

# **SUMMARY REPORT**

## **COST-EFFECTIVENESS PROJECT**



### **Overview partner projects**

**City of Aalst (BE)**

**City of Turnhout (BE)**

**University of Agder (NO)**

**University of Abertay (IE)**

**Värmland County Administrative Board (SE)**

**UC Syddanmark (DK)**

**Province of Drenthe (NL)**

# Cost-effectiveness report – City of Aalst

## Interreg North Sea Region – In For Care project

### Introduction

The city of Aalst chose the project “informal care café- De Palto” to examine the cost-effectiveness of this initiative. During this cost-effectiveness measurement period from November 2018 till September 2019, it was the objective to measure the impact of the project “De Palto” on the carrying capacity of the participating informal caregivers. Due to a lack of appropriate data and the implementation of the methodology, the city of Aalst needed to change the analysis strategy. This resulted in a shift towards examining the attractiveness of the two different types of “De Palto” sessions and their cost-effectiveness. These analysis results can be used to determine the topics of future sessions.

### Project description

The city of Aalst (Belgium) wants to support informal carers. Together with !Drops, a social innovation agency, the local service centres and a core group of informal carers, the concept of an informal care café “De Palto” was developed. This is a travelling café in our three local service centres, each 1<sup>st</sup> Tuesday of the month, alternately in the morning, afternoon and evening. It provides a place where all kind of informal caregivers are welcome to meet people in similar situations, exchange stories and experiences, in a relaxed atmosphere. Since most of the caregivers do not recognise themselves as a ‘caregiver’, these cafés are relevant to raise awareness in a low-threshold way on the topic. Moreover, ‘De Palto’ consists of recreation sessions but also informative sessions, with an internal or external speaker, for example about the informal care financial incentives, about short-stay accommodations or specific support. The core group of caregivers are seen as the ‘ambassadors’ of the café, they are part of the meetings to discuss about the next topics of the café.

### Objectives

The city of Aalst wants to offer innovative solutions to support informal caregivers.

Sub objectives;

1. Discover needs and wishes of informal caregivers
2. Increase carrying capacity and reducing the burden of the informal caregivers
3. Increase knowledge
4. Coming to possible innovative solutions to support caregivers
5. Bringing informal caregivers together on a specific topic/occasion

The cost-effectiveness measurement was originally focused on the second sub-objective “Increase carrying capacity and reducing the burden of the informal caregivers”. More specific about the intention of this project to increase the carrying capacity of the informal caregivers by organizing the cafes.

Later in this report, it becomes clear that there has been a shift from the second sub objective to the fifth sub objective because of measure methodology issues.

## Costs & effects of the project

Direct effects (overview)	<ul style="list-style-type: none"> <li>• Increase carrying capacity</li> <li>• Reduce the burden</li> <li>• Experienced support</li> <li>• Increase knowledge about caregiving relevant topics and support</li> <li>• Social contact fellow sufferers</li> </ul>
Indirect effects	<ul style="list-style-type: none"> <li>• Less loneliness</li> <li>• Increase quality of life</li> <li>• Contact fellow sufferers</li> <li>• Increasing social cohesion</li> </ul>
Direct cost(s)	<ul style="list-style-type: none"> <li>• Personnel costs</li> <li>• Materials (e.g. promo materials)</li> <li>• Catering</li> <li>• Guest speakers/teachers/...</li> </ul>

The total costs used for the analyse includes the preparation time and related preparation cost.

## Measurement instruments

The initial measurement is being evaluated with an instrument to measure the carrying capacity, which is the “Caregiver Strain Index (CSI)”.

Indicator: Caregiver Strain Index (CSI)

The Caregiver Strain Index is a screening instrument which can be used to identify strain of carers, assess their ability to go on caring and to identify areas where support may be needed. Strain was defined as ‘those enduring problems that have the potential for arousing threat’.

13 questions are provided, with answers being Yes or No. The instrument can be either answered by the carer or with staff asking questions in an interview situation. Time frame for administration is

approximately 5 minutes. The score is determined by adding up the “Yes” answers. A score of 7 “Yes” answers or greater indicates a high level of stress.

