	30
1.4.	Theme D: Municipal Use of MDB/MPHP	31
1.5.	Theme E: Municipality Size and MDB/MPHP Suitability	31
1.6.	Theme F: Municipal Roles and Leadership	31
1.7.	Theme G: Central Health Authority Roles (and Leadership)	31
1.8.	Theme H: NIPH Actions Wishlist	31
1.9.	Theme I: MDB/MPHP Indicators and Policy	32

Annex A. Ethical Approval from RCMHRE, Norway

[RCMHRE – Regional Committee for Medical and Health Research Ethics]



UNIVERSITETET I OSLO

DET MEDISINSKE FAKULTET



Date: 30.04.14 Your ref.:

Our ref.: IRB 0000 1870

Regional komité for medisinsk og helsefaglig forskningsetikk Sor-Ost C (REK Sor-Ost C) Postboks 1130 Blindem NO-0318 Oslo

Telefon:+47 22 84 55 21

E-post: post@helseforskning.etikkom.no Nettadresse: http://helseforskning.etikkom.no

To whom it may concern

Exemption from ethics approval regarding the study:
Use of Norwegian Municipal Health Profiles and Data Bank: A qualitative study

With reference to your email of 9th of April, we hereby confirm that the Regional Committee for Medical and Health Research Ethics, section South-East C, Norway has assessed the project Use of Norwegian Municipal Health Profiles and Data Bank: A qualitative study.

The ethics committee system consists of seven independent regional committees, with authority to either approve or disapprove medical research studies conducted within Norway, or by Norwegian institutions, in accordance with ACT 2008-06-20 no. 44: Act on medical and health research (the Health Research Act).

The abovementioned study is exempt from review in Norway, cf. § 4 of The Act. The project can be implemented without the approval by the Regional Committee for Medical Research Ethics.

Please do not hesitate to contact the Regional Committee for Medical and Health Research Ethics, section South-East C (REK Sør-Øst C) if further information is required.

Yours sincerely,

Britt-Ingjerd Nesheim MD, PhD Professor of Medicine, University of Oslo

Chair Regional Committee for Medical and Health Research Ethics, section South-East C

Marianne Eidem Higher executive officer

Regional Committee for Medical and Health Research Ethics, section South-East C

Annex B: Literature Search Existing Evaluations

Author/year Institution		▼ Title	▼ Product evaluated ▼	Publicatio 🕶	▼ Publicatio ▼ What kind of survey? ▼ Respondents		▼ Results
Lester, N. &		Measuring inequalities:	Report: Measuring Inequality, 1 report, 1	1 report, 1	Questionnaire with space		
Gartner, A.	Public Health Wales an example of	an example of	Trends in Mortality and Life	Powerpoint	for free text, personally		Information about how the
(2012)	Observatory	developing a profile	Expectancy in Wales, 2011	presentation	administered	23 end users	original report was used
	I2SARE (Health						Information on whether
12SARE Project Inequalities	Inequalities	Evaluation report. Work	ork 168 regional health reports		Internal evaluation of EU		project benchmarks had
Team (2011)	Indicators in the	package 3	for Europe	Report	project	Project participants been met	been met
							Information about
			Health Indicators, indicator				intended users' awareness
Statistics		Consultation survey on	set used in many different			49 end user	and usage of Health
Canada (2009)	Canada (2009) Statistics Canada	health indicators	settings	Report	Qualitative interviews	interviews	Indicators product, and how
							Information about usage of
		Consultation study.	Health Indicators, indicator				the Health Indicators, the
Statistics		External clients of	set used in many different		Web survey, posted to	187 completed	specific indicators,
Canada (2005)	Canada (2005) Statistics Canada	health statistics division settings	settings	Report	contacts	surveys	difficulties and suggestions
							Information about usage of
		Evaluation of Scottish			Online questionnaire,		the Health and Wellbeing
Galbraith, L.	Scottish Public	health and wellbeing	Health and Wellbeing		sent to several different	83 completed	Profiles, some specific
(2010)	Health Observatory	profiles 2008	Profiles	Report	kinds of lists/networks	surveys	indicators, difficulties and
					Questionnaire distributed		
!					to all public nealth		1.040.000.000.000.000.000.000.000.000.00
Heigesen,		Kommuneneiseprofiler.			coordinators and planners		Information about
M.K., Hofstad,	Norwegian Institute	M.K., Hofstad, Norwegian Institute Kommunenes bruk av			in the municipalities,		knowledge about and
H. & Vestby,	for urban and	Helsedirektoratets	Webpage:		qualitative interviews	514 questionnaires,	514 questionnaires, usage of the webpage,
G.M. (2008)	regional research	nettsted	Kommunehelseprofiler	Report	with ten municipalities	20 interviews	evaluation of indicators
							Information about
Shared			Health Profiles: Regional		Online survey, interviews	270 questionnaires,	270 questionnaires, knowledge about and
Intelligence	South East Public	Health profiles	Profiles and online		with stakeholders, focus	10 interviews, 2	usage of Health Profiles,
(2009)	Health Observatory	al report	Interactive Tool	Report	groups	focus groups	discussion of indicators,
		Utvärdering av					Information about the
Statskontoret,		uppföljningssystemet	2 reports, Folkhälsopolitisk		Questionnaires,		varying usage and
Sweden	Statskontoret,	för den nationalla	rapport and Årsrapport, 1		interviews with selected	413 questionnaires,	413 questionnaires, knowledge about the three
(2013)	Sweden	folkhälsopolitiken	webpage: Folkhälsodata	Report	high-level stakeholders	ca 30 interviews	products.

Annex C. Information Letter and Consent Form

[These have been translated from the original in Norwegian.]



(Address municipality)

(date)

Survey on the use of the Public Health Profiles for Municipalities and the Municipal Health Statistics bank

May we interview the Municipal Physician and Public Health Coordinator in your municipality?

Background:

Municipalities and counties are in accordance with the regulations laid down in the Public Health Act required to monitor the health status and determinants for health.

According to § 5 of this regulation the NIPH will annually distribute processed statistics from central registries to assist the municipalities.

In January 2014, the updated Municipal Public Health Profiles and information about the Municipal Data Bank were distributed for the third time. The NIPH is interested in studying whether and how these products are used in the municipalities and whether there are deficiencies that should be corrected. In this context, we would like to conduct interviews with the Municipal physician and the Public Health Coordinator in a limited number of municipalities.

The interview is expected in itself to provide useful practical knowledge about the use of the public health profile for each municipality, and there will be allocated time for questions and additional briefings at the request of the interviewee after the interview. If the municipality wishes, we can also provide training in the use of the municipal health statistics bank to all municipal employees who are available the same day as the interview takes place.

Interview Form:

The interview has three parts. First, a structured interview, which will be recorded, then a short questionnaire, and finally, the municipal employees get some short practical tasks to be solved using the MDB.

All interviews will be carried out in the period April-June 2014.

Confidentiality:

The person / persons being interviewed will not be asked personal questions beyond age and educational background. The final report, which is the only thing that will be publicly available in this study, will not make it possible to identify individuals or specific municipalities, and notes and audio recordings will be erased when the report is completed. The person / persons being interviewed will be asked to sign a consent form (attached).

Practical points:

Please provide a phone number and a time when I might call to make an appointment, alternatively you can call me directly on mobile (deleted). If the municipality is far from Oslo I'd prefer to interview both the Municipal physician and the Public Health Coordinator on the same day, but this is not an absolute requirement.

Sincerely,	
(name)	
(title)	



Consent Form for Survey on the use of Municipal Public Health Profiles and the Municipal Data Bank

I have read the information sheet with information about this investigation and agree that the information I provide in an interview with the Norwegian Institute of Public Health employee may be used in the survey anonymously.

