In need of a collaborative response
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CHAPTER 7

RENEWING THE EXPERTISE OF HEALTH AND SOCIAL CARE PROFESSIONALS TO PROVIDE INTEGRATED CARE: EVALUATION OF AN INTERVENTION IN A DEPRIVED DUTCH NEIGHBOURHOOD

Jennifer van den Broeke, Maartje van der Aa, Wim Busschers, Karien Stronks, Thomas Plochg

Abstract

Rationale, aims and objectives - Multimorbidity in deprived populations is associated with longer hospital stays, more avoidable admissions and complications, higher costs, and lower satisfaction with available services. While integrated care has been proposed as a solution, the expertise of professionals to deliver this type of care has received little attention. Our case study evaluates an intensive intervention in a deprived neighbourhood in the Netherlands, launched in 2008, to tackle multimorbidity and the expertise of health and social care professionals to cater to the population’s health needs.

Methods - Mixed-methods evaluation. Between 2009-2012 semi-structured interviews (n=11), field observations, conversations, dialogue sessions and documentary review. In 2012 and 2013 quantitative before-and-after study with web-based questionnaire in the intervention and two control neighbourhoods (n= 86 at t0 and n=117 at t1).

Results - The intervention sought to develop professional expertise in population health orientation, generalism, and coaching. Activities were supported by management that emphasized learning by doing, working bottom-up with direct application in practice, and professionals enjoying discretion to experiment. The intervention’s widely supported mission brought cohesion to its activities. In the interviews, professionals reported becoming more adept at understanding the common causes behind patients’ complaints, unravelling their multiple problems, and encouraging them to be more active in addressing their own health and well-being. But this was not supported by the quantitative data measuring professionals' attitudes.

Conclusion and practice implications - Neighbourhood interventions can strengthen professionals’ expertise in population health orientation, generalism and coaching, and the communication and collaboration skills necessary to employ them. Whether they can lead to more adequate responses to multimorbidity and more effective integrated care arrangements needs to be further researched.
Renewing the expertise of health and social care professionals

Introduction

Residents of deprived neighbourhoods often suffer from an accumulation of health and social problems. They more often have (multiple) chronic diseases, lead unhealthy lifestyles, and are overweight; they more often experience problems related to work, income, living conditions, and parenting [1-6]. But even when these additional burdens are taken into account, their use of healthcare services exceeds that of residents in more affluent neighbourhoods [7]. Multiple health and social problems have been linked to longer hospital stays [8], more avoidable admissions and complications [9], higher costs of care [10, 11], and lower satisfaction with available services [12].

Integrated care to coordinate healthcare services has been proposed as a solution to these problems. Examples include the expanded chronic care model [14], community-based integrated care [15], and integrating primary care and public health [16, 17]. But while strategies to integrate care have often focused on institutional structures and processes, they have paid less attention to the attitudes, behaviour and tools (hereafter referred to as expertise) of health and social care professionals to provide care that meets the needs of deprived populations. In this article we report our evaluation of our intervention. Against this background, we conducted a case study of a local intervention to promote integrated care in the Netherlands. Launched in 2008, Healthy Neighbourhood Overvecht sought to renew the expertise of the neighbourhood’s health and social care professionals. Overvecht is a deprived neighbourhood in the Dutch city of Utrecht (see table 1 for basic population characteristics). Its health and social care system is collaboratively governed by the Municipality of Utrecht and the major healthcare insurer, Agis Zorgverzekeringen. The neighbourhood was chosen for two reasons. First, the insurance company’s figures reveal a high use of services compared to other neighbourhoods. Second, collaborative projects to improve neighbourhood health were already underway (see table 2), with GPs working alongside physiotherapists, social workers and psychologists in 4 of Overvecht’s 5 healthcare centres.
Methods

**Background to the methodological approach**

One of the aims of Healthy Neighbourhood Overvecht was for health and social care professionals to renew their expertise to provide integrated care. The intervention began by inviting a small group of active professionals, frustrated by the continued poor health of the Overvecht population and their seeming inability to counter it, to analyse persisting problems. The resulting action plan highlighted the following problems: the difficulty for professionals to grasp the complexity of their patients’ problems; the fragmentation of healthcare provision; a mismatch between presented complaints and offered solutions; and the difficulty of making patients take greater responsibility for their own health. Joint efforts by the neighbourhood’s health and social care professionals seemed necessary.

The intervention envisioned a ‘total solution’ encompassing public health and primary and social care, targeting both organizational structures and the expertise of individual professionals to provide care that better meets the needs of the neighbourhood’s population. To better understand the complexity of patient problems, the programme encouraged professionals to approach problems from a population perspective. To counter the fragmentation in healthcare provision, it encouraged professionals to attain an overview of each patient’s problems, not only those complaints pertaining to their specialization. The programme also encouraged professionals to coach their patients in taking greater initiative and responsibility for their own health and well-being. In sum, the intervention aimed to develop the expertise of professionals in 3 main areas: *population health orientation*, *generalism*, and *coaching*.

*Population health orientation* acknowledges that individual and population health are connected. It requires professionals to be aware of patient groups with specific characteristics (such as socio-economic status, genetic features, medical care, and physical environment) while ensuring that individual patients are considered in their specific contexts [18-20]. *Generalism* consists of a holistic approach to health – of providing a broad range of coordinated services (a mix of prevention, cure and care) and ensuring the timely referral of patients to other services [21]. *Coaching* implies coaching towards self-management – improving patients’
knowledge, skills, and motivation to adopt healthy behaviours and to comply with therapies.