The initial idea was to compare the CSI results of the first Palto with the CSI results of the last sessions. Therefore, the participants had to complete the questionnaire each session..

Unfortunately, the available data is not appropriate to execute the analysis. So the city of Aalst decided to change the analysis base to another sub-objective (5).

The new measurement instruments to evaluate the attractiveness differences between informative and more relaxing sessions are the subscription and presence lists of each Palto session.

The costs are followed up in financial accounts.

As a supplement on the data collection, 6 semi-structured interviews with informal caregivers who frequently visited ‘De Palto’ were completed. The interview consisted of two main questions: opinion and satisfaction about knowledge sharing and information transfer during the cafes + experienced support of informal carers about “De Palto”.

## Measurement period

The measurement period starts from November 2018 till September 2019. The cost data period started in May 2018, because the preparation costs are included in the cost-effectiveness analysis.

## Effect measurements

The quantitative effect measurement about the extent of increasing carrying capacity of the informal caregivers is executed by the output indicator “Caregiver Strain Index”. This indicator is compared to the costs.

Indicator: Caregiver Strain Index (CSI)

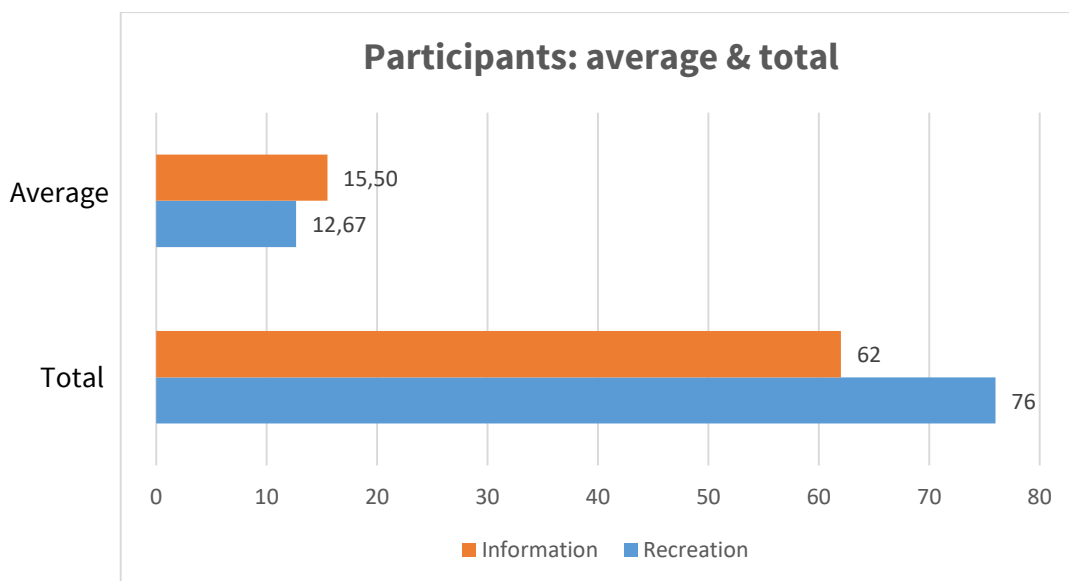
The Caregiver Strain Index is a screening instrument which can be used to identify strain of carers, assess their ability to go on caring and to identify areas where support may be needed. Strain was defined as ‘those enduring problems that have the potential for arousing threat’.

This index is designed by the New York University Robinson, Division of Nursing, The Hartford Institute of Geriatric Nursing. The index is include in attachment.

Due to a lack of the necessary data and a delay of implementation of methodology, the city of Aalst was forced to change the measurement plan. Despite this, during the measurement period 28 CSI’s have been collected, whereof 21 CSI’s were completed. It can be shown that 12 out of 21 caregivers are overburdened. This represents just simple overview of the average carrying capacity of our visitors in the informal care café. See below for the added conclusions of the qualitative semi-structured interviews.

Instead of measuring the carrying capacity of informal caregivers, the city will measure the **difference between “Informative Palto sessions” and “Recreation Palto sessions”**. This measurement framework results from sub-objective “Bringing informal caregivers together on a specific topic/occasion”. The difference will be measured based on attractiveness (amount of participants) and costs specific related to the two type of sessions.