I agree that I may be contacted one time after the interview to clear up any misunderstandings or correct the data collected. (yes / no)

Name:			
Municipality:			
	(11 digits):		
Phone:			-
Date:	Signature:		

Annex D. Interview Guide

[These have been translated from the original in Norwegian.]

- 1) Demographic questions (to be filled in in advance)
 - a. The Municipality
 - i. Name
 - ii. Population
 - iii. District index, Centrality
 - iv. The specific MPHP (to be brought)
 - v. Downloads (how many times)
 - vi. Main industries (if available on municipal web page)
 - vii. How public health work is organised (if available on municipal web page)
 - b. The Informant
 - i. Name
 - ii. Gender
 - iii. Age
 - iv. Education
 - v. Job title
 - vi. Time in position

2) About the Municipal Public Health Profile (MPHP)

- a. How/when did you find out about the MPHP?
- b. What kind of work do you have where statistics can be of use?
- c. Do you use the MPHP at all?
- d. How much?
- e. When did you last use the MPHP?
- f. For what purpose? Result?
- g. In general: How often?
- h. For what?
- i. Example?
- j. Easy/hard compared to other data sources?
- k. What do you think about the presentation form?
- I. Do you use the MPHP with others?
- m. Have you shared the MPHP with anyone? Who? What and how?
- n. Does anyone else in the municipality use the MPHP?
- o. Effect of the MPHP locally?
- p. Do you check the MPHP every year regarding municipal developments?
- q. Is the MPHP mirrored in municipal policy/strategy?
- r. How COULD one use the MPHP?
- s. What kind of work do you have where the MPHP might be of use?
- t. Do you/your municipality produce your own statistics?
- u. Do you/your municipality use other sources of statistics?
- v. Does the MPHP reflect your reality?
- w. Reflection page 1?
- x. Reflection page 2?
- y. Reflection page 3?
- z. Reflection page 4/the barometre?
- aa. What do you think about the length of the MPHP?
- bb. Comments user friendliness/functionality?
- cc. Comments data provided/indicators? Are they relevant?
- dd. Are you satisfied with the MPHP?

3) About the Municipal Data Bank (MBD)

- a. What kind of work do you have where statistics can be of use?
- b. Do you use statistics banks, such as Statistics Norway's data bank, NorHealth, WHO-HfA etc in your daily work?
- c. How/when did you find out about the MDB?
- d. Do you use the MDB at all?
- e. When did you last use the MDB? Result?
- f. How much do you use the MDB?
- g. In general: How often?
- h. For what? Example use?
- i. Easy/hard compared to other data sources?
- j. What do you think about the presentation form?
- k. Do you use the MDB with others?
- I. Have you shared the MDB with anyone? Who? What and how?
- m. Does anyone else in the municipality use the MDB?
- n. Effect of the MDB locally?
- o. Is the MDB mirrored in municipal policy/strategy?
- p. How COULD one use the MDB?
- q. What kind of work do you have where the MDB might be of use?
- r. Do you/your municipality produce your own statistics?
- s. Do you/your municipality use other sources of statistics?
- t. Does the MDB reflect your reality?
- u. Comments user friendliness/functionality?
- v. Comments data provided/indicators? Are they relevant?
- w. Are you satisfied with the MDB?

- 4) For the future
 - a. What can be improved in the MPHP?
 - b. Data selection/indicators in the MPHP?
 - c. Othe data sources for the MPHP?
 - d. User friendliness in the MPHP?
 - e. What can be improved in the MDB?
 - f. Data selection/indicators in the MDB?
 - g. Othe data sources for the MDB?
 - h. User friendliness in the MDB?
 - i. How can the MPHP and MDB better serve your needs and the municipality's needs?
 - j. Is there a need for other products for data presentation?
 - k. Is the NIPH sufficiently active in promoting the MPHP/MDB?
 - I. What should the NIPH be doing?
- 5) Any other issues you would like to raise?

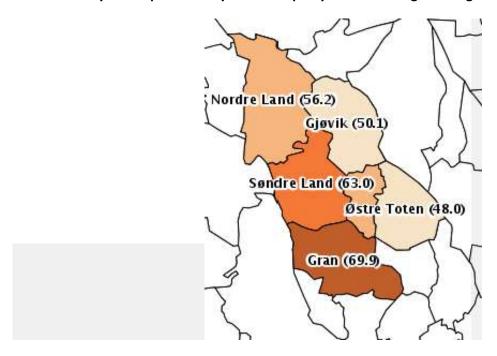
Handouts:

- 1) Municipal Public Health Profile (as in Annex H, but the 2014 version, in Norwegian, of the relevant municipality)
- 2) (after interview): short questionnaire (Annex F)
- 3) Three simple tasks to be solved using the MDB (Annex E)

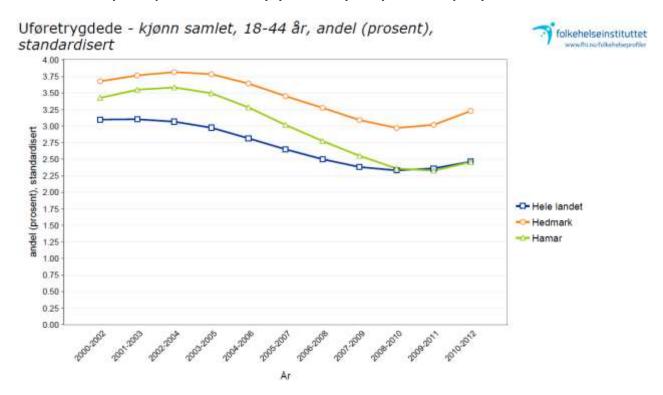
Annex E. Tasks to be solved using the Municipal Data Dank

[These have been translated from the original in Norwegian.]

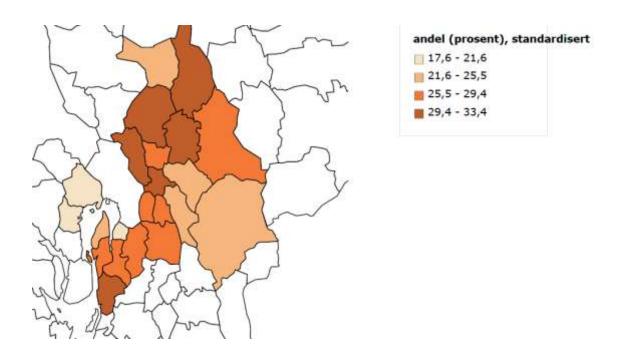
1) Make a map showing the percentage using primary health care services for the symptoms anxiety and depression in your municipality and some neighbouring municipalities.



2) Make a **timeline** showing the percentage of **young people on disability benefits** over **as long** a **time span as possible** in **Norway, your county and your municipality**.



3) Make a map showing high school drop out rates in all municipalities in your county.



Annex F. Questionnaire

[These have been translated from the original in Norwegian.]

To which extent do you agree/disagree with the following statements about the Municipal Public Health Profiles (MPHPs) and the Municipal Data Bank (MDB)?

The Municipal PHP	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
present data clearly					
help to prioritise within public					
health					
are helpful in planning new					
services					
raise consciousness about					
social inequalities in health					
have changed my views about					
public health problems					
are useful in my daily work					

The Municipal Data Bank	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
presents data clearly					
helps to prioritise within public health					
is helpful in planning new					
services					
raises consciousness about social inequalities in health					
has changed my views about public health problems					
is useful in my daily work					

For which purposes have you used, respectively, the Municipal Public Health Profile (MPHP) and the Municipal Data Bank (MDB)?