**Activities to promote the renewal of expertise**

The programme was based on 3 pillars. The first was changing the focus of care from illness and cure towards health and healthy behaviour [cf.22-25]. Activities encouraged professionals to think in terms of *generalism* and learn new ways of coaching. Second, professionals were encouraged to develop a *population health orientation* to increase their awareness of health problems in the neighbourhood, the determinants of health and the complexity of often inter-related problems. Third, activities promoted communication and collaboration between professionals.

Specific projects were based on these 3 pillars (see table 1). *Project Vitamin D*, for instance, involved the cooperation of primary care and public health professionals to inform neighbourhood residents about the consequences of Vitamin D insufficiency. The evaluation of this relatively simple exercise yielded valuable lessons about campaign timing, reaching out to residents and collaboration between professionals. In *Project Relax in Overvecht*, a campaign targeting persons with mild psychological complaints, the goal was more complicated and more parties (including social workers and psychologists) were involved. The aim was to increase residents’ awareness that psychological well-being influences health; that psychological problems are a normal part of life; and that people can do something to improve their own mental health with the support of professionals and others in the community.

**Programme management**

The programme’s daily management was in the hands of 2 project leaders – one from the health insurance company and one from the local government. Management followed a *bottom up* strategy, meaning that front-line professionals led in the designing of activities to renew expertise, while project leaders had supporting and facilitating roles. The Healthy Neighbourhood Overvecht Platform was launched at the outset of the programme, consisting of the initial small group of involved professionals and professionals from the welfare service organization,
In need of a collaborative response

the mental healthcare service organization, 3 multi-disciplinary healthcare centres, the Big!Move Foundation, the Public Health department and the health insurance company. A Directors’ Group including the directors of the participating organisations was installed to oversee the activities.

All activities undertaken in and during the programme – from the initiation of the Platform to the activities to promote the renewal of expertise to the support given by project leaders to other initiatives in the neighbourhood – are seen as part of the broader intervention (see table 1).

**Mixed-methods evaluation**

We used mixed methods to extend the breadth and range of our inquiry [27]. Qualitative data were collected between the end of 2009 and 2012 through semi-structured in-depth interviews, field observations, conversations, dialogue sessions and documentary review. Our analysis of this qualitative data guided our collection of quantitative data in 2012 and 2013. The quantitative study was a

**Table 1** Activities implemented in Utrecht Overvecht to promote renewal of expertise from 2006-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 2006 | • Implementation of the Big!Move foundation (B!M) by one of the multidisciplinary healthcare centers (MHCC). Big!Move is a program for exercise based on the viewpoint that the focus should be shifted from illness and cure (I&C) to health and healthy behavior (H&H), (I&C→H&H). This program or method was developed in Amsterdam South-east (Aalders et al. 2010). The principle is to challenge patients not to show their dependence, but to empower themselves with doing the things they are able to do  
• Continuation of GO, a joint initiative to prevent overweight and obesity aimed at children and their parents started in 2005 by the municipality Utrecht, the Welfare Service, and the major Homecare Service in Overvecht, and coordinated by the department of Public Health (PH dept.) (De Geus et al. 2011) |
| 2007 | • Within the B!M stronger emphasis is put on the organizational development of primary care and the further development of the program for exercise  
• Start Happinezz, a program for professionals providing consultation for complex cases. Through interviews colleagues form different professionals give feedback to help improve a professionals’ care or support to a certain patient. Parties involved in the development of Happinezz: B!M, several MHCC, Welfare Service, Homecare Service, Mental healthcare Service, psychologist and ‘Cliëntenbelang Utrecht’ (a patient organization for all patients in the municipality of Utrecht) |
| 2008 | • Start El Kouaa, an empowerment project for Moroccan women. Parties involved in the development of El Kouaa: B!M, several MHCC, Welfare Service, Mental healthcare Service  
• Further development of Happinezz  
• Further developing B!M  
• May: first round of dialogue in Overvecht between the major healthcare insurance company Agis Zorgverzekeringen (HC.Ins.Comp.), the PH dept. and health and social care professionals from local organizations  
• October: Signing of the memorandum of understanding on the 8th of October by HC.Ins.Comp. and the municipality of Utrecht  
• December: a first version of the Plan of action is written by the project leaders from the HC.Ins.Comp. and the PH dept. in collaboration with the first group of involved professionals from local organizations, building upon the earlier initiatives Happinezz and El Kouaa |
**Table 1 Continued**