Every Palto session has another perspective and main topic. The topics can be divided into two types: informative (e.g. short-stay accomodations) and recreation (e.g. summer walk).



The measurement results in an average participants amount of 15,50 for informative sessions and 12,67 for recreation sessions. Despite that the total absolute amount of recreation sessions participants (76) is higher than informative sessions (62). The nature of this contradistinction lays in the amount of organised events: 4 informative, 6 recreation.

Direct costs: figures

Cost	EUR
Catering	400,00
Personnel	8.130,65
Drinks	483,00
Materials (promo)	840,48
Speakers	572,65
<b>Total cost</b>	<b>10.426,78</b>
<b>Recreation sessions</b>	<b>6.461,33</b>
<b>Information sessions</b>	<b>3.965,45</b>

The costs are mostly similar for both type of sessions. Despite the cost type “speakers”, this is exclusively dedicated to the recreate sessions.

Analyse of the effects and costs:

Based on the graphic we could conclude that the informative sessions had more impact in attracting people towards these activities, translated in and based on average amount of participants.

If we compare this with the costs with the amount of participants of the types of sessions:

Recreation session

85,02 EUR / participant

Informative session

63,96 EUR / participant

## Evaluation

### Quantitative conclusions

The measurement results in an average participants amount of 15,50 for information sessions and 12,67 for recreation sessions. Despite that the total absolute amount of recreation sessions participants (76) is higher than information sessions (62). The nature of this contradistinction lays in the amount of organised events: 4 information, 6 recreate.

The “per event”/average figures show that – based on the perspective of sub-objective 5 – the information sessions had more impact (+2,83).

The costs were 10.426,78 EUR in total. More than 60% of these costs were related to the recreation sessions.

If we put the amount of participants in relation with the costs involved for the two types of sessions separately, follow comparison can be made:

Recreation session

85,02 EUR / participant

Information session

63,96 EUR / participant

We can conclude that the information sessions were more effective in terms of average participants. In addition, **the information sessions showed to be also more cost-effective than the recreation sessions. The information session needed 21,06 EUR of 24,77 % less investment to reach and attract a participant/informal caregiver.**

### Lesson learned

- The decision of our methodology was made too late. This has had an impact on our data collection and results. Furthermore, the café was developed together with a social innovation agency, who also had a large survey including the CSI. The informal care café has to be a relaxing moment, and not with too many questionnaires. This resulted in some miscommunication and mistakes in data collection. Furthermore, there was a difference in our visitors each Palto session, some of them were coming to all of the three locations, others only in 1 local service centre. This made is

impossible to make a comparison in CSI and link the evolution with participating in the Palto café's.

## Qualitative conclusions

qualitative semi-structured interviews (6 caregivers)

1. Knowledge sharing / information transfer
  - All caregivers are very satisfied about the informative sessions and speakers. There seems to be a need for accessible and comprehensible information. All of the cafés were interesting in a certain way. The timing of about 30 min presentation is good.
  - Someone even suggested that popular topics could be repeated in a later café. It is also very positive that the topics of the sessions are chosen by caregivers themselves. It is a very approachable way to get to know new things and have the possibility to ask questions.
  - Caregivers do like the approach during the café's with presentation and handouts. So they can write something down and read it later again at home, or pass the information on to others
2. Experienced support
  - All caregivers would recommend De Palto, because they think it breaks the daily routine and gives you a relax feeling to go home.
  - It was the most mentioned that social contact and spend some time with people in a similar situation is a good thing. They are all happy to meet new people. Even besides the café, the new contacts are maintained. Social contact is for all interviewed caregivers the most important way in which they experience support. This is followed by knowledge and relaxation. Someone mentioned that she felt more motivated because of this increased knowledge. Someone else said she would now ask help from other caregivers also.

## Success factors/limitations

- Personal contact or invitation is a success factor to convince people to join
- The evening edition was initially to reach the working caregivers, but not many visitors so it was decided to replace this also to a café in the morning
- Transport is a limitation for some caregivers to get to our café
- There is a need to strengthen the café feeling and group feeling, which could be a result of the switching location each month. Furthermore it works to have some time to talk to each other before the speaker starts to strengthen the café feeling.
- Another success factor is a warm welcome in the café and each time a small explanation of the concept and content of the café. In one local service centre, there are two volunteers responsible to welcome everyone and serve coffee, which really works.
- To end, food and drinks do help to make your café more attractive.

## De Palto mixed method

Quantitative

- 28 CSI's (21 usefull and 7 incomplete)
- 12 out of 21 informal carers are overburdened
- Most surveys CSI conducted between January and August 2019

#### Qualitative

- 6 semi-structured interviews conducted to gauge : opinion and satisfaction about knowledge sharing and information transfer during the cafes + experienced support of informal carers about De Palto
- Quarterly stakeholders meetings for better collaboration for supporting informal carers in Aalst – 1 planned in October

### Attachment 1: caregiver strain index (csi)

#### Caregiver Strain Index (CSI)

I am going to read a list of things that other people have found to be difficult. **Would you tell me whether any of these apply to you?** (GIVE EXAMPLES)

	Yes = 1	No = 0
Sleep is disturbed (e.g., because . . . is in and out of bed or wanders around at night)		
It is inconvenient (e.g., because helping takes so much time or it's a long drive over to help)		
It is a physical strain (e.g., because of lifting in and out of a chair; effort or concentration is required)		
It is confining (e.g., helping restricts free time or cannot go visiting)		
There have been family adjustments (e.g., because helping has disrupted routine; there has been no privacy)		
There have been changes in personal plans (e.g., had to turn down a job; could not go on vacation)		
There have been emotional adjustments (e.g., because of severe arguments)		
Some behavior is upsetting (e.g., because of incontinence; . . . has trouble remembering things; or . . . accuses people of taking things)		
It is upsetting to find . . . has changed so much from his/her former self (e.g., he/she is a different person than he/she used to be)		
There have been work adjustments (e.g., because of having to take time off)		
It is a financial strain		
Feeling completely overwhelmed (e.g., because of worry about . . . ; concerns about how you will manage)		
<b>Total Score</b> (Count yes responses. Any positive answer may indicate a need for intervention in that area. A score of 7 or higher indicates a high level of stress.)		

Robinson, B. (1983). Validation of a Caregiver Strain Index. *Journal of Gerontology*, 38:344-348. Copyright © The Gerontological Society of America. Reproduced by permission of the publisher.

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# Cost-effectiveness report – City of Turnhout

## Interreg North Sea Region – In For Care project

### 1. Introduction

Although the criminal figures are low in the city, people tend to feel unsafe in specific neighborhoods in Turnhout, and this feeling tends to expand all over the city. This perception of unsafety should be turned around.

Strengthening the social cohesion effects the feeling of security and well-being. Research shows that the neatness/tidiness of a place is a significant factor concerning the feeling of security. But there is another significant indicator: the recognition of faces on the street where you live. You trust who you know, who you have seen before.

We worked about increasing the social cohesion in 3 projects. We concentrated on the area Merodecenter for two projects: 't Geburt and Speelothek, and the third project Buurtmakerij works citywide.

### 2. Project description

#### 2.1. 't Geburt

Video of In for Care in Turnhout: <https://www.youtube.com/watch?v=iJ0udtlan7w>

The start: dealing with 'safety perception'

The environment of Merodelei and the in-site apartments called 'Merodecenter' was the number one on the list of 'places to avoid' in Turnhout, there was a great feeling of insecurity. Issues like litter, dirt, urine(smell) all over the public square, 5 robberies at the local supermarket: these were the conversation topics for the locals (and by extension the inhabitants of the town, and local media).

The civil services, local police and the neighborhood made some agreements:

- the neglected square in front of the apartments, next to the Merodelei was renovated: new sitting equipment was installed like seats, and all was made more cosy using plants and colours.
- in fact the square was not public territory, but in property of the owners of all 115 apartments. The city took responsibility to keep the place clean.
- Installation of new LEDlighting in all the street, which can be dimmed or made brighter

- installation of a camera in direct contact with the police radio room which has a view on the square

The need to reinforce the social cohesion

We noticed that people of the environment 'Merodelei - Merodecenter' barely know each other. The inhabitants are a mixed group of young and old, rich and poor, natives and immigrants, ... There is no uniting behaviour: no neighboring comity like many neighborhoods have in town. There is a merchant association, but not all merchants participate. Social cohesion is low, no initiatives are taken by the inhabitants to get to know each other.

In this project we organize meeting opportunities so people can get to know each other, feel more safe or even getting to help each other in small ways. We try to connect people.

## 2.2. Speelothek

Kids play, kids connect. But kids like to play with toys or games, and like to play with each other. They need room to play.

The Speelothek is like a library for toys and games. People can come and borrow the materials, at a very low (symbolic) cost. Within the opening hours there is the possibility that kids play together in the speelothek. They have to be accompanied by a parent or a carer. Also for them it is an big opportunity to meet each other and get to know one another.

## 2.3. Buurtmakerij

This project facilitates people who want to organize events of projects which unite neighbors and neighborhoods, in a very active way and the same time stimulating initiative. Some examples are a neighborhoodlibrary on the street, a common vegetable garden, ... .

## 3. Project objectives

Within the In for Care project we would like to set 3 goals as a city service, in order as mentioned:

- a) stimulating meeting occasions: aiding/enhancing social contacts between neighbours.  
Measuring: the number of offered meeting occasions, number of people present at these times.
- b. increasing social cohesion: motivating neighbours to organise the community centre themselves

measuring: number of initiatives contacting/involving volunteers or 'co-workers', number of volunteers who present their help, number of hours volunteers actually participate.

c. stimulating neighbours to take care of each other

Measuring: number of times neighbours help each other.

## 4. Costs and effects of the project

### 4.1. Costs

	Costs		Personnel cost		Rent		Totaal	
	2018	2019	2018	2019	2018	2019	2018	2019
't Geburt	301,00 €	645,00 €	7 600,89 €	10 616,33 €	6 000,00 €	4 950,00 €	13 901,89 €	16 211,33 €
Speeltheek	- €	- €	8 512,11 €	9 048,69 €	6 000,00 €	7 050,00 €	14 512,11 €	16 098,69 €
Buurtmakerij	19 903,00 €	10 373,00 €	2 167,45 €	31 839,31 €			22 070,45 €	42 212,31 €

### 4.2. Effects

For the period from January 2018 till July 19 we assembled these facts: number of meeting occasions and the number of visitors/contacts. Per project:

Project	# visitors	#meetingmoments
't Geburt	400	51
Speeltheek	2132	77
Buurtmakerij	1808	30

Direct and indirect effects:

- cooperations between different kinds of civil services, schools, social initiatives and citizens
- qualitative connections and moments/memories that really matter in one's life
- Volunteers (neighbors, inhabitants) helping in 't Geburt and Speeltheek (citizen activation)
- The signal from the city to the neighborhood is very positive. People see and notice that the region is a priority for the city. In the past, this neighborhood had a negative imago, and neighbors tend to blame the city not doing anything about it. The community centre and the PR around it makes people feel 'cared of'.
- Some visitors have come to really meet neighbors with the same interests, in the past they said 'hello' maybe but didn't know each other well. Now they can have interesting conversations, close to home.
- Some people have the feeling to know neighbors better, and to be known better. In case of emergency, they feel that they are going to be helped faster and by someone they 'know'.

- Some visitors have had the chance to practice the language better
- Some people we referred to other services, who can help them as well or better.
- Some people were helped with paperwork, with PC skills, ...

## 5. Effect measurements

These are the effect measurement (output) indicators we will use and compare to the effects we want to achieve.

- Fostering/promoting social interactions between inhabitants of the neighborhood and city.
- Activating citizens to organise activities or meetings (small of big) with neighbors.
- Meeting up with each other and do a little helping if necessary

## 6. Measurement instruments

We keep track of the number of participants and the number of meeting opportunities.

We plan to use a questionnaire (dec 19) to ask the inhabitants of the neighborhood about the effects above.

## 7. Measurement period

All three projects are measured in a consistent way from January 2018 till July 2019. We will keