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### Levelling the social gradient in health at the local level: applying the Gradient Equity Lens to Norwegian local public health policy

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Abstract:	<p>The gradient in health inequalities reflects a relationship between health and social circumstance demonstrating that health worsens as you move down the socio-economic scale. Norway's Public Health Act specifically aims to tackle the gradient by addressing the social determinants of health. In this paper, we draw on data from two studies that investigated how municipalities in Norway deal with these challenges. In doing so, we apply theoretical perspectives, as defined in the Gradient Evaluation Framework (GEF), in order to analyse the implementation of the Act at the municipality level. The paper aims to describe and analyse how local governments follow the requirements of the Act. In doing so, the following research questions are addressed: Which policies are implemented at the local level to reduce social inequalities in health among families and children? How is intersectoral collaboration carried out and who is taking part in the collaboration? The paper draws on both quantitative survey data from questionnaires sent to all Norwegian municipalities and qualitative interview data in six municipalities. The findings show that there is raised awareness of the significance of social determinants among an increased number of municipalities, indicating that the PHA is being implemented according to its objectives.</p>

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## Introduction

In many countries of the European Union (EU) considerable gains in population health have been achieved over the last few decades with citizens now living long and healthier lives than previous generations.<sup>1</sup> Despite this however, large inequalities in health status persist between and within countries, with evidence suggesting that these inequalities are increasing.<sup>2,3</sup> Moreover, there is substantive evidence of a social gradient in health inequalities (HI), demonstrating that health becomes worse as you move down the socioeconomic scale.<sup>4-6</sup>

The causes of HI are complex and involve a wide range of factors, which relate to the wider social determinants of health, including living conditions, health related behaviours, education, occupation and income, health care systems, and health policy. As many inequalities are not simply a matter of chance or choice and are instead influenced strongly by a range of factors such as the actions of governments (e.g. policy), stakeholders, and communities, this means that they are not necessarily inevitable and can be prevented.<sup>7</sup> Consequently, action to tackle health inequalities through healthy public policy means addressing those factors which are deemed inequitable, preventable, and impact unequally on the health of the population. This means that in practice, reducing HI is difficult and has been termed a ‘wicked’ problem denoting a complex issue with multiple root causes that has no simple solution.<sup>8-10</sup> Approaches targeting only the most disadvantaged populations are unlikely to be effective in levelling-up the gradient and may even contribute to an increase in HI (for example, due to increased stigmatisation). Instead, a gradient approach to policy is arguably required, which necessitates not only a focus on disadvantaged populations, but also a focus on the upstream determinants of health inequities (such as income, education, living, and working conditions).

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3 It is likely that low socioeconomic status during childhood may influence adult health status  
4 even if an individual has experienced upward social mobility.<sup>11,12</sup> This would suggest that  
5 efforts to level-up the gradient in health should pay particular attention to children and young  
6 people, as interventions at these early stages in the life cycle may well offer the greatest  
7 potential of levelling-up the gradient and facilitating long-term positive health outcomes. For  
8 instance, welfare policies that aim to provide children and their families with, *inter alia*, a  
9 decent standard of living (e.g. a ‘living wage’) and access to high performing schools, may  
10 well contribute positively to child health and well-being. In addition, there is a clear  
11 relationship between family policy generosity and the child poverty rate; countries with more  
12 generous family policies tend to have substantially lower child poverty rates.<sup>13</sup>

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15 For a number of years Norway has been ranked at the top of the United Nations’ Health  
16 Development Index, which is a summary measure of average achievement in key dimensions  
17 of human development. Norway belongs to the “social democratic” welfare regime  
18 characterised by its emphasis on solidarity and universalism, and the redistribution of  
19 resources among social groups, mainly through progressive tax systems.<sup>14</sup> However, even  
20 though the overall picture of Norway is positive and a Public Health Act (PHA) with a focus  
21 on reducing the gradient in health inequalities has been adopted, the country nevertheless has  
22 its challenges with social inequalities in health seemingly increasing.<sup>15</sup>

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25 Consequently, over the last decade the Norwegian National Government has developed a  
26 number of specific policies to reduce HI, with levelling up the social gradient by action on the  
27 social determinants of health, being regarded as a core public health objective.<sup>16</sup>

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3 The present paper aims to describe and analyse how local governments in Norway follow the  
4 requirements of the Norwegian 2012 PHA by applying theoretical perspectives as defined in  
5 the Gradient Evaluation Framework.<sup>17</sup> In doing so, we address two research questions: How is  
6 the concept of social inequality understood and applied? How is the HiAP approach to  
7 reducing social inequalities in health among families and children carried out? To address  
8 this, first, we present the Norwegian Public Health Act. Second, we present the conceptual  
9 foundations and structure of the GEF framework. Third, we present our methods, fourth our  
10 results are presented and, lastly we discuss the findings and conclude the paper.  
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### 23 **The Norwegian Public Health Act**

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28 In January 2012, a new Public Health Act (PHA) was adopted by the National Government.<sup>18</sup>  
29 The purpose of the Act is to contribute to societal development that promotes public health  
30 and reduces social inequalities in health. The Act provides a broad basis for the coordination  
31 of public health work both horizontally across various sectors and actors, as well as vertically  
32 between authorities at local, regional and national level. In the Act it is stated that only by  
33 integrating health and its social determinants as an aspect of all social and welfare  
34 development through a whole of government approach, can good and equitable public health  
35 be achieved.  
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49 The PHA is explicitly underpinned by the principle of Health in All Policies (HiAP).<sup>19</sup> HiAP  
50 is an approach to public policies across different sectors (e.g. education, health, transport,  
51 housing etc.) that systematically takes into account the health implications of such policies in  
52 order to improve population health and reduce health inequity. Intersectoral action is therefore  
53 regarded as key to reducing HI. In governance terms, one of the main features of intersectoral  
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3 action is that it places responsibility for public health work as a ‘whole-of-government’  
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5 responsibility rather than a responsibility of the health sector alone.  
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10 In Norway, the PHA has been developed at the National level. Central actors involved in the  
11 Act development have been policy makers from the Directorate for Health who were inspired  
12 by the wider international social determinants agenda.<sup>7</sup> Subsequently, when a left-wing  
13 government came into office in 2005, a “window of opportunity” for adopting the policy was  
14 created and subsequently capitalised on.<sup>20</sup>  
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23 The adoption of the PHA in 2011 gave the Norwegian central government a strong mandate  
24 for implementing the policy and this “top down” strategy included mandating the  
25 municipalities to integrate the policy into their own plans and budgets. Via the County  
26 Governor, the National authorities are now able to oversee and audit the municipalities’  
27 implementation of the Act. Other National governance tools have included information and  
28 guidance to the administrative levels at regional and local levels. A study from 2013 indicated  
29 that policy-makers at the National level were advocates for the policy, these ambitious aims  
30 were nevertheless not shared by municipalities.<sup>21</sup>  
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44 In Norway, municipalities have a dual role: on the one hand they are agents for the welfare  
45 state through their responsibility for implementing national policy goals. On the other hand,  
46 municipalities form independent local democratic areas that are able to decide how to use  
47 national funding in accordance with local priorities, preferences, and needs.<sup>22-23</sup> From 2018, a  
48 total of 422 municipalities have the overall responsibility for welfare provision including  
49 services such as pre-schools, schools, child care, and care for the elderly, social support and  
50 services, primary health care, culture, agriculture and the development of local areas; this  
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3 includes the development of industry and employment.<sup>21</sup> A particular focus is on the local  
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5 planning system as an important means of ensuring that the overall aims of the policy are  
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7 being implemented. This means that the broad determinant perspective in the PHA is to be the  
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9 foundation for local government planning and included in the local Master Plan (MP).<sup>24</sup> For  
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11 municipalities, the MP is the basis for all local policies. All local governments must produce  
12  
13 an overview of the health status and determinants that influence health and disease in their  
14  
15 populations. This overview is required to identify local health challenges and their  
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17 determinants, it should have a particular focus on social inequalities in health, and it should be  
18  
19 the basis for local policy-making. The Norwegian National Public Health Institute (NPHI) has  
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21 subsequently produced so-called health profiles for all the municipalities. These are available  
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23 both on the NPHI website and the municipalities' websites. They include indicators that  
24  
25 provide an opportunity for monitoring and addressing the social determinants of health.  
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27 Municipalities are mandated to use these indicators both in the MP and in the further  
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29 development of their policies and measures. However, the act also allows the municipalities to  
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31 adjust the policies to their own context. The relative freedom of the independent  
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33 municipalities may therefore result in differences in how the policy is being implemented at  
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35 the local level.  
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#### 44 **Conceptual foundations and the structure of the GEF**

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50 The GEF <sup>4, 17, 25, 26</sup> is a European action-oriented policy tool aimed at technical policy experts in  
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52 (modern) public health working at the European Member State level (Figure 1). The  
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54 framework aims to facilitate evaluation of policy actions for their current or future use in  
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56 terms of their 'gradient friendliness'. In particular, this means their potential to level-up the  
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58 gradient in HI by addressing the social determinants of health. The GEF conceptual model  
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3 sets the formulation, implementation, monitoring and evaluation of policies and their related  
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5 actions firmly within the well-established policy cycle. Although the policy cycle has been  
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7 challenged by some for being unresponsive, simplistic, and unrealistic it is nevertheless also  
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9 generally accepted as being a useful heuristic and iterative device for understanding the  
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11 lifecycle of a policy, especially when evaluating complex policy actions.<sup>27</sup>  
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17 Whilst the specific core components of the policy cycle vary, in GEF it comprises five core  
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19 elements including: priority setting and policy formulation; pre-implementation; (pilot)  
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21 implementation; full implementation; and policy review. In GEF, the stages of the cycle are  
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23 interdependent; they do not need to operate in a linear or incremental way, and evaluation can  
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25 apply at each stage, as appropriate to the policy action context and stage of development  
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27 under consideration.  
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### 33 FIGURE 1 ABOUT HERE