	МРНР	MDB
Public health		
interventions/campaigns		
Surveillance, for use in my daily work		
Municipal planning		
(incl. regulating, area plans, expansion)		
Professional skills development		
Personal interest		
To illustrate a talk		
To illustrate a report		
To examine inequalities in my		
municipality		

My relationship to	МРНР	MDB
I have never really used (x)		
I don't understand very well what		
it's about		
I have talked to people who don't		
understand what it's about		
I understand what it's about, but it is		
of no use to me		

Annex G: Questionnaire Results

Mathebase Mat															Sum Yes/	Sum No/	Sum No/ Sum Unknown/
Perponenties		Municipality/Informant	Fjordby/S	Fjordby/H	Granbygd/J	n		Strandbygd/ A	Strandbygd/ M		Kystby/ I	Kystby/S	Skogsby/ K		Agree	Disagree	Don't know
Pelpagnetities Y N N N N N N N N N	MPHPs are:	clear	٨	γ	>	>	γ	^	^	^	λ	^	Λ	٨	12	0	0
Proposition Y N N N N N N N N N		help prioritise	٨	u	^	ㄷ	ᄕ	٨	^	^	λ	χ	Λ	ם	8	3	1
Stationarie containmentalities		help plan	λ	n	٨	u	u	y	٨	n	λ	n	γ	n	9	2	4
Claring clarin, vivolvivolvivolvivolvivolvivolvivolvivo		show social inequalities	٨	u	٨	٨	u	٨	u	٨	λ	n	γ	n	7	2	3
Strictled		changed my views	u	u	u	u	u	٨	u	٨	Ľ	L	u	n	2	6	1
Clear Clea		useful	λ	n	٨	u	ý	y	γ	λ	γ	u	ý	ý	6	2	1
Pellospidicities	MDB is:	clear	γ	λ	n	٨	n	У	λ	γ	λ	λ	ý	γ	10	0	2
New Standing		helps prioritise	γ	u	n	٨	n	У	λ	γ	λ	λ	ý	٨	6	1	2
Schows Social inequalities		helps plan	λ	n	n	٨	n	γ	λ	λ	λ	n	ý	n	7	0	2
Consider my views Continue		shows social inequalities	λ	λ	n	٨	n	γ	u	Á	λ	n	γ	ý	8	1	3
Matche M		changed my views	u	n	n	u	n	У	u	γ	u	u	u	n	2	9	4
Matcheliding National Place Nation		useful	λ	λ	n	٨	ý	γ	λ	λ	λ	u	ý	ý	10	1	1
Stronglance December Decemb	MPHP uses:	intervention	u	u	u	u	u	u	u	λ	u	u	γ	u	2	10	0
Salition		surveillance	u	u	u	u	u	γ	γ	٨	u	u	ý	u	4	8	0
Skill'sdevelopment		planning	λ	λ	ý	٨	ý	γ	λ	λ	u	u	ý	u	6	3	0
Personal interest		skills development	γ	λ	u	u	u	u	λ	γ	λ	u	u	u	2	7	0
Hustrate takk		personal interest	u	u	u	u	u	u	u	Á	λ	u	u	u	2	10	0
Hustrate report 1		illustrate talk	λ	u	u	٨	ý	γ	λ	λ	λ	u	ý	u	8	4	0
examine inequalities n		illustrate report	u	λ	u	٨	u	γ	γ	٨	λ	u	u	u	9	9	0
sess: intervention n		examine inequalities	u	λ	u	u	u	٨	٨	٨	Ľ	L	u	u	4	8	0
stirilg development y	MDB uses:	intervention	u	u	u	и	u	u	u	u	u	u	٨	u	1	11	0
planning y<		surveillance	u	u	u	٨	u	У	λ	u	u	u	ý	u	4	8	0
skills development y		planning	γ	λ	ý	٨	u	У	λ	γ	u	u	ý	u	8	4	0
personal interest n		skills development	γ	ý	u	u	u	u	Á	٨	λ	u	γ	u	9	9	0
illustrate talk illustrate talk illustrate talk illustrate talk illustrate talk illustrate report illustrate report illustrate report illustrate report invervised in		personal interest	u	u	u	٨	u	u	u	u	λ	u	ý	u	3	6	0
Illustrate report		illustrate talk	٨	u	L	ш	ш	٨	٨	С	u	u	٨	и	4	8	0
examine inequalities n n n n y n		illustrate report	u	λ	u	٨	п	٨	Á	u	u	u	λ	u	2	7	0
skhips: deverused n n n n n n y n y y y y n		examine inequalities	u	٨	u	п	п	٨	٨	٨	u	u	٨	и	2	7	0
onships: don't understand n	MPHP	never used	u	u	c	ш	드	и	c	c	u	٨	ч	٨	2	10	0
others don't understand y n	relationships:		u	u	u	и	u	u	u	u	u	u	u	n	0	11	1
nouseforme n n n n n n n n n n 1 n		others don't understand	٨	٨	u	^	п	и	u	С	u	u	п	n	3	8	1
onships: don't understand n n y n n n y a 4 on seforme n <		no use for me	u	u	u	u	u	u	u	ч	u	٨	u	n	1	10	1
don'tunderstand n n u n u n u n u n u 0 n u n	MDB	never used	u	u	ý	u	ý	u	u	u	u	λ	u	ý	4	8	0
others don't understand n y u y u n n n u n u 2 no use forme n n y n u 1	relationships:	don't understand	u	u	э	۵	n	u	u	L	u	ъ	L	n	0	8	4
		others don't understand	u	٨	n	^	n	и	u	С	u	n	u	n	7	9	4
		no use for me	u	u	n	L	n	u	u	c	u	٨	L	n	1	8	3

Annex H. Municipal Public Health Profile for Tromsø 2013

PUBLIC HEALTH PROFILE 2013

Tromsø







The public health profile is a contribution to the municipality's efforts to gain an overview over the health status of the population and the factors that influence this, as required by the Public Health Act. The statistics are from the last available time period, October 2012, and are based on the municipal boundaries as of January 1st 2013.

Published by Norwegian institute of Public Health Department of Health Statistics P.O.Box 4404 Nydalen N-0403 CSIQ Norway E-mail: kommunehelsa@fhi.no

Editors:
Camilla Stoltenberg (chief editor)
Else-Karin Groboti (editor)
Editorial staff: the technical board for public
health profiles
Inspired by: National Health Observatories, U.K.
Front page photograph: Colourbox
English version
Batch 0311120948.07011356.,
0311120948.03010854.02/11/2012 11: 07

Some features of municipal public health

The topics were selected to provide opportunities for health promotion and prevention. The indicators take into account the municipality's age and gender composition, but all statistics must also be interpreted with local conditions in mind.

About the population

- Life expectancy for women is not clearly different from what is expected in the country as a whole.
- . The proportion of over-80s is lower than in the country as a whole.
- The proportion of single person households is higher than the proportion in the country.

Living conditions

- The proportion with high school or higher education is higher than the country level.
- The proportion of people in low-income households is lower than in the country as a whole.
- The proportion of disability pensioners under the age of 45 is lower than the national level.
- The proportion of children with single parents is higher than in the country as a whole.

Environment

- The proportion of people supplied by waterworks with 12 analysed samples and with satisfactory E. coli results appears to be higher than the national level. This concerns the part of the population connected to waterworks where reporting is required.
- The proportion of the population who are injured in accidents is lower than
 in the country as a whole, based on hospital admissions.

Schools

- The proportion of 10th graders who enjoy school is lower than in the country as a whole.
- The proportion of 5th graders at the lowest level of reading proficiency is lower than in the country as a whole.
- The rate of high school dropouts is higher than in the country as a whole.

Lifestyle

- Smoking seems to be a bigger problem than in the country as a whole, based on the proportion of pregnant women who smoke at first prenatal check-up. We have no figures for the rest of the population.
- Obesity seems to be a bigger problem than in the country as a whole, based on the proportion of men with BMI > 25 kg / m² at the military assessment.

Health and disease

- The proportion of the population with psychiatric symptoms and disorders is lower than in the population as a whole, based on data from general practitioners and emergency departments.
- The proportion of cardiovascular disease is not clearly different from the country level, based on hospital admissions.
- The proportion of people with type 2 diabetes appears to be lower than the country level, based on data from general practitioners and emergency departments.
- Musculoskeletal ailments and diseases appear to be more prevalent than in the country as a whole, based on data from general practitioners and emergency departments.



Disease patterns reflect lifestyle, environment and living conditions

Many municipalities ask for statistics about diet, physical activity and other lifestyle habits. In many cases it is necessary to use disease patterns and other indirect measures in the public health profiles to obtain information about the lifestyle of the population.

At present, there are no national registries with reliable data on lifestyle so the public health profiles mostly feature statistics related to health targets, such as disease and causes of death. These statistics can still be useful for assessing the living habits of the population.

Several chronic diseases are largely a result of the living habits over time. We can indirectly obtain information about lifestyle in the municipality by 'reading' patterns of disease. Lifestyle refers to diet, physical activity, smoking and other health-related behaviours. Lifestyle is not only the result of personal choice. The choices individuals make are also the result of environmental and living conditions, and disease patterns may therefore provide an indication of conditions in the municipality.

Figure 1 shows the factors that affect health. These range from personal characteristics such as age and gender, to social conditions such as culture, employment, housing and local environment, education and social networks.

Figure 1. Factors influencing health (after Dahlgren and Whitehead (1))



The underlying factors may either promote health or increase the risk of disease. Lack of social support is a factor that increases the risk of both mental and physical health problems. Conversely, social support promotes health and well-being, because the support of friends, schoolmates, colleagues and family acts as a "buffer" against various stresses.

Education is an example of a factor that has an impact on health throughout adulthood.

Significant health disparities

Studies show that lifestyle often follows education and income levels. This means that groups with longer education and higher income have, on average, more favourable lifestyles and better health than groups with shorter education and lower income.

Reducing social inequalities in health is an important objective of public health. Efforts to improve living conditions, such as work and education, can help to promote health and reduce social inequalities. Preventing children from dropping out of high school will promote health because it provides greater opportunities for work and active participation in society. Mastery and well-being in primary school lays a good foundation for completion of high school.

One initiative, multiple gains

The municipality's efforts against one risk factor may reduce the incidence of several diseases. For example, measures to combat smoking reduce the incidence of diseases such as cardiovascular disease, chronic obstructive pulmonary disease (COPD) and cancer. Likewise, efforts to promote physical activity affect the incidence of health problems such as obesity, cardiovascular disease and type 2 diabetes. In addition, physical activity improves well-being and physical and mental health.

Preventive measures may be directed towards high-risk groups or the total population. Initiatives towards groups with particularly high risks may be effective, but measures directed at the entire population may provide greater overall gains. This is because population-oriented measures reach a large number of people with intermediate risk, and because more cases of disease occur in this group than in the high-risk group. Although the individual risk is much higher in the high-risk group, more cases of illness occur in the group with moderate risk, because this group is larger.

There is no conflict between population-related measures and measures directed towards high-risk groups as, they can complement each other. For example, reducing salt in processed foods lowers blood pressure a little in everyone, and thus lowers the risk of cardiovascular disease in the general population. Health services will continue to treat individuals with hypertension to reduce their risk.

Population-oriented measures aim at "small changes among many," so that the entire population moves towards a lower risk.

Short term and long term health gains

It may take many years before current prevention efforts provide results. However, some results may also come quickly. For example, physical activity is important for wellbeing and mental health, and smoking cessation reduces the risk of heart attack already in the first year of not smoking. Another example is injury prevention, which can quickly be demonstrated by reduced injury incidence.

Through the design of the physical environment the municipality can encourage physical activity and social interaction between people. Planning the physical environment in terms of health promotion can contribute to better physical and mental health. Meeting places in the community may have an impact on mental health, while it is easier to be physically active if the neighbourhood is safe and inviting.

Smoking and smokeless tobacco

The proportion of smokers in the Norwegian population has declined, but still 17 per cent smoke daily. Smoking is the habit that has the greatest negative impact on public health. Prevalence of smokingrelated diseases such as COPD, lung cancer and cardiovascular disease can provide information on people's smoking habits over time. Statistics on these smoking-related diseases can be found in the public health barometer.

There are great social differences in smoking behaviour. Figure 2 shows daily smoking in different educational groups, with data provided by the nationwide Survey of Living Conditions in 2008 (SSB).

There is a higher proportion of smokers in groups with shorter education than in groups with longer education. These differences explain a large part of the social inequalities in morbidity and mortality.

Many of the people using tobacco as adults became addicted at a young age. It is therefore vital to prevent tobacco use among adolescents - both smoking and smokeless tobacco use. Smokeless tobacco is as addictive as cigarettes and contains harmful and carcinogenic substances and the number of users is increasing Initiatives in middle school may be particularly effective, and should be followed with measures in high school. Enforcement of the age limit for tobacco purchases and the establishment of smoke-free areas are appropriate measures.

Physical activity and diet

Physical activity and a balanced diet promote health and protect against a variety of diseases throughout life.

Several of the indicators under health and disease in the public health barometer can provide information about the population's diet and physical activity. These include indicators of obesity, high blood pressure and cholesterol, cardiovascular disease, cancer and type 2 diabetes. Regular physical activity can also improve mental health.

Figure 3 shows the proportion of the population who achieve the recommended minimum level of activity in different age groups, as measured by activity monitors. Numbers in the figure are derived from population surveys of activity in the population conducted by the Norwegian Directorate of Health in 2008-2011 (2.3). Adults and the elderly are recommended to be physically active for at least 30 minutes daily, while children and adolescents are recommended at least 60 minutes of daily physical activity. The figure shows that there is considerable variation between the different age groups in terms of the extent to which they achieve their recommended levels of activity.

Overweight and obesity are major health problems in most countries, including Norway. Figure 4 shows the prevalence of overweight including obesity in men, measured at military inscription, shown as an average for the period 2003-2009. When the basis for data is small, municipal values may not be displayed.

Habits related to diet and physical activity are set early in life. The development of overweight and obesity can be delayed by directing measures towards children and their physical and social environment. The municipality, as the owner of schools and kindergartens, has a unique opportunity to encourage children to have positive experiences of healthy eating and physical activity. Public health clinics are another arena in which the municipality can make a difference through contact with children and their families.

References: 1. Dahlgren G, Whitehead M. Policies and Strategies to Promote Social Equity in Health. Stockholm 1991. 2. Fysisk aktivitet blant voksne og eldre i Norge. Resultater fra en kartlegging i 2008-2009. Oslo: Hdir; 2009. 3. Fysisk aktivitet blant 6-, 9- og 15-åringer i Norge. Resultater fra en kartlegging i 2011. Oslo: Hdir; 2012.

Figure 2: Daily smokers by educational background (country figures)

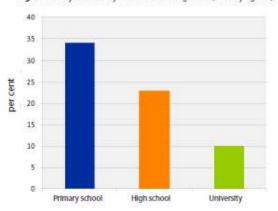


Figure 3: Proportion who achieve recommended levels of physical activity (country figures)

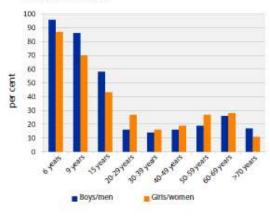
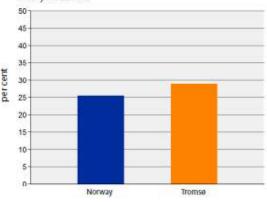


Figure 4: Overweight including obesity among men, measured at military assessment



Public health barometers for your municipality

The table below compares some key figures on a manicipal and county level with national figures. Municipalities and counties may have an age and gender composition that differs from the national average. This may affect the statistics and is taken into account in the figure and number columns. Statistics without age and gender standardination are available in the Municipal Health data bank, khufnino. The differences between the municipality and the country are tested for statistical significance, see www.thino.nbikehiseprofiler

- Green value can state with a high degree of certainty that the municipality is in a better position than the country as a whole
- Red value can state with a high degree of certainty that the municipality is in a worse position than the country as a whole
 Yellow value not possible to state for certain how the municipality compares to the country as a whole

- O Not tested for statistical significance

 The value for the county (not tested for statistical significance)
- The value for the country as a whole

 The variation between the municipalities in the county

nicircles: Municipal values that are more than double or half the country value are shown as a semicircle on the perimeter of the field.

A -green- value means that the municipality is better placed than the country as a whole. However, the indicator may still be a major health challenge for the municipality, as the country level may not necessarily represent a desired level. For a more comprehensive list of municipal developments, you can create charts in the Municipal Health Oata Bank.

Горіс		Indicator	Munics- patity	County	Norway	unit(*)	Public healt	h profile for Tromsø
	1	Population growth	13	0.7	1.3	per cent		ΦΦ
	2	Population over 80-years	2.7	4.1	4.4	per cent	0	•
About	3	Life expectancy, men	77.3	76.7	77.2	years		•
9 1	4	Life expectancy, women	82.3	81.9	82.2	years		•
- 8	5	One-person households	19	18	18	per cent		0
	6	Number of immigrants and children of immigrant parents	9.6	75	13	per cont	• 0	
	7	Upper secondary / higher education	86	82	83	per carri		0
10	В	Low income	8.6	8.6	9.4	per cent		0
0.0	9	Income disparity, P90/P10	2.5	2.4	2.5			00
Uving	10	Unamployed	2.2	2.2	2.7	per carri		0
	11	Disability pension, 18-44 years	1.8	25	23	per cent (a,k*)		
3	12	Child of single parents	19	19	16	per cent		
ē.	13	Drinking water, E. coll analyses	97	73	94	per carnt		0
Envisor	14	Hospital-beated Injuries	12	13	13	per 1000 (a,k*)		700
1	15	Enjoys school	82	79	84	per cent (k*)		* 0
a de	16	Bulled at school	9.5	10	8.9	per carri (k*)		•
Schools	17	Lowest lovel reading skills	20	25	26	per cent (k*)	1	* 0
0.55%	18	Drop out from high school	32	37	25	per cent (k*)		*
x ye	19	Smoking, women	22	24	20	per carri (a*)	•	
24	20	Overweight Incl. obesity, men	29	31	25	per cent	•	0
Ì	21	Mental illness and symptoms, primary care	125	130	135	Por 1000 (a,k*)	•	0
	72	Mental lilness, users of medication	109	112	131	Par 1000 (a,k*)		**
	23	Hypertension, printary care	54	62	65	Per 1000 (a,k*)		40
	24	Cholesterol lowering agents, users of medication	63	75	77	Por 1000 (a,k*)		* O
	25	Cardiovascular disease, hospital treatment	18	18	18	Per 1000 (a,k*)		* •
9 5 6	26	COPD and asthma, users of medication	93	101	97	Per 1000 (a,k*)		Φ
-	27	Type 2 diabetes, users of medication	30	34	-32	Per 1000 (a,k*)		♦ ○
-	28	Type 2 diabetes, primary care	30	36	39	Per 1000 (a,k*)		• O
Health and disease	29	Cancer total, new cases	525	517	554	Por 100 000 (a,k*)		* 0
100	30	Cancer of colon and rectum, new cases	77	73	76	Por 100 000 (a,k*)		•
	31	Lung cancer and COPD, mortality	40	38	38	Per 100 000 (a,k*)		
	32.	Hip fractures, hospital treatment	2	21	2.2	Por 1000 (a,k*)		60
	33	Musculoskeletal disorders, primary care	272	285	254	Per 1000 (a,k*)		40
	34	Vaccination coverage	95.2	940	94.1	per cent	92	1402131133 180

Explanation (numbers indicate line in the table above):

Explanation (numbers indicate line in the table above):

* standardsed value, a = age standardsed and k = standardsed by gender
1,011,2,021,34,1997.011, calculated based on age-specific mortality, 15 year average, 5,2011, in per cent of the population, 6,2012, 7,2011, highest level of education (of all with stated oducation), 8,
2010, persons living in households with income believe 60 % of national median, 9,2010, the ratio between the income of a person who is in the 90th percential and one who is in the 10th percential and the percential and 20th and 20

Transcripting water and the Norwegian Paster of Death Registry, Norwegian Labour and Welfare Administration, Norwegian Directorate for Education and 91 airsing. The Norwegian Water Works Registry, Norwegian Patient Registry, Medical Birth Registry of Norwegian Victorate of Health, Cancer Registry of Norwegian Patient Registry (SYSWAS), and the Norwegian Prescription Database. For more information about the Indicators, see www.fhi.no/folkaheiseprofiler

Annex I. Code List

Code Description	Theme Description
01. Differences within municipalities are not covered	E) Municipality Size and MDB/MPHP Suitability
02. Presence of indicators in the MPHPs rules what	
the municipalities notice or measure	I) MDB/MPHP Indicators and Policy
03. The municipality has little/no experience using	
the MDB	D) Municipality Present Use of MDB/MPHP
04. Interacting with legal frameworks	F) Municipal Roles and Leadership
04. Interacting with legal frameworks	I) MDB/MPHP Indicators and Policy
05. No interest in the MPHP midsection	C) MPHP Midsection Wishlist
06. Discussions about specific problematic indicators	I) MDB/MPHP Indicators and Policy
07. Offering regular physical training courses	D) Municipality Present Use of MDB/MPHP
07. Offering regular physical training courses	F) Municipal Roles and Leadership
07. Offering regular physical training courses	H) NIPH Actions Wishlist
07. Offering regular physical training courses	I) MDB/MPHP Indicators and Policy
08. The municipality needs/all municipalities need	
to have more MDB users	D) Municipality Present Use of MDB/MPHP
09. Need for practical information about	
interventions and priorities	D) Municipality Present Use of MDB/MPHP
10. Making better use of NIPH e-mail	
communication to municipalities	H) NIPH Actions Wishlist
11. User friendliness of the map function	A) MDB Functionality Wishlist
12. Using a positive slant on more indicators	B) MDB/MPHP Indicator Wishlist
12. Using a positive slant on more indicators	C) MPHP Midsection Wishlist
13. Adding indicators on health promotion	B) MDB/MPHP Indicator Wishlist
13. Adding indicators on health promotion	C) MPHP Midsection Wishlist
14. Providing a MPHP midsection on mental health	C) MPHP Midsection Wishlist
15. Discussing the role of the Chief Municipal Officer	F) Municipal Roles and Leadership
16. Not having to use the plus sign to expand the	
indicator list	A) MDB Functionality Wishlist
17. User friendliness of showing name and values	
on the map	A) MDB Functionality Wishlist
18. Not having to select «Show table» after every	
change in the pop-up screen	A) MDB Functionality Wishlist
19. Potential municipal mergers	E) Municipality Size and MDB/MPHP Suitability
20. Being frustrated over own municipal	5) Municipal Dalas and Leadership
role/position	F) Municipal Roles and Leadership
21. Use of MDB/MPHP in multisectorial municipal	D) Municipality Dress of the Cartest Access to the Cartest Access
working groups	D) Municipality Present Use of MDB/MPHP
21. Use of MDB/MPHP in multisectorial municipal	S) A A civital Bules Line
working groups	F) Municipal Roles and Leadership
21. Use of MDB/MPHP in multisectorial municipal	D) M
working groups	D) Municipality Present Use of MDB/MPHP

	T
22. Use of MDB/MPHP in collaborating with other	T) Municipality Size and MDD /MDLID Suitability
municipalities 22. Use of MDB/MPHP in collaborating with other	E) Municipality Size and MDB/MPHP Suitability
municipalities	F) Municipal Roles and Leadership
23. One-sided focus on red and green lights	MDB/MPHP Indicators and Policy
	I THE BY WITH MINICALOTS AND TOTALLY
24. Adding reasons for inclusion of indicator/MPHP midsection subjects	B) MDB/MPHP Indicator Wishlist
24. Adding reasons for inclusion of indicator/MPHP	,
midsection subjects	C) MPHP Midsection Wishlist
24. Adding reasons for inclusion of indicator/MPHP	
midsection subjects	H) NIPH Actions Wishlist
25. Adding indicators for kindergarten/school indoor	
environment	B) MDB/MPHP Indicator Wishlist
26. Ensuring that indicators correspond with the	
NDH handbook	B) MDB/MPHP Indicator Wishlist
26. Ensuring that indicators correspond with the	G) Central Health Authority Roles (and
NDH handbook	leadership)
26. Ensuring that indicators correspond with the	
NDH handbook	H) NIPH Actions Wishlist
27. Adding indicators from school nurses	B) MDB/MPHP Indicator Wishlist
28. Working with and consulting central health	G) Central Health Authority Roles (and
authorities	leadership)
29. Providing NIPH support with analysis/interpretation	D) Municipality Present Use of MDB/MPHP
29. Providing NIPH support with	b) Mullicipality Present Ose of MDB/MPHP
analysis/interpretation	H) NIPH Actions Wishlist
30. Lacking a public health coordinator in	Try turn try teachers wishingt
municipality	F) Municipal Roles and Leadership
31. Working with municipal politicians	F) Municipal Roles and Leadership
31. Working with municipal politicians	I) MDB/MPHP Indicators and Policy
32. Showing more than one indicator at a time	A) MDB Functionality Wishlist
33. Adding indicators from Ungdata	B) MDB/MPHP Indicator Wishlist
34. Adding indicators for education level of people	
who move into and out of the municipality	B) MDB/MPHP Indicator Wishlist
35. Adding indicators from local municipal surveys	B) MDB/MPHP Indicator Wishlist
35. Adding indicators from local municipal surveys	E) Municipality Size and MDB/MPHP Suitability
36. Prioritizing within municipal public health	MDB/MPHP Indicators and Policy
37. Offering regular online trainings/video lectures	
38. Using MDB/MPHP for evaluations of municipal	H) NIPH Actions Wishlist
activities	D) Municipality Present Use of MDB/MPHP
39. Using MPHPs/MPH for training within the	= /a
municipality	D) Municipality Present Use of MDB/MPHP
40. External media use of the MDB/MPHP toolsets	D) Municipality Present Use of MDB/MPHP
41. Planning municipal work;	, ,
mapping/measurements	D) Municipality Present Use of MDB/MPHP
42. Add indicators/MPHP midsection on social	
inequalities in health	C) MPHP Midsection Wishlist
43. Large municipalities want more data to be made	E) Municipality Size and MDB/MPHP Suitability
+3. Laige municipanties want more data to be made	L) Municipality Size and Midb/Mirrir Sultability

available	
44. User friendliness of select all/remove all	A) MDB Functionality Wishlist
45. Adding more age groups	B) MDB/MPHP Indicator Wishlist
45. Adding more age groups	E) Municipality Size and MDB/MPHP Suitability
46. Location of the indicator descriptions	A) MDB Functionality Wishlist
47. Taking no interest in the MPHPs because of	
munipality size. Only MDB gives relevant	
information	E) Municipality Size and MDB/MPHP Suitability
48. Providing a MPHP midsection on young people,	
stress and substance abuse	C) MPHP Midsection Wishlist
49. Adding indicators for sick leave	B) MDB/MPHP Indicator Wishlist
50. Adding indicators for overweight in children	B) MDB/MPHP Indicator Wishlist
51. Adding indicators for purchasing power	B) MDB/MPHP Indicator Wishlist
52. Adding indicators/MPHP midsection for	
smoking/snus	B) MDB/MPHP Indicator Wishlist
53. Adding indicators/MPHP midsection for	
smoking/snus	C) MPHP Midsection Wishlist
53. Adding indicators for fertility	B) MDB/MPHP Indicator Wishlist
54. Supporting multicultural municipalities (not used	
in report)	J) Other issues
55. Adding indicators for sick leave for mental	D) A 4DD /A 4DUD to d'act a calada d'act d'act
distress	B) MDB/MPHP Indicator Wishlist
56. Adding indicators for bathing water quality	B) MDB/MPHP Indicator Wishlist
57. Adding indicators for possibility of outdoor	
exercise/distance to footpath	B) MDB/MPHP Indicator Wishlist
58. Adding indicators for language testing in	
kindergarten/early schooling	B) MDB/MPHP Indicator Wishlist
59. Adding indicators from health stations	B) MDB/MPHP Indicator Wishlist
60. Adding indicators/MPHP midsection for	
substance abuse	B) MDB/MPHP Indicator Wishlist
60. Adding indicators/MPHP midsection for	C) MADUD Mides etian Michigh
substance abuse	C) MPHP Midsection Wishlist
61. Praise for existing NIPH fact sheets (not used in report)	J) Other issues
62. Adding indicators for overweight in adults	B) MDB/MPHP Indicator Wishlist
63. Adding a new NIPH fact sheet for ISO-BMI (not	I) Other income
used in report)	J) Other issues

Annex J. Theme List

Theme Description	Code Description
A) MDB Functionality Wishlist	11. User friendliness of the map function
A) MDB Functionality Wishlist	16. Not having to use the plus sign to expand the indicator list
A) MDB Functionality Wishlist	17. User friendliness of showing name and values on the map
A) MDB Functionality Wishlist	18. Not having to select «Show table» after every change in the pop-up screen
A) MDB Functionality Wishlist	32. Showing more than one indicator at a time
A) MDB Functionality Wishlist	44. User friendliness of select all/remove all
A) MDB Functionality Wishlist	46. Location of the indicator descriptions
B) MDB/MPHP Indicator Wishlist	12. Using a positive slant on more indicators
B) MDB/MPHP Indicator Wishlist	13. Adding indicators on health promotion
B) MDB/MPHP Indicator Wishlist	24. Adding reasons for inclusion of indicator/MPHP midsection subjects
B) MDB/MPHP Indicator Wishlist	25. Adding indicators for kindergarten/school indoor environment
B) MDB/MPHP Indicator Wishlist	26. Ensuring that indicators correspond with the NDH handbook
B) MDB/MPHP Indicator Wishlist	27. Adding indicators from school nurses
B) MDB/MPHP Indicator Wishlist	33. Adding indicators from Ungdata
B) MDB/MPHP Indicator Wishlist	34. Adding indicators for education level of people who move into and out of the municipality
B) MDB/MPHP Indicator Wishlist	35. Adding indicators from local municipal surveys
B) MDB/MPHP Indicator Wishlist	45. Adding more age groups
B) MDB/MPHP Indicator Wishlist	49. Adding indicators for sick leave
B) MDB/MPHP Indicator Wishlist	50. Adding indicators for overweight in children
B) MDB/MPHP Indicator Wishlist	51. Adding indicators for purchasing power
B) MDB/MPHP Indicator Wishlist	52. Adding indicators/MPHP midsection for smoking/snus
B) MDB/MPHP Indicator Wishlist	53. Adding indicators for fertility
B) MDB/MPHP Indicator Wishlist	55. Adding indicators for sick leave for mental distress
B) MDB/MPHP Indicator Wishlist	56. Adding indicators for bathing water quality
B) MDB/MPHP Indicator Wishlist	57. Adding indicators for possibility of outdoor exercise/distance to footpath
B) MDB/MPHP Indicator Wishlist	58. Adding indicators for language testing in kindergarten/early schooling
B) MDB/MPHP Indicator Wishlist	59. Adding indicators from health stations
B) MDB/MPHP Indicator Wishlist	60. Adding indicators/MPHP midsection for substance abuse
B) MDB/MPHP Indicator Wishlist	62. Adding indicators for overweight in adults
C) MPHP Midsection Wishlist	05. No interest in the MPHP midsection
C) 1411 THE IVITAGE CEROTE VVISITIES	os. No interest in the Mir III iniusection

	
C) MPHP Midsection Wishlist	12. Using a positive slant on more indicators
C) MPHP Midsection Wishlist	13. Adding indicators on health promotion
C) MPHP Midsection Wishlist	14. Providing a MPHP midsection on mental health
C) MPHP Midsection Wishlist	24. Adding reasons for inclusion of indicator/MPHP midsection subjects
C) MPHP Midsection Wishlist	42. Add indicators/MPHP midsection on social inequalities in health
C) MPHP Midsection Wishlist	48. Providing a MPHP midsection on young people, stress and substance abuse
C) MPHP Midsection Wishlist	53. Adding indicators/MPHP midsection for smoking/snus
C) MPHP Midsection Wishlist	60. Adding indicators/MPHP midsection for substance abuse
D) Municipality Present Use of MDB/MPHP	03. The municipality has little/no experience using the MDB
D) Municipality Present Use of MDB/MPHP	07. Offering regular physical training courses
D) Municipality Present Use of MDB/MPHP	08. The municipality needs/all municipalities need to have more MDB users
D) Municipality Present Use of MDB/MPHP	09. Need for practical information about interventions and priorities
D) Municipality Present Use of MDB/MPHP	21. Use of MDB/MPHP in multisectorial municipal working groups
D) Municipality Present Use of MDB/MPHP	21. Use of MDB/MPHP in multisectorial municipal working groups
D) Municipality Present Use of MDB/MPHP	29. Providing NIPH support with analysis/interpretation
D) Municipality Present Use of MDB/MPHP	38. Using MDB/MPHP for evaluations of municipal activities 39. Using MPHPs/MPH for training within the
D) Municipality Present Use of MDB/MPHP	municipality
D) Municipality Present Use of MDB/MPHP	40. External media use of the MDB/MPHP toolsets
D) Municipality Present Use of MDB/MPHP	41. Planning municipal work; mapping/measurements
E) Municipality Size and MDB/MPHP Suitability	01. Differences within municipalities are not covered
E) Municipality Size and MDB/MPHP Suitability	19. Potential municipal mergers
E) Municipality Size and MDB/MPHP Suitability	22. Use of MDB/MPHP in collaborating with other municipalities
E) Municipality Size and MDB/MPHP Suitability	35. Adding indicators from local municipal surveys
E) Municipality Size and MDB/MPHP Suitability	43. Large municipalities want more data to be made available
E) Municipality Size and MDB/MPHP Suitability	45. Adding more age groups
E) Municipality Size and MDB/MPHP Suitability	47. Taking no interest in the MPHPs because of munipality size. Only MDB gives relevant information
F) Municipal Roles and Leadership	04. Interacting with legal frameworks
F) Municipal Roles and Leadership	07. Offering regular physical training courses
F) Municipal Roles and Leadership	15. Discussing the role of the Chief Municipal Officer
F) Municipal Roles and Leadership	20. Being frustrated over own municipal role/position

F) Municipal Roles and Leadership	21. Use of MDB/MPHP in multisectorial municipal working groups
	22. Use of MDB/MPHP in collaborating with other
F) Municipal Roles and Leadership	municipalities
F) Municipal Roles and Leadership	30. Lacking a public health coordinator in municipality
F) Municipal Roles and Leadership	31. Working with municipal politicians
G) Central Health Authority Roles (and	28. Working with and consulting central health
leadership)	authorities
G) Central Health Authority Roles (and	26. Ensuring that indicators correspond with the NDH
leadership)	handbook
H) NIPH Actions Wishlist	07. Offering regular physical training courses
H) NIPH Actions Wishlist	10. Making better use of NIPH e-mail communication to municipalities
H) NIPH Actions Wishlist	24. Adding reasons for inclusion of indicator/MPHP midsection subjects
H) NIPH Actions Wishlist	26. Ensuring that indicators correspond with the NDH handbook
	29. Providing NIPH support with
H) NIPH Actions Wishlist	analysis/interpretation
H) NIPH Actions Wishlist	37. Offering regular online trainings/video lectures
	02. Presence of indicators in the MPHPs rules what the
I) MDB/MPHP Indicators and Policy	municipalities notice or measure
I) MDB/MPHP Indicators and Policy	04. Interacting with legal frameworks
I) MDB/MPHP Indicators and Policy	06. Discussions about specific problematic indicators
I) MDB/MPHP Indicators and Policy	07. Offering regular physical training courses
I) MDB/MPHP Indicators and Policy	23. One-sided focus on red and green lights
I) MDB/MPHP Indicators and Policy	31. Working with municipal politicians
I) MDB/MPHP Indicators and Policy	36. Prioritizing within municipal public health
J) Other issues	54. Supporting multicultural municipalities (not used in report)
J) Other issues	61. Praise for existing NIPH fact sheets (not used in report)
J) Other issues	63. Adding a new NIPH fact sheet for ISO-BMI (not used in report)

Annex K. Recommendations

Hoping to reach what Silverman (2013, p 436) describes as the policy-making audience, clear recommendations are crucial. I want to stress that these are derived from the (prospective) users of the MPHPs and the MDB in a bottom-up manner.

The following discussion comes from Urbankommune, where M wanted the NIPH to construct a new indicator. It illustrates how many of these recommendations arose (lines 522-537, abbreviated):

(The interviewer, I, demonstrates population figures in the MDB)

M ... it will not tell me much about fertility, will it? ... Because that's a more complicated concept. Compared to the numbers that are here [in the MDB], namely the population of working age compared to people who are over retirement age, right, and [we could] compare them.

M ... [we] should be working towards increasing fertility, and when one thinks nationally as well, should something be done about it? That's a bit interesting when we demonstrate why it's OK having immigrants (laughs). Which is something that not everyone thinks ... (laughs)

I: That should be fairly straight forward. I'll take that [idea] with me.

M Yes, and it is a complex indicator, so it is fine that someone does the job.

In writing this chapter, I am split between the desire to present the wish lists of my informants and presenting what I think the municipalities actually need. If I'm to do the first, to which degree should I evaluate, or even censor, their wishes?

I have decided to present, but annotate, the wishes of my informants, and to a certain degree allow the Themes I constructed in the Results chapter to order my thoughts. The code numbers from the first coding exercise are maintained for ease of reference.

39 of the 63 codes led to recommendations, which are listed in this annex.

1.1. Theme A: MDB Functionality Wishlist

Code 11. User friendliness of the map function

Recommendation: Make the map button more visible.

This was, overwhelmingly, the greatest technical challenge. The small globe on the menu line signifying "Map" was terribly difficult to find, and even practised users had no idea where to look. It needs to be made more visible.

Code 17. User friendliness of showing name and values on the map

Recommendation: Increase reliability of this function.

For the majority of users, this function did not work. Work is needed on the IT side to make it work on all browser platforms.

Code 18. Not having to select «Show table» after every change in the pop-up screen

Recommendation: Ask IT specialist if this is necessary for the system to function, and if there are alternative solutions.

Code 32. Showing more than one indicator at a time

Recommendation: Show multiple indicators.

Some users who had been working in the field for a long time remembered this function from NorHealth, where one could show two different indicators with the same denominator on the same graph. This was something they missed and would like to have re-instated.

1.2. Theme B: MDB/MDPH Indicator Wishlist

Code 13. Adding more indicators on health promotion

Recommendation: Find more positive indicators on health promotion.

Code 25. Adding indicators for kindergarten/school indoor environment

Recommendation: Today this is collected by around 70% of all municipalities. Start publishing these indicators, and more municipalities will start collecting and reporting.

Code 27. Adding indicators from school nurses

Recommendation: School nurses collect large amounts of data for municipal data servers. Find or compute good indicators.

Code 33. Adding indicators from Ungdata

Recommendation: Today most municipalities take part in these surveys. Start publishing these indicators, and more municipalities will take part.

Code 34. Adding indicators for education level of people who move into and out of the municipality

Recommendation: Requires data linkages, but might be a feasible indicator.

Code 45. Adding more age groups

Recommendation: When possible, add more age groups, at least for larger municipalities.

Code 51. Adding indicators for purchasing power

Recommendation: Find good indicators for this.

Code 50. Adding indicators for overweight in children

Recommendation: Use the Barnevekst study to publish data where this is available. Data from school nurses may also be useful here.

Code 52. Adding indicators/MPHP midsection for smoking/snus

Recommendation: Find a way to include an indicator on this, possibly from school surveys.

Code 53. Adding indicators for fertility

Recommendation: Publish an indicator at municipal level.

Code 55. Adding indicators for sick leave for mental distress

Recommendation: When possible, publish this indicator in the MDB.

Code 56. Adding indicators for bathing water quality

Recommendation: This indicator is published for many bathing areas, and could be included in the MDB if it can be calculated for the relevant municipalities.

Code 57. Adding indicators for possibility of outdoor exercise/distance to footpath

Recommendation: Such an indicator is already collected in many municipalities. Find a way to include it in the MDB, and more municipalities will start collecting it.

Code 58. Adding indicators for language testing in kindergarten/early schooling

Recommendation: Results from these tests are currently collected. Find a way to make good indicators.

Code 60. Adding indicators/MPHP midsection for substance abuse

Recommendation: Find feasible indicators.

Code 62. Adding indicators for overweight in adults

Recommendation: Look for ways to include an indicator on overweight, at least at county level.

1.3. Theme C: MPHP Midsection Wishlist

Code 13. Adding more indicators on health promotion

Recommendation: Find a way to include more about health promotion within all fields of Public Health.

Code 14. Providing a MPHP midsection on mental health

Recommendation: This topic is growing in importance, and a midsection dealing with mental health would be an important policy signal.

Code 24. Adding reasons for inclusion of indicator/MPHP midsection subjects

Recommendation: Write explicitly why specific topics are included. This is needed because municipal public health officials need such arguments to influence their politicians on which interventions and other measures should be prioritised and what they should involve.

For code 24, H in Kystby agrees (lines 181-183):

Yes, it is educating the general public. Why is it important? Because when we "preach" about education and why we should work on this, it's not always so easy to justify. And then of course we have these hideous graphs showing the numbers ... like life expectancy ... and ...[tapers off]

Code 42. Add indicators/MPHP midsection on social inequalities in health

Recommendation: Ensure this this topic is regularly covered.

Code 52. Adding indicators/MPHP midsection for smoking/snus

Recommendation: Tobacco use remains an important health determinant, and snus use is growing. The municipalities need more information in these fields.

Code 60. Adding indicators/MPHP midsection for substance abuse

Recommendation: Ensure this topic is regularly covered.

1.4. Theme D: Municipal Use of MDB/MPHP

This theme is descriptive of what the informants do today and did not generate any recommendations.

1.5. Theme E: Municipality Size and MDB/MPHP Suitability

Code 01. Differences within municipalities are not covered

Recommendation: Strengthen and speed up ongoing work to add data at lower geographical levesl; consider doing this for all municipalities above a certain size, not just biggest cities.

Code 43. Large municipalities want more data to be made available

Recommendation: Work with the bigger municipalities to add extra datasets.

1.6. Theme F: Municipal Roles and Leadership

This theme mainly describes what the municipal informants do today and did not generate any direct recommendations. (The NIPH could make recommendations for how the municipalities should irganise their inner workings in this area, but that would be beyond the scope of this report.)

1.7. Theme G: Central Health Authority Roles (and Leadership)

This highly political theme is how I sorted all descriptions and desires of national authorities interacting with municipal public health work. See codes 26 (Theme H) and 28 (Theme I).

1.8. Theme H: NIPH Actions Wishlist

Code 07. Offering regular physical training courses

Recommendation: Organise courses at as many venues and in as many forms as possible.

Code 10. Making better use of NIPH e-mail communication to municipalities

Recommendation: Include information about the MPHPs and the MDB in more mailings.

It is possible to subscribe to different NIPH newsletters, but MDB/MPHP tools are rarely/never mentioned. The mailings should have short instructions on how to use in particular the MDB, not just inform people that there is a new version available, and the regular mailings could also be used to reach different municipal roles.

Regarding code 10, S in Kystby comments (lines 474-477):

It arrives in the general municipal e-mail. And I guess there's some kind of regular distribution list. But I'm very uncertain of whether it reaches the Municipal Head of Education, and the Head of Education certainly doesn't know there are training courses, and that this might be something for them, to give an example.

Code 26. Ensuring that indicators correspond with the NDH handbook (Norwegian Directorate of Health 2013, pp19-21).

Recommendation: Ensure that the municipal public health workers know how these subject areas are covered by the MDB and the MPHPs. Consider discussing a revised version of the handbook with NDH to make it more in line with the intended users' expectations.

Code 29. Providing NIPH support with analysis/interpretation

Recommendation: Include links to analysis and other forms of interpretations when possible.

Code 37. Put video lectures on the NIPH web pages

Recommendation: Video lectures should be provided on NIPH's website.

1.9. Theme I: MDB/MPHP Indicators and Policy

Code 02. Presence of indicators in the MPHPs rules what the municipalities notice or measure

Recommendation: This implies that the NIPH must work with other authorities to ensure that the set of indicators selected are practical for prevention and health promotion, and that municipal political leaders must be trained in using health indicators for what they are.

Code 04. Interacting with legal frameworks

Recommendation: Include training on different frameworks in both video lectures and other training packages.

Code 15. Discussing the role of the Chief Municipal Officer

Recommendation: This is the person informants think the NIPH should attempt to communicate more with, to emphasize his/her role in public health. Training was also mentioned. Ways should be found to reach and engage these officials, to ensure they know and understand the important part they play.

As stated by I in Fjordby (lines 245-251, abbreviated):

They have often their own networks, chief municipal officer networks. If you [the NIPH] are ever there and say something, and somehow showcase them as the most important public health people ... then maybe...[it will] help eventually (laughs). It's very different, many of us are located deep in an organization. And er... some might be ... I feel maybe not even that I am invisible, to the Chief Municipal Officer level, but many might almost be so, as public health coordinators. One is located so far down in an organization.

Code 36. Prioritizing within municipal public health

Recommendation: The 2014 Public Health Act moves more responsibility to the municipal level, leaving the municipalities with responsibilities for areas few of them are trained in, and where procedures, measurements, plans and targets are under rapid development.

Code 28. Working with and consulting central health authorities

Recommendation: Encourage all relevant institutions to communicate more and better with the municipalities. Due to requirements in the new Public Health Act (NMHCS 2012), more contact points and information systems may need to be developed.