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
</tr>
</thead>
</table>
• First steps are taken to establish collaboration between three MHCC to achieve integrated primary care, which will later become the ‘Overvecht GEZond!’ foundation (OG!). Involved are three MHCC and B!M.  
• June: To warrant the activities developed within the Project Group HNO at management- and policy level, a Director Group is initiated in which the directors of the Welfare Service, Mental Healthcare Service, the major Homecare Service, OGI, HC.Ins.Comp. and PH dept. take place. The Project Group becomes a Platform. Middle 2009 the Platform HNO and the Director Group HNO are functioning at full strength.  
• The Platform HNO starts the project ‘One language’. An independent advisor is asked to perform the project to take stock of and analyse the problems professionals in Overvecht experience and possible solutions  
• Further development of Happinezz  
• The Platform HNO starts the Project Vitamin D. A campaign for awareness of the consequences of lack of vitamin D, as an experiment in collaboration between PH and PC professionals  
• The Platform HNO starts the project ‘Exercise broker’, a project to encourage adults and the elderly to exercise more  
• OGI! does a grant application with the support of the PH dept. and the HC.Ins.Comp. The grant is for ‘Zichtbare Schakel’ (‘ZS’) a subsidy by the national government to encourage the use of district nurses  
• OGI! does a grant application with the support of the PH dept. and the HC.Ins.Comp. The grant is for ‘SOLK’ a subsidy by the national government to encourage integrated care for patients that have complaints that cannot be explained by a physical component |
| 2010 | • OGI! becomes an official foundation and a fourth MHCC joins OGI!  
• The Platform HNO and Director Group HNO organize the First Neighborhood Conference in which the HNO viewpoint (based on I&C→H&H) is explained and tools are provided to make it possible to work by this viewpoint  
• Propaganda for the Happinezz method through a publication and a workshop at the First neighborhood Conference  
• The grant for ‘SOLK’ is honored and OGI! starts the project ‘SOLK’, a project to learn how to help patients that have complaints that cannot be explained by a physical component  
• The Platform HNO starts the ‘Healthy Information Table’, a campaign for healthy lifestyle of the inhabitants of Overvecht  
• The Platform Vitamin D is held a second time  
• The Project Vitamin D encourages that a lot of effort is being made to realize that more adults exercise. This is done through connecting primary care services to the Welfare Service  
• The grant for ‘ZS’ is honored and OGI will work together with a small Homecare Service |
| 2011 | • A fifth MHCC joins OGI! and B!M becomes assimilated into the foundation  
• The major Homecare Service joins the Platform HNO and the Director Group HNO  
• The Platform HNO and Director Group HNO organize the Second Neighborhood Conference  
• Further development of the HNO viewpoint and the analysis of the expertise professionals need in order to work by the HNO viewpoint  
• Implementation of the Happinezz method in all centers that are joined in OGI!  
• Further development of the methods developed within ‘ZS’ and ‘SOLK’  
• The Platform HNO starts the Project Relax in Overvecht. A campaign about relief of stress aimed at inhabitants with mild psychological complaints  
• Continuation of the activities aimed at exercise  
• Development of a project to consult a physiotherapist for exercise based on the viewpoint of I&C→H&H |
| 2012 | • The Platform HNO and Director Group HNO organize the Third Neighborhood Conference  
• The HNO viewpoint and expertise are recorded  
• The hospital joins the Platform HNO and the Director Group HNO  
• A new multidisciplinary team ‘Neighborhood team Strong Overvecht’ that supports adults and families with multiple complex health and social problems joins the Platform HNO and the Director Group HNO  
• The start of a collaboration with ‘Strong Basic Care’(connecting medical-social)  
• Further development of the methods developed within ‘ZS’ and ‘SOLK’  
• Continuation of the activities aimed at relief of stress with The Month of Relaxation  
• A logo and slogan for HNO are developed, a first newsletter is sent to all professionals that signed up for it, and a LinkedIn group was created  
• The Platform HNO starts the Gaming consisting of several projects such as ‘Walk around the block’ and ‘Virtual Patient’  
• Because of financing problems the exercise program B!M has to stop. All other activities still go through |
before-and-after study consisting of a web-based questionnaire for professionals working in Utrecht Overvecht and in 2 control neighbourhoods.

Table 2. Socio-demographics in 2008

<table>
<thead>
<tr>
<th>Socio-demographics in 2008</th>
<th>Intervention neighbourhood</th>
<th>Control neighbourhoods</th>
<th>Municipality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Utrecht Overvecht</td>
<td>Utrecht Northwest</td>
<td>Utrecht Zuidwest</td>
</tr>
<tr>
<td></td>
<td>(only Ondiep / Zuilen-East)</td>
<td>(only Kanaleneiland)</td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>31.056</td>
<td>40.550</td>
<td>15.695</td>
</tr>
<tr>
<td>% 65 years or older</td>
<td>17.1%</td>
<td>11.1%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Niet-westerse allochtonen</td>
<td>42.5%</td>
<td>24.9%</td>
<td>70.9%</td>
</tr>
<tr>
<td>uitkeringsontvangers</td>
<td>21.2%</td>
<td>15.9%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Komt niet rond</td>
<td>9.7%</td>
<td>Unknown</td>
<td>15.0%</td>
</tr>
<tr>
<td>Met matig of slechte gezondheid</td>
<td>28.1%</td>
<td>Unknown</td>
<td>19.5%</td>
</tr>
</tbody>
</table>


Participants

All health and social care professionals working in Utrecht Overvecht and in the control neighbourhoods of Ondiep/Zuilen East and Kanaleneiland (see table 1) were invited to fill out the online survey, once in 2012 and again in 2013. The invitation included an extensive explanation covering anonymity, reporting, and purpose.

Participants in the qualitative study included members of the Healthy Overvecht Platform and Directors’ Group as well as professionals and speakers involved in the neighbourhood conferences. For the interviews, we purposefully selected respondents for their profession (GP, social worker, etc.) and for being either very or very little involved in the programme (see table 2). The first author approached professionals in the Platform; further respondents were found through the ‘snowball’ method.
Data collection and analysis

Questionnaire

The questionnaire sought to measure the attitude of professionals towards population health orientation, generalism and coaching. In developing the questionnaire, we used data from Overvecht and a similar programme in a deprived neighbourhood in Amsterdam. Items for the questionnaire were informed by literature searches using MEDLINE (PubMed) and Google Scholar; new items were drafted in case they were not available in existing questionnaires. The 3 areas of expertise were operationalized as follows: population health orientation consisting of 1) preventive action, 2) valuing knowledge of the (social) determinants of health in the neighbourhood, and 3) valuing knowledge of the neighbourhood’s facilities; generalism consisting of 4) holistic attitude and 5) consideration of social context; and coaching consisting of 6) coaching towards self-management. Greater detail on the formulation of the questionnaire can be found elsewhere [28].

For example, a question gauging professionals’ holistic attitude asked: “When patients are treated by several professionals at the same time, do you make sure that your treatment is compatible with that of other professionals?” A question gauging professionals’ attitude towards coaching asked: “Do you ask patients what they themselves can do for their own healing/health?” There were five possible answers, ranging from “Hardly ever” to “Almost always”.

In the statistical analysis, the independent variables were ‘intervention neighbourhood’ and ‘control neighbourhood’, and the year in which the questionnaire was filled out, either 2012 (t0) or 2013 (t1). The dependent variables were the extent to which professionals practiced population health orientation, generalism, and coaching.

Interviews, field observations, conversations, dialogue sessions and documentary review

Table 3 provides an overview of our methods in the collection and analysis of qualitative data. For the field observations, an extensive explanation (covering anonymity, reporting, purpose) was given at the first meeting. All professionals
Table 3. Data collection

<table>
<thead>
<tr>
<th>Data collection Methods</th>
<th>Period</th>
<th>N</th>
<th>Participants</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field observations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>meetings</td>
<td>January 2010 – December 2011</td>
<td>11</td>
<td>Researcher JB (as non dependent observer)</td>
<td>The researcher took notes. Manual qualitative content analysis. (Analysis done on partnership development within the Platform and Director Group between the different involved organizations, concepts used, and the activities that were initiated at these meetings).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Project leaders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Members of the Platform HNO</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Members of the Director Group HNO</td>
<td></td>
</tr>
<tr>
<td>Field observations:</td>
<td>February 2010 – December 2011</td>
<td>5</td>
<td>Researcher JB</td>
<td></td>
</tr>
<tr>
<td>neighbourhood conferenc</td>
<td></td>
<td></td>
<td>Project leaders</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Professionals from different organizations within the neighbourhood</td>
<td></td>
</tr>
<tr>
<td>Interviews en</td>
<td>October 2009 – June 2012</td>
<td>15</td>
<td>Researchers JB and TP</td>
<td>Semi-structured qualitative interviews with professionals.</td>
</tr>
<tr>
<td>conversations</td>
<td></td>
<td></td>
<td>Project leaders</td>
<td>Conversations with project leaders and key participants</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stagaire (student)</td>
<td>Interviews and conversations were recorded and ad verbatim transcribed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Professionals</td>
<td>Manual qualitative content analysis.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Key participants</td>
<td></td>
</tr>
<tr>
<td>round table meetings</td>
<td></td>
<td></td>
<td>Project leaders and directors of Agis and dept. of Public health Utrecht</td>
<td>Round table meetings: notes and minutes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Members of the round table (Agis, dept. of Public Health of the municipality of Amsterdam and dept. of Public Health of the municipality of Utrecht, local authority of Amsterdam)</td>
<td>Manual qualitative content analysis.</td>
</tr>
<tr>
<td>Conference</td>
<td>November 30th 2010</td>
<td>1</td>
<td>Researchers JB, KS and TP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Project leaders and directors of Agis and dept. of Public health Utrecht</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Members of the Platform and Director group HNO and professionals</td>
<td></td>
</tr>
</tbody>
</table>
and directors present gave their verbal informed consent. Ethics approval was not required under Dutch law.

All 11 respondents gave their verbal informed consent for the interviews. Ethics approval was not required under Dutch law. The respondents were contacted by phone; all interviews took place at the respondent’s workplace. The interviews were conducted in 2010 and 2012 and lasted 40-60 minutes. An extensive explanation at the start of the interview covered purpose, reporting, recording, and anonymity. The interviews were recorded and transcribed ad verbatim in their original Dutch; excerpts in this article have been translated and edited for clarity.

The interviews addressed the attitudes, behaviours, tools, and experiences of professionals as they sought to provide better integrated care to the Overvecht population. The topic guide was continually revised in light of emerging findings. We coded the interviews using framework analysis, looking for similarities and differences in descriptions of the development of the three areas of expertise and how these related to the intervention’s activities.

We also studied documents including written statements, websites, evaluations, and presentations.

**Results**

**Quantitative findings**

The response rate was 33% at t0 (in 2012) and 36% at t1 (in 2013). Forty-six professionals in the intervention neighbourhood and 40 professionals in the control neighbourhoods responded at t0. At t1 this was 74 and 43. Background information on the respondents is presented in table 4.

At both time points, over 60% of respondents in the intervention neighbourhood were already working there at the beginning of the intervention in 2008, two-thirds of them since at least 2005. Approximately 20% of respondents from the total sample had been working in the same neighbourhood for 25 years or more. The spread of respondents – over professional groupings, over intervention and control groups, and over time – is uneven. ‘Social care’ professionals, including social workers, consultants for the elderly, and school social workers, were
In need of a collaborative response

Our analysis revealed hardly any changes in respondents’ attitudes towards population health orientation, generalism or coaching between t0 and t1. Professionals in the intervention area showed greater positive changes in ‘valuing knowledge of (social) determinants of health in the neighbourhood’ than professionals in the control areas. At t0 the score in the intervention area was lower (-1.066)

Table 4. Characteristics of sample

<table>
<thead>
<tr>
<th>n (percentage of total group respondents that completed the questionnaire)</th>
<th>Intervention neighbourhood</th>
<th>Control neighbourhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t0</td>
<td>t1</td>
</tr>
<tr>
<td>Number of respondents who completed the questionnaire</td>
<td>46 (100%)</td>
<td>74 (100%)</td>
</tr>
<tr>
<td>Number of respondents in each professional group:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GP</td>
<td>7 (15%)</td>
<td>8 (11%)</td>
</tr>
<tr>
<td>Social care</td>
<td>18 (39%)</td>
<td>25 (34%)</td>
</tr>
<tr>
<td>Exercise</td>
<td>10 (22%)</td>
<td>18 (24%)</td>
</tr>
<tr>
<td>Nurse</td>
<td>5 (11%)</td>
<td>12 (16%)</td>
</tr>
<tr>
<td>Case manager</td>
<td>6 (13%)</td>
<td>11 (15%)</td>
</tr>
<tr>
<td>Number of respondents that have worked in their present working area:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; for 5 years</td>
<td>15 (33%)</td>
<td>23 (31%)</td>
</tr>
<tr>
<td>5 &lt; 9 years</td>
<td>12 (26%)</td>
<td>14 (19%)</td>
</tr>
<tr>
<td>9 – 10 years</td>
<td>2 (4%)</td>
<td>8 (11%)</td>
</tr>
<tr>
<td>&gt; 10 years</td>
<td>17 (37%)</td>
<td>29 (39%)</td>
</tr>
<tr>
<td>Number of respondents that have had their occupation for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 4 years</td>
<td>3 (7%)</td>
<td>7 (9%)</td>
</tr>
<tr>
<td>4 &lt; 8 years</td>
<td>14 (30%)</td>
<td>11 (15%)</td>
</tr>
<tr>
<td>8 &lt; 25 years</td>
<td>16 (35%)</td>
<td>34 (46%)</td>
</tr>
<tr>
<td>&gt; 25 years</td>
<td>13 (28%)</td>
<td>22 (30%)</td>
</tr>
<tr>
<td>Number of respondents that work in a multidisciplinary cooperative</td>
<td>32 (70%)</td>
<td>61 (82%)</td>
</tr>
<tr>
<td>Number of respondents working in both the intervention neighbourhood and (one of the) control neighbourhood(s)</td>
<td>At t0 this was 13 (28%)</td>
<td>At t1 this was 27 (36%)</td>
</tr>
</tbody>
</table>

the largest group (slightly over 30%). ‘Case managers’ (approximately 10%) were the smallest group.
than in the control areas, while the positive change is greater (1.504 extra) at t1 than in the control areas. The positive change is also greater for ‘valuing knowledge of facilities in the neighbourhood’ and ‘preventive action’. These differences, however, were not statistically significant. For ‘holistic attitude’, ‘consideration of social context’ and ‘coaching (towards self-management)’, we observed a decline in the intervention area compared to the control areas, although again the differences were not statistically significant.

**Qualitative findings**

The interviews confirmed our findings from observations and document analysis. Below we distinguish between the intervention’s management and its activities on the ground.

*I. programme management*

The Platform, the Director’s Group, and the continuous facilitating by project leaders provided a solid structure in which the renewal of expertise could be promoted. The intervention’s management emphasized: 1) learning by doing; 2) working bottom-up with direct application in practice; and 3) professionals enjoying discretion and support to experiment.

In interviews conducted in 2010, respondents emphasized the difficulties of managing patients with multiple problems:

“All general practitioners in the neighbourhood in some way feel this in their body, that it is a difficult job. I think all general practitioners in the Netherlands experience this, but here there is much more pressure.... You notice it here sooner, because there is more complexity, more pathology, and people live in unhealthier surroundings. If you look at the figures from the municipality, at ‘experienced health’, you see this.”

(U10C, general practitioner)

While there were ideas about potential solutions, these were not yet very specific:

“There are simply some clients who definitely need a joint, collective approach.... It is
‘Intercept’ is the mean of the control group at t=0  
‘Time’ is the change in mean of the control group at t=1  
‘Treat’ is the difference in mean of the treatment group with regard to the control group at t=0  ‘Treat*Time’ is the difference in change of mean for the treatment group with regard to the change in mean of the control group at t=1

Table 5. Changes in expertise in intervention versus control groups: mixed models

<table>
<thead>
<tr>
<th>Integral expertise</th>
<th>Parameter</th>
<th>Estimate</th>
<th>Std. error</th>
<th>Sig.</th>
<th>95% Confidence interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
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<tr>
<td><strong>Population health orientation</strong></td>
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<td></td>
<td></td>
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<td>.043</td>
<td>1.809691</td>
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</tr>
<tr>
<td></td>
<td>Time</td>
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<tr>
<td></td>
<td>Time*Treat</td>
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<td>.051</td>
<td>-.008657</td>
<td>3.017500</td>
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<td>Valuing knowledge of facilities in the neighborhood</td>
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<td>1.614798</td>
<td>.068</td>
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<td>34.848569</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time</td>
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<td>.818363</td>
<td>.487</td>
<td>-2.183589</td>
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<td>Treat</td>
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<td>Time*Treat</td>
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<td>.275</td>
<td>-.477127</td>
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<tr>
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<td>Intercept</td>
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<td>.071</td>
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<td>-2.297083</td>
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<td></td>
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<tr>
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<td>.000</td>
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<tr>
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<td>Time*Treat</td>
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very important because you see that, at least with the people here in Overvecht, that there are problems in many areas… lots of clients are in a circle.”

Interviewer: “A circle of what?”

“Of both physical and mental complaints which are sometimes, very often, connected to each other, and if you look at it jointly, it is first enlightening and second you have your noses pointed in the same direction, and also what the client wants and is able to do…” (U10E, social care worker)

Our respondents’ focus later shifted from the neighbourhood’s problems to how the intervention was encouraging them to develop their expertise:

“Sometimes there are conferences that we organize ourselves within ‘Healthy Neighbourhood’. We had a small conference here on ‘How do you manage, looking through different pairs of glasses’ [the neighbourhood conference had the title ‘Vague complaints, clarity together’ and the notice displayed several pairs of glasses]. What do you see looking at a patient through a different pair of glasses? And at this point you see Overvecht is starting to organize things by itself. The skills and the knowledge and the course of study…. There is a lot of connecting, a lot of activity here. Things are being shared during lunch: how is the exercise programme, how are things going with the consultation?”

Interviewer: “Do you mean only here at the centre or also elsewhere?”

“Also elsewhere. There is an expression: ‘Health and well-being are contagious!’ I like that expression. So it does get propagated, it does get connected. In Overvecht there are a number of people who in a way are the founders, but are also still active and enthusiastic…. It is about thinking differently, looking at health from another perspective. And you see that socially, you are a coach at a certain point, you see more and more coaching…” (U12J, physiotherapist)

Respondents stated that different professionals have their own strengths and that
their joint efforts enabled them to learn from each other. They also mentioned that the joint effort is good for morale:

“You make each other better and I think that is really an important goal of our way of working. You eventually start broadening your tools yourself, when you realize that I can deliberate with that colleague, who tackles things in such a way, and… look, you get better at it yourself too. If you are on your small island, you don’t have that. So I think that is an important added value of working together…. Because it is also highly appreciated and encouraged. So I think once you work together and you notice that you get positive feedback, it tastes like more, I always say.” (U12I, social-psychiatric nurse)

“And behaviour therapy, or mindfulness, or merely approaching people differently, people simply speaking a different language so they will not be set up against each other, and slowly this leads to results and… reduced costs…. But that should be investigated in the long run. It is also a kind of collaboration. And collaborating means being oriented in the same direction, thinking alike, these are all competencies for collaboration that… are important.” (U12J, physiotherapist)

To develop their expertise, respondents felt it essential to work in an environment that encouraged them to use their new skills, a workplace that gave them ‘room to rummage about’ [29].

II. Activities within the programme

The intervention’s activities aimed to develop professional expertise in three main areas: population health orientation, generalism, and coaching.

Population health orientation
The orientation towards population health developed largely in accordance with the intervention’s original theory. Professionals within the Platform initially experienced difficulties departing from their service-orientation. Discussions first focused on how to get neighbourhood
residents to use their services. Patients would be referred, but would often not follow through. An early suggestion was the creation of a new physical location in Overvecht to gather all services under one roof. The One Language and Project Vitamin D projects (see table 1), however, suggested that the solution was not another service, but a better understanding of the (causes of) problems and the more effective coaching of patients through collaboration with their professional peers. Members of the platform saw first-hand that the needs of the population were best met through joint efforts based on a shared vision on how to manage patients with multimorbidity (see figure 1). Discussions within the Platform moved towards seeking solutions for population health needs – a new way of thinking shared with a larger group of professionals at the First Neighbourhood Conference in 2010.

Box 1.

Figure 1. Short version of the area-based programme's viewpoint on managing patients with multimorbidity in the context of deprivation, as it was in 2012

Mission Healthy neighbourhood Overvecht:

To correspond to the needs and self-management

Professionals take it as starting-point that all inhabitants, also the vulnerable ones, are able to employ self-management and they take into account that self-management may be (temporarily) limited. Professionals carefully and critically consider what their own efforts have to be in order to correspond to the needs of the inhabitants and to what the inhabitants want, without doing to much.

Working together works better

‘Working together works better’ is the philosophy that Healthy Neighbourhood Overvecht has adopted, both on strategic and operational level. It is about working differently, organizing differently, working together different-
ly, having a different relationship between patient-professional, etc. If necessary professionals will also involve professionals from other sectors such as education, housing, activation, debt services.

$I&C \rightarrow H&H$

It is the ambition within Healthy Neighbourhood Overvecht to change the focus on Illness and Cure ($I&C$) to Health and Healthy behaviour ($H&H$). Involved partners attune what they offer, the attitude of the professionals and of the organisation to this ambition.

Source: A leaflet from Healthy Neighbourhood Overvecht for hand out February 2012

Professionals developed their population health orientation by realizing that their peers were experiencing the same problems and by joining health promotion activities at the neighbourhood level. A skit performed at the First Neighbourhood Conference featured a patient with several medical and social problems presenting vague complaints and a GP who had tried all the standard approaches without success. Professionals in the audience recognised the situation. They grew increasingly aware that the problems they faced individually were common in the neighbourhood, and that given their complex causes, no single professional could solve them alone. More professionals became involved in health promotion activities with projects such as *Healthy Information Table* and *Walk around the Block*.

**Generalism**

The expertise of generalism also developed in accordance with the intervention’s original theory. Respondents developed ways to observe and approach patients and to take responsibility beyond their traditional domains.

In *El Kouaa* (see table 1), one of the intervention’s early projects, professionals learned how to identify and approach patients with accumulated health and social problems. By discussing their uncertainties with peers, they grew more con-
Renewing the expertise of health and social care professionals

fident in approaching patients and referring them to services such as *El Kouaa*. The HAPPINEZZ project (see table 1) explored the next step: whether certain problems experienced by patients may be causing or complicating the treatment of other complaints. The DASHBOARD tool was developed by GP Jaqueline van Riet to help professionals gain an overview of a patient’s (interacting) problems, facilitating communication between GPs and patients and between professionals on who must take the lead [30].

The realization that patients’ experiences of health are influenced not only by the presence of disease but also by mental and/or social problems led to greater efforts to unravel what is going on in patients’ lives. Professionals explained that they take time to learn about patients’ medical complaints and coping strategies, family histories and circumstances, work, friendships and debts. They try to ‘see the bigger picture’:

“I’m also a nurse, so I have knowledge of how the human body works, so with certain complaints alarm bells go off like ‘Okay, was the thyroid checked well? Could this gentlemen have diabetes?’ I do think it is important to have contact about this, also with the GP. Look, the GP of course knows much more about it than I do, but he has his blind spots, in some moments. If you are busy, or you think it is all due to stress…. The whole context, of body, mind and environment, I always try to combine these. From a holistic view on people, so to speak.” (U12I, social-psychiatric nurse)

Respondents also encountered problems they (at first) could not solve alone. Over time they came to appreciate that a holistic attitude also implies good stewardship – taking responsibility for more than the patient’s initial complaint – and that failing to address underlying causes would only lead to treating symptoms:

“Healthcare is still offered in a too fragmented way…. Do treatments really result in better quality of life? Or better health? I think the care that is being offered now is very much the treatment of symptoms. Band aid care…. I hope that healthcare, that services become more or less integrated.” (U10A, physiotherapist)

Respondents gave several examples of the tools they use, acquired either during
In need of a collaborative response

their education or in continuing education courses, useful for unravelling patients’ problems and for coaching them. The projects in which the new tools were developed – such as SOLK and HAPPINEZZ (see table 1) – contributed to a new shared way of communicating and collaborating. Respondents gained “new expertise in cooperation” (U12J, physiotherapist) and experienced “the power of working together” (U12M, social worker), of having their “noses pointed in the same direction” (U12I, social-psychiatric nurse). In general, our respondents spoke positively of the neighbourhood intervention’s many activities.

Coaching

The expertise of coaching did not quite develop according to the intervention’s original theory. Rather than the emphasis on patients’ knowledge, skills or motivation to pursue healthier behaviour, the process of learning was a more self-reflective one in which professionals grew increasingly aware of the unintended consequences of their traditional attitudes which kept patients from taking responsibility for their own health, well-being and healing.

Patients expecting professionals to solve their complaints was identified as a problem at the outset of the intervention:

“I recently read a report with figures on whether it is a serious problem that more [care] is consumed in this neighbourhood. What I understood is that it is not more than in other neighbourhoods. But I can hardly believe this myself because, at least in the patient population I see, there are still many patients who are focused on illness and cure, not on behaviour and health.” (U10A, physiotherapist)

The plan of action targeted the tendency of professionals to solve problems for their patients rather than with them. The intervention’s mission to shift the focus of care from illness and cure to health and healthy behaviour informed the development of coaching expertise. This was particularly noticeable in HAPPINEZZ and SOLK (table 1). Respondents explained that while they remained responsible for the needs of their patients by providing or referring them to the necessary care, they now do so after discussing what actions patients can take themselves. Tools to ‘activate’ patients included asking them to give a grade for their own
health and then asking them what they could do to improve it. A recurrent term was ‘[placing patients in] an active state’. A GP who had developed a step-by-step method to help patients take control of their lives explained:

“I always do this on a sheet of paper, always. [She gets a sheet of paper and draws a cross. The quadrants represent the four dimensions of the patient.] Body, mind, social relations, and social conditions…. I checked and your complaint does not have a medical cause, so there’s nothing here right now [points to the body quadrant]. So the other three are left. Do you have any idea? It is not about what is going wrong socially. At this point people start observing themselves and looking at their social conditions: ‘Could it be my job?’, ‘Could it be my living circumstances?’ It is not about the details, but about the relationships between them. So I do not get into the elements, but into the relationships between them…. Then it is social care, or if it is not clear at all, maybe an exercise consultation could be useful, because you get started with your body and hopefully find out something. So it really depends on where the patient is…. Without [activating the patient] a medical referral is useless. Because then he will go to the physiotherapist, with the same expectation: ‘Make me healthy, I have to get a massage here… says the GP’. So I have wiped the ’I’, that self-awareness, clean and now here stands a person who realises that he is responsible for his own path in life. Only I don’t use such words.” (U12H, general practitioner)

“The added value is that you remain enthusiastic towards each other as colleagues. You need tools to be able to interact well with someone…. We speak the same language, use the same concepts…."

Interviewer: “In contact with clients?”

“Yes, we keep on setting them in the active state, which is of course important when you go from one therapist to the other….” (U12J, physiotherapist)

Respondents emphasized that patients in an ‘active state’ will more likely understand what can be expected from a therapist or service and what they can do for their own health and well-being.
**DISCUSSION**

This study examined how health and social care professionals renewed their expertise within an intervention to provide integrated care in a deprived neighbourhood. The intervention’s management was based on the following principles: 1) learning by doing, 2) working bottom up with direct application in practice, and 3) professionals being given room to experiment. The development of expertise focused on 3 inter-related areas: population health orientation, generalism and coaching, as well as the collaboration and communication skills necessary to practice them.

While the development of expertise was mostly in accordance with the theory underpinning the intervention, there were exceptions where daily reality influenced developments. Previous studies [e.g.31] have pointed to the challenges of managing patients with multimorbidity in deprived contexts. Professionals often have difficulties understanding and diagnosing the complaints patients present [32, 33]. The intervention encouraged new ways of communicating with patients and being sensitive to the realities of their everyday lives. Solutions had to be found for the fragmentation of available services, but also for patients being unable to get help or support themselves. Expertise in *generalism* was therefore more than gaining a holistic attitude but entailed ‘good stewardship’. Another challenge for professionals is that co-morbidity influences the capacity of self-management [34]. *Coaching* thus aimed to ‘activate’ patients by giving them insight into their own possibilities and responsibilities, and by encouraging them to experience success through small tasks [cf. 23]. Previous studies on working in deprived neighbourhoods have referred to the ‘exhausting’, ‘demoralising’, ‘overwhelming’, and ‘soul destroying’ nature of such work [31]. The intervention’s emphasis on *population health orientation* helped professionals feel that they were not alone, that they were facing the challenges of multimorbidity together with other professionals.

We specifically examined how the intervention contributed to the renewal of expertise among professionals. The programme management challenged professionals to arrive at solutions together. This was facilitated by the presence of influential professionals capable of ‘thinking out of the box’ and sharing their findings with enthusiasm. The room and support given to experiment was seen as crucial,
as was the widely supported mission of the overall intervention which brought cohesion to its many activities. The intervention’s ‘total solution’ – encompassing primary care, prevention and social care – led to a way of working that appeared sensible and effective as it prevented ‘band aid care’ or the treatment of symptoms instead of causes.

The management of Healthy Neighbourhood Overvecht was able to unite the different health and social care organisations behind a common goal. But in contexts where there is greater competition between organisations, other measures might be needed to gain their commitment. Future programmes may find insights from research on networks (e.g. Lasker et al. 2001) useful to understand the short and long-term advantages and disadvantages for organisations to take part in neighbourhood interventions. Nor should the time necessary for change be underestimated; Healthy Neighbourhood Overvecht developed over many years and continues to evolve. Prior circumstances in Overvecht were also favourable for achieving cooperation.

The study’s main limitation concerns its data on the intervention’s impact on actual expertise, gleaned through a survey and qualitative interviewing. Whereas the interviews suggested positive developments in the three core areas of expertise, this could not be confirmed in the survey. First, we do not know whether survey respondents in 2012 and 2013 were the same people; we therefore cannot eliminate possible confounders. Nor do we have sufficient data on group characteristics (such as age, gender) to try and ‘repair’ this problem. While the (absence of) changes in expertise may reflect the distribution of respondents across professional groups, the numbers in each are too small to test in stratified analyses. Second, the questionnaire focused on attitudes, whereas the interviews addressed tools and behaviour as well. Managers did not oblige professionals to develop their expertise following the theory that initially informed the intervention. Although the questionnaire was created together with project leaders, the kinds of expertise the intervention sought to develop were themselves a moving target.

Conclusion
Our findings suggest that neighbourhood-level interventions to provide integrated care to deprived populations can strengthen professionals’ expertise in po-
pulation health orientation, generalism and coaching, as well as the communication and collaboration skills necessary to employ them. Professionals became more adept at understanding the common causes behind patients’ complaints, unravelling their multiple problems, and encouraging them to be more active in managing their own health and well-being. The renewal of professional expertise was facilitated by management that emphasized learning by doing, working bottom-up with direct application in practice, and professionals enjoying discretion to experiment. The intervention’s widely supported mission brought cohesion to its activities and united the neighbourhood’s professionals. Whether this can lead to more adequate responses to multimorbidity and more effective integrated care arrangements in other contexts needs to be further researched.

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