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36 Figure 1. Gradient Evaluation Framework (reproduced from Davies & Sherriff, 2012a with  
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38 permission from the University of Brighton).  
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43 A core part of the framework is the Gradient Equity Lens (GEL) which can be applied  
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45 iteratively and flexibly to facilitate appropriate evaluation of policy actions at each stage of  
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47 the preferred policy cycle. This GEL comprises two key inter-related dimensions which  
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49 together provide a Gradient perspective on evaluating policies and their related actions. The  
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51 GEL includes eight key areas which form a 'check-list' of key components deemed important  
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53 to underpin the design and evaluation of effective policy actions (proposed or in place) in  
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55 terms of their potential to be 'gradient-friendly' i.e. to level-up the gradient in health  
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3 inequalities by addressing the social determinants of health which affect the health of  
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5 children, young people and their families:  
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TABLE 1 ABOUT HERE

Table 1. The Gradient Equity Lens (Davies & Sherriff, 2012a)

The GEL can be applied to all the phases of the policy cycle and in the present paper, the GEL is adapted as a conceptual framework to study the implementation of the Norwegian PHA.

### Methods and data

This paper is based on data generated from two studies comprising three surveys as well as qualitative interviews with policy makers. A baseline survey was conducted in 2011 a few months before the PHA was implemented. In 2011, at the time there were 430 municipalities and 15 partly self-governing urban districts of Oslo. An online questionnaire was sent to the chief executive officers (CEOs) of all municipalities and urban districts who then either answered the survey themselves or delegated to an appropriate civil servant. A total of 361 municipalities and urban districts filled in the questionnaire giving a response rate of 87%. The smallest and most geographically remote municipalities were the ones that in most cases did not respond to the survey request.<sup>28</sup> The second survey was carried out in spring 2014. As with the first, the questionnaire was sent to the CEOs of the municipalities and urban districts of Oslo, 269 municipalities responded to the whole questionnaire while an additional 40 municipalities responded to parts of it. The response rate was thus between 61 and 77%. Once again, the smallest and most remote municipalities did not respond. The third survey



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3 was carried out in 2017. It had a slightly different purpose but included several of the same  
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5 questions as the two former surveys.  
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10 All surveys included questions on if and how public health had been included in the municipal  
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12 planning system, which areas of public health had been prioritised in the municipality, which  
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14 specific groups had policies been developed for, whether or not intersectoral working groups  
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16 for health promotion had been established, whether a public health coordinator (PHC) had  
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18 been employed, and where in the municipal organisation the PHC was employed. The 2014  
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20 survey was essentially a further elaborated version of the initial 2011 baseline survey,  
21  
22 covering specific questions regarding the implementation of the PHA, especially with regards  
23  
24 to planning procedures.<sup>29</sup> Subsequently, some questions were asked only in the 2014  
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26 questionnaire. The 2017 survey had a broader perspective but some of the questions from the  
27  
28 2014 survey were included.<sup>30</sup>  
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35 Individual interviews were additionally conducted with policy makers from six municipalities.  
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37 The municipalities were sampled strategically, and the main inclusion criteria were that  
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39 municipalities had already started the process of implementing the HiAP principles and were  
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41 actively addressing HI. Consequently, based on the 2011 survey, municipalities that were  
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43 ostensibly in the process of implementing the PHA were selected. Additional criteria included  
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45 size of municipality (some large, medium and small) and inclusion of both urban/rural  
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47 municipalities. In each municipality, between six and eight informants were interviewed. The  
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49 municipalities selected had different organisational models, and therefore the relevant  
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51 informants varied to some extent. In general, political and administrative leaders and leaders  
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53 of different sectors or units were interviewed along with public health coordinators. The aim  
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55 of this paper is not to compare the municipalities; instead, the survey data is intended to  
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3 provide a broad picture of the general situation regarding implementation of the PHA, whilst  
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5 the interview data and quotes aim to present a more in-depth and nuanced picture. Both  
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7 studies received ethical approval from the Norwegian Data Protection Official for Research.  
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## 10 11 12 **Results**

### 13 14 *Proportionate universalism/ Scale and intensity*

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16 The concept of proportionate universalism was initially formulated by Marmot as a strategy  
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18 that might reduce the steepness of the social gradient in health.<sup>6</sup> Proportionate universalism  
19  
20 proposes that any actions to address the social gradient must be universal, but with a scale and  
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22 an intensity that is proportionate to the level of disadvantage. Proportionate universalism is  
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24 also a principle represented in the PHA.  
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30 In the 2014 questionnaire, we asked if the municipalities had developed an overview of the  
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32 health situation including HI. 39% of municipalities reported that they had made such an  
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34 overview, whilst 48% reported that they were only just starting the process. In 2017 there had  
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36 been a major increase, as 85% reported that they had made this overview.  
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40 The 2017 survey also indicates that municipalities have started to consider equal allocation of  
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42 resources in their planning documents and decision-making.  
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46 From the individual interviews, officials working as Public Health Coordinators were  
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48 particularly found to have a high awareness of the principles of the PHA and some of them  
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50 have captured the gradient thinking, illustrated by the following quote:  
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3 *“I belong to those who think Michael Marmot has been reasoning sensibly about this,*  
4 *and I believe the social determinants and the basic conditions for development of*  
5 *society are the most important” (K2).*  
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11 All informants interviewed stated that both universal and targeted measures were important.

12 The quantitative surveys also showed that there is an increasing focus on living conditions,  
13 indicating an understanding of the social determinants of health. In 2011 only 6 % of the  
14 municipalities answered that they prioritised living conditions; in 2014 the number had risen  
15 substantially to 42%  
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23 In 2017, the question was posed somewhat differently, asking about concrete areas covering  
24 social living conditions like housing, education, and employment and income. These areas  
25 still hold a relatively low priority, for example 36 % of the municipalities report that they  
26 were giving priority to issues like employment and income. In contrast, 58% report that they  
27 prioritize individual measures concerning mental health in children and adolescents.<sup>31</sup>  
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35 Part of the explanation for this priority is the National government’s priority of mental health  
36 among adolescents and children, and the support to municipalities on this issue.<sup>31</sup>  
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44 When asked in the surveys whether the municipalities prioritised universal measures; 16%  
45 answered yes in 2011, whilst in 2014 the number had increased to 43% (2011, n=303; 2014,  
46 n=250). This question was not included in the 2017 survey.  
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53 The individual interviews also found support for these principles:  
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58 *“I believe it is valuable to reach everyone, but I believe that some of our offers should*  
59 *be directed at disadvantaged groups” (H1).*  
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5 In the interviews, the targeted measures mentioned were extra support for children who need  
6 to develop their knowledge of the Norwegian language or examples of where the municipality  
7 retained a resource of sports equipment to lend out for free where needed. Still, few  
8 interviewees seemed to be aware of the social gradient in health, and many respondents still  
9 viewed HI as a problem only for marginalised groups, particularly in smaller municipalities:  
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19 *“To me this is first and foremost about vulnerable families who have a history –*  
20 *unemployment and dependency on social welfare often continue over generations.”*  
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24 (K5).  
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### 28 ***A whole systems approach/ Intersectoral tools for all***

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30 The Norwegian PHA demands a whole system approach to addressing HI. The responsibility  
31 for public health lies with the municipality leadership which includes the Mayor, the CEO and  
32 their administration. The whole system approach is further reflected in the PHA demand that  
33 public health must be included in the local municipal MP. Based on the MP, action plans  
34 should be developed, committing the local governments to address HI challenges. In the 2014  
35 and 2017 surveys, municipalities were asked if they had established intersectoral working  
36 groups and which sectors were members of such groups. 62% of the municipalities reported  
37 having established such groups in 2014. In 2017 the number had increased to 72%  
38  
39 Regarding sectors participating most often, approximately 50% of the participants come from  
40 the local Child Health Centres, this had increase to 71% in 2017. The cultural sector,  
41 including sports (67% and 56%), Schools (75% and 72%) and kindergartens (50% and 60%).  
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43 An interesting point is that the kindergartens seem to participate more in intersectoral working  
44 groups in 2017 than they did in 2014 and 2011.  
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5 To ensure implementation, it is important that public health is anchored at the executive level  
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7 in the municipalities, where budgets are made and policies developed. Furthermore, in the  
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9 Norwegian system, the municipal planning process is important for the development of  
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11 policies and measures and thus the planning departments play an important role in the policy-  
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13 making process. In 2014, 68% of the municipalities' CEO staff participated in intersectoral  
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15 working groups representing an increase from 22% in 2011. In 2017 the number had  
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17 decreased to 56%. However, participation from the planning departments had increased. In  
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19 2011 it was 16% ; in 2014 participation had increased to 65% and in 2017 56% of the  
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21 municipalities reported that the planning department was participating in intersectoral  
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23 working groups. In the interviews, informants described this positive development, which is  
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25 illustrated in the following quote:  
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33 *“It has developed from being a responsibility for the health sector to a field that is a*  
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35 *responsibility for the central leadership and then developed to concrete measures.”*  
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38 *(M1)*  
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42 However, in other municipalities the health sector was still the most dominant sector:  
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47 *“Generally, the public health field is still too much influenced by the health and*  
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49 *social sectors. We have been working overtime to anchor it more broadly and we*  
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51 *have moved a bit on the way.” (K2)*  
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### 55 ***Life course approach*** 56 57 58 59 60

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3 In the 2011 survey, municipalities were asked which institutions they believed could reduce  
4 social inequalities. Municipal health centres are a universal service offered to all families.  
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6 They are responsible for vaccination programs and for the following up of children's and  
7  
8 families' health and wellbeing. 43% believed that these health centres reduced social  
9  
10 inequalities while only 27% believed that schools could play this role. In 2014 and 2017,  
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12 municipalities were asked a general question in terms of whether they were capable of  
13  
14 reducing social inequalities; in 2014 83% said yes and in 2017 this number had increased to  
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16 95%. However, it seems that the efforts are mainly related to the services they are responsible  
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18 for, rather than looking across administrative levels and sectors. Particularly child health  
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20 centres and kindergartens seem to be arenas for efforts to reduce inequalities among children.  
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29 In the interviews, many of the respondents expressed awareness of the life course approach  
30 and emphasised the need for services for families and children:  
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35 *"We take care of them at birth. We try to influence them from the first day. I think the*  
36 *municipality has a responsibility to follow through the transitions in the education*  
37 *system, from day care to secondary school."* (M1)  
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44 The significance of the life course perspective on children was emphasised by several  
45 respondents. However, very few connected this to a policy to level the social gradient in  
46 health and related social determinants. Rather, it was individualised and concerning a few  
47 marginalised groups.  
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3                   *“We see that it often is inherited. If you come from a family with low socioeconomic*  
4                   *status, you follow in the footsteps of your parents regarding activities and education,*  
5                   *and they follow that path.” (M7)*  
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### 10 11 12 ***Social and wider determinants*** 13

14 The Norwegian PHA mainly addresses the social determinants of health and pays relatively  
15 less attention to individual lifestyle factors. Despite this, many municipalities surprisingly  
16 continue to focus predominantly on individual lifestyles such as physical activity and diet.  
17 Indeed, the 2014 survey showed that 71% of municipalities still prioritised lifestyle issues.  
18 This is an increase from 2011 when the number was 34%. In the 2017 survey, the respondents  
19 were asked what they saw as the main challenge in public health. Mental health problems  
20 were ranked highest (62%).  
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32 Given the focus of the Act, it would be expected that addressing the social determinants  
33 would be much higher on the agendas of municipalities.  
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40 In contrast, the municipalities taking part in the qualitative interviews seemed to reflect more  
41 about the social determinants. Education is one issue that was raised by several informants:  
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46                   *“I believe the most important in reducing social inequalities is simply education. If*  
47                   *people get a platform and get an education, that’s what it takes to reduce inequity.”*  
48                   *(F7)*  
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3 Some of the interviewees pointed out, that developing policies and measures based on an  
4 understanding of the wider determinants of health is very political, and therefore demands  
5 political priorities, including redistribution of resources:  
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12 *“But it is also very political, and I think that has not been problematized enough.*  
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14 *When we tried to include the wider social determinants in our local plan, everybody*  
15 *agreed, but in practice we don’t have a political regime that necessarily thinks that*  
16 *this is a good policy - so it is not being followed up in practice.” (K4)*  
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### 23 ***Non-geographic boundaries***

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26 There are regional variations in how the social gradient relates to mortality (Marmot, 2010). A  
27 policy addressing only socially deprived areas will have limited potential to reduce the social  
28 gradient. Our surveys show that larger Norwegian municipalities in 2011 prioritised living  
29 conditions whilst smaller tended to prioritise lifestyle issues. As shown above, the 2014 and  
30 2017 surveys indicate that an increasing number of municipalities prioritise living conditions  
31 in their public health policies. Still, it appears to be a theme mostly for the larger  
32 municipalities.  
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45 Based on our interviews, there also seems to be a difference between smaller and larger  
46 municipalities regarding the priority of the HI. In one city informants working within public  
47 health and the social services regarded the situation as worrying:  
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54 *“If you take a cynical approach; if they live in a certain part of town, have not*  
55 *completed secondary education and smoke, then they don’t have many prospects.”*  
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58 *(K4)*  
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5 This respondent thought that the improvements of disadvantaged areas by refurbishing  
6 schools and local areas would reduce inequalities, for example in education:  
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12 *“In the long term, you will have a new generation of children and young people who*  
13 *will attend good schools in stimulating surroundings that will encourage them to take*  
14 *an education. This could lead to more social equality, which will also help them to*  
15 *make healthy choices.” (K4)*  
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### 21 22 23 **Gradient friendly indicators**

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25 In general, policy objectives, including targets and outcomes, need to be able to capture the  
26 fact that social inequity in health forms a gradient across society. However, social  
27 determinants of health and causal factors require additional analysis as the most important  
28 determinants of health may differ between socio-economic groups (Davies & Sherriff, 2012a).  
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37 It is of course very important that indicators have been developed and made available for each  
38 municipality, providing the opportunity to address the social gradient. Without such  
39 indicators, many of the aspects of health inequalities remain invisible. The share of  
40 municipalities that have developed an overview of the health situation has increased by more  
41 than 50% from 2014 to 2017. In 2017, 70% of the municipalities report that that the overview  
42 has formed the basis for local priorities in their planning. 68% also report that the priorities of  
43 services is based on findings from the overview. This indicates that if municipalities have  
44 made an overview they will use it as presupposed in policy documents.  
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### 59 **Discussion**

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3 The Norwegian Public Health Policy is unique in Europe in overtly addressing the social  
4 determinants of health. An overall aim is to level the social gradient in health by adapting a  
5 Health in All Policies approach and the local level is key to implementing these policies.  
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10 Even though the issues of HI and HIAP have been on the political agenda for a number of  
11 years in Norway, it was only when the PHA was adopted in 2012 that the municipalities were  
12 mandated to include these themes in their policies, plans and practices. In general, there is a  
13 development from 2011 through 2017 where the act is being increasingly integrated in the  
14 municipalities. In the following, we will follow the GEF in our discussion of the findings.  
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17 Informants support the idea that policies should be universal but that targeted measures should  
18 be available for disadvantaged families. This support for both universal and targeted measures  
19 may be interpreted as a *proportionate universalistic strategy*.<sup>6</sup> Implicitly it is, since  
20 proportionate universalism reflects the Nordic welfare state model. Many measures are  
21 universal, and this is the basis for distribution of health and welfare services. However, it  
22 cannot be concluded that the municipalities are aware of the principle of proportionate  
23 universalism to reduce HI and level the social gradient in the context of the PHA in the  
24 Norwegian municipalities. The social differences in Norway are increasing,<sup>32</sup> and universal  
25 welfare measures are crucial to reduce these. As policy-makers are the policies and making  
26 priorities, it seems vital that they share this understanding. When explicitly discussed, there is  
27 a focus on marginalised groups when HI are being discussed.  
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51 Regarding *A whole systems approach/ Intersectoral tools for all* there seems to be an  
52 increased integration across municipal sectors. An increasing number of municipalities have  
53 established intersectoral working groups, and the municipal leadership also seems to pay an  
54 increasingly important role. One point to be made is that the working groups are anchored in  
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3 the administrative structure representing sectors responsible for the implementation of the act.  
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5 This may promote implementation since it demands a commitment from all sectors.  
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10 *The life course approach* is well integrated in Norwegian municipalities since they are  
11 responsible for services for families and children. There seems to be a development towards  
12 increased awareness that day care, education and leisure time activities play an important part  
13 in reducing social inequalities.  
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20 In Norway, like in many other countries, social inequalities are widest in the largest cities, and  
21 positive and negative health factors are clustered in different parts of the cities.<sup>15</sup> The situation  
22 in the larger city illustrates dilemmas in the development of policies to level the social  
23 gradient. Several programmes have been developed to improve living conditions in poor  
24 areas. Seldom, however, are housing policies being discussed in the context *the social and*  
25 *wider determinants*.  
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35 While some policies and measures are being developed, mainly in the sectors working with  
36 disadvantaged groups and areas, policy measures that address the root causes, i.e. the social  
37 determinants are not being developed.  
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42 Even though many of these root causes would demand national policy measures, the  
43 municipalities have the authority to develop housing policies and recreational areas via the  
44 municipal land use plan. In many municipalities, the planning of housing has been left to  
45 private developers, and as real estate prices rise, there is very limited building of affordable  
46 housing.  
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54 Norwegian municipalities have been provided with *gradient friendly indicators* in the health  
55 profiles provided. These indicators provide an opportunity for monitoring and addressing the  
56 social determinants of health. Municipalities are mandated to use these indicators, both in the  
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3 MP and the further development of policies and measures. Most municipalities have now  
4 developed the required overviews of the health situation in their municipality.  
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## 10 11 **Conclusions**

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13 There seems to be a development towards increased awareness that municipal services like  
14 day care, education and leisure time activities play an important part in reducing social  
15 inequalities.  
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22 In the decentralised Norwegian governance system, municipalities have a relatively high  
23 degree of freedom to make priorities, both politically and economically. The PHA includes  
24 mostly ‘soft’ governing tools, in terms of audits and different types of support i.e. courses and  
25 seminars for policy-makers. Economic support is available, but not via budgets, but in terms  
26 of projects and other time limited funding. This may be problematic in the long-term  
27 implementation and giving a signal that the act is not so important.<sup>33</sup> On the other hand, there  
28 is room for local adjustments of the policy, which also call for bottom up approaches and an  
29 integration in the municipality also based on local interests, which is important for a whole of  
30 government approach to be implemented.<sup>34,35</sup>  
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46 An important discussion is also limits of local policy-making. Overall priorities, for example  
47 in fiscal – or education policies, are made at the national level. It adds to the point that  
48 reducing HI is a wicked issue with contesting definitions and priorities, that need whole of  
49 government action. Reducing HI is a truly wicked issue, both being complex and lacking  
50 political consensus. By leaving the main responsibility to the municipalities, the actual  
51 solutions are left to the local government to handle, while many of the solution are to be  
52 found at other levels and even other sectors of society.  
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## REFERENCES

1. Sherriff NS, Gugglberger L, Davies JK on behalf of the ACTION-FOR-HEALTH Consortium. *Reducing health inequalities through health promotion and structural funds*. Murska Sobota ,Institute of Public Health Murska Sobota; 2014.
2. Mackenbach J P, Stirbu I, Roskam AJR et al.. Socioeconomic inequalities in health in 22 European countries. *New England Journal of Medicine*. 2008, 358(23): 2468-2481.
3. Mackenbach JP, Meerding WJ, Kunst AE Economic costs of health inequalities in the European Union. *Journal of Epidemiology and Community Health*. 2011; 65 (5): 412-419 Doi:10.1136/jech.2010.112680. Epub 2010 Dec 19.
4. Davies JK, Sherriff NS. The gradient in health inequalities among families and children: a review of evaluation frameworks. *Health Policy*.2011; 101(1):1-10.
5. Graham H. *Understanding health inequalities*. Maidenhead, Berkshire: Open University Press; 2000.
6. Marmot M. *The Marmot Review. Fair Society, Healthy Lives. Strategic Review of Health Inequalities in England Post-2010*. London, Ministry of Health; 2010.
7. WHO. *Closing the gap in a generation. Health equity through action on the social determinants of health*. Final report from Commission on Social Determinants of health, Geneva; WHO; 2008.
8. Rittel HWJ, Webber MM. Dilemmas in a General Theory of Planning. *Policy Sciences*.1973; 4:155-169
9. Blackman T, Marks L, Harrington, B et al. Wicked Comparisons: Reflections on Cross-National Research about Health Inequalities in the UK. *Evaluation*. 2010;6:43-57.
10. Fosse E, Bull T, Burström B et al. Family policy and inequalities in health in different welfare states. *International Journal of Health Services*. 2014; 44(2): 233-251.

- 1  
2  
3 11. Poulton R, Caspi A., Milne B J et al. Association between children's experience of  
4  
5 socioeconomic disadvantage and adult health: a life-course study. *Lancet*,  
6  
7 2002;360:1640-1645.  
8  
9
- 10 12. Graham H. Power C. Childhood disadvantage and health inequalities: a framework for  
11  
12 policy-based life course research. *Child: Care, Health and Development*. 2004;30(6):  
13  
14 671-678.  
15  
16
- 17 13. Lundberg O. How do welfare policies contribute to the reduction of health  
18  
19 inequalities? *Eurohealth*. 2009; 15(3): 24-27.  
20  
21
- 22 14. Esping-Andersen G. *The Three Worlds of Welfare Capitalism*. Cambridge: Polity  
23  
24 Press; 1990.  
25
- 26 15. Dahl E, Bergsli H, van der Wel K. *Social Inequalities in Norway. A Norwegian*  
27  
28 *Knowledge Overview*. Oslo: University College of Oslo and Akershus; 2014.  
29  
30
- 31 16. Ministry of Health and Care Services Norway. *National strategy to reduce social*  
32  
33 *inequalities in health*. Report to the Storting no. 20 (2006-2007). Oslo;2006.  
34  
35
- 36 17. Davies JK, Sherriff NS. The Gradient Evaluation Framework (GEF): *A European*  
37  
38 *framework for designing and evaluating policies and actions to level-up the gradient*  
39  
40 *in health inequalities among children, young people, and their families*. Brighton:  
41  
42 University of Brighton; 2012.  
43  
44
- 45 18. Ministry of Health and Care Services. *Public Health Act, no. 29, 24-06-2011*. Oslo.  
46  
47
- 48 19. Leppo. K., Ollila, E., Peña., Wismar, M. and Cook, S. *Health in all Policies. Seizing*  
49  
50 *opportunities, implementing policies*. Helsinki: Finnish Ministry of Social Affairs and  
51  
52 Health; 2013.  
53  
54
- 55 20. Strand M, Fosse E. Tackling health inequalities in Norway: Applying linear and non-  
56  
57 linear models in the policy making process. *Critical Public Health*. 2011;21(2).  
58  
59  
60

- 1  
2  
3 21. Tallarek MG, Helgesen MK, Fosse E. Reducing social inequalities in health in  
4 Norway: Concerted action at state and local levels? *Health Policy*.2013; 13:228–  
5 235.1.<http://dx.doi.org/10.1016/j.healthpol.2013.09.019>  
6  
7  
8  
9  
10 22. Baldersheim H, Ståhlberg K. Guided Democracy or Multi-Level Governance? New  
11 Trends in Regulatory Regimes in Central-Local Relations in the Nordic Countries.  
12 *Local Government Studies*.2002;28:74-90.  
13  
14  
15  
16  
17 23. Hanssen GS; Helgesen MK Multi-level governance in Norway: universalism in  
18 elderly and mental health care services. *The International journal of sociology and*  
19 *social policy*. 2011; 31,3-4.  
20  
21  
22  
23  
24 24. Hofstad, H. (2011). Healthy Urban Planning: Ambitions, Practices and Prospects in a  
25 Norwegian Context. *Planning Theory & Practice*, 12(3): 387-406, Routledge, London.  
26  
27  
28  
29 25. Davies JK, Sherriff NS. Evaluating policies: applying the gradient equity lens. In:  
30 Stegeman I, Costongs C). The right start to a healthy life: Levelling up the health  
31 gradient among children, young people and families in the European Union-What  
32 works? Brussels: EuroHealthNet; 2012; 153-176.  
33  
34  
35  
36  
37 26. Davies JK, Sherriff NS. Assessing public health policy approaches to level-up the  
38 gradient in health inequalities using a consensus-building process: The Gradient  
39 Evaluation Framework (GEF). *Public Health*. 2014; (128): 246-253.  
40  
41  
42  
43  
44 27. Hallsworth M, Parker S, Rutter J. *Policy making in the real world: Evidence and*  
45 *analysis*. London: Institute for Government; 2011.  
46  
47  
48  
49 28. Helgesen MK, Hofstad H. *Regionalt og lokalt folkehelsearbeid- Ressurser,*  
50 *organisering og koordinering En baselineundersøkelse. [Regional and local health*  
51 *promotion. Resources, organization and coordination. A baseline study]*. Oslo, NIBR-  
52 report; 2012:13.  
53  
54  
55  
56  
57  
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59  
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2  
3 29. Schou A, Helgesen MK, Hofstad H. *Samhandlingsreformens effekt på kommunen som*  
4 *helsefremmende og sykdomsforebyggende aktør [The effect of the Coordination*  
5 *reform on municipalities' performance in the field of health promotion and public*  
6 *health]*. Oslo, NIBR-report 2014:21.  
7  
8  
9  
10  
11  
12 30. Helgesen MK, Abebe DS, Schou A. *Oppmerksomhet mot barn og unge i*  
13 *Folkehelsearbeidet – Nullpunktsundersøkelse for Program for folkehelse i kommunene*  
14 *settes i verk [Children and youth in municipal health promotion. A baseline Joint*  
15 *Report]* Oslo; NIBR/NOVA 2017  
16  
17  
18  
19  
20  
21 31. Ministry of Health and Care Services Norway. *Mestring og muligheter [Coping and*  
22 *opportunities]*. Public health report to the Storting no. 19 (2014-2015). Oslo;2014.  
23  
24  
25  
26 32. Norwegian Institute of Public Health (NIPH). *Public Health Report – short version.*  
27 *Health Status in Norway 2018. Oslo;* Norwegian Institute of Public Health.  
28  
29  
30  
31 33. Fosse E, Helgesen MK. How can local governments level the social gradient in health  
32 among families with children? The case of Norway. *International Journal of Child,*  
33 *Youth and Family Studies.*2015; 6 (2): 328-346.  
34  
35  
36  
37 34. Carey G, Crammond B, Keast R. Creating change in government to address the social  
38 determinants of health: how can efforts be improved? 2014; *BMC Public Health:* 14.  
39  
40  
41  
42 35. Carey G, Crammond B. What Works in Joined-Up Government? An Evidence  
43 Synthesis. *International Journal of Public Administration.* 2015; 38:13-14,1020-1029.  
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### Compliance with ethical standards

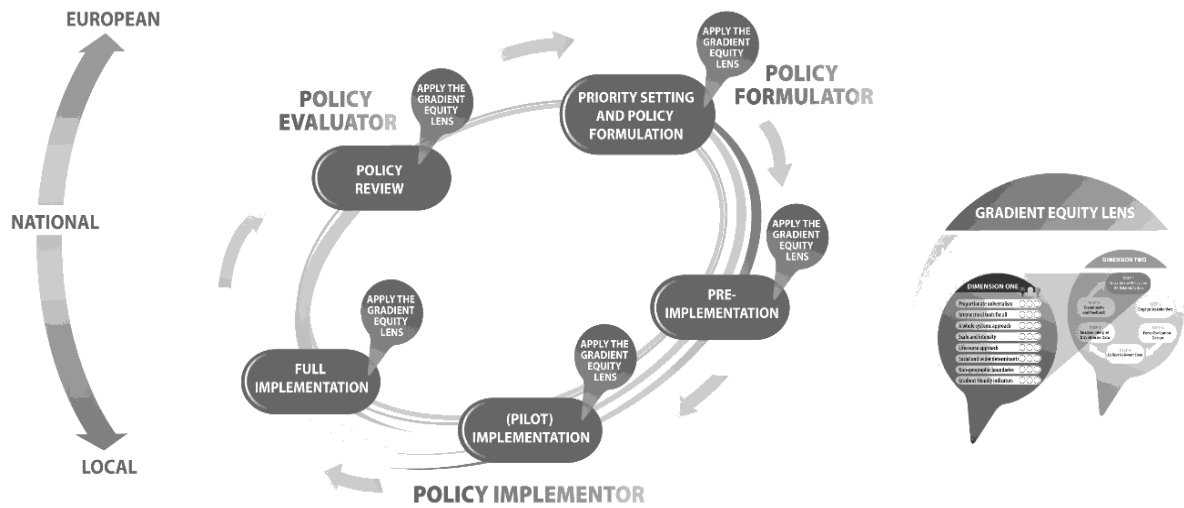


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3 Ethics approval and consent to participate. Both studies received ethical approval from the  
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5 Norwegian Data Protection Official for Research. For the quantitative study, consent was  
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7 implicitly assumed by return of completed questionnaires. For the interview study, all  
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9 participants provided informed consent.  
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For Peer Review

Running Head: Levelling the social gradient in health

Figure 1. Gradient Evaluation Framework (reproduced from Davies & Sherriff, 2012 with permission from the University of Brighton).



review

Table 1. The Gradient Equity Lens (Davies &amp; Sherriff, 2012)

KEY COMPONENTS	
Proportionate universalism	The gradient approach to policy action consists of broad universal measures combined with targeted (proportionate) strategies for high-risk/disadvantaged groups.
Scale and intensity	The scale and intensity of provision of universal services should be proportionate to the level of disadvantage.
Intersectoral tools for all	Political commitment to action is needed from all sectors of government.
A whole systems approach	Children need to be given the best start in life to maintain and maximise their capabilities.
Life course approach	Factors at early stages in life can influence health in later life. Health inequalities can therefore be passed down the generations.
Social and wider determinants	The conditions, in which people are born, grow, live and work, are responsible for health inequalities: Wider socioeconomic factors; Social and cultural factors; Physical and social environment; Population-based services Access to, and quality of, services; Individual and behavioural factors.
Non-geographic boundaries	Targeting disadvantaged areas needs to be complemented by stressing universal aspects of policies in order to level up the gradient.

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Gradient friendly indicators	Health outcome indicators need to be stratified by socio-economic stratifiers: education, income/wealth, occupational class, ethnic group, and place of residence.
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For Peer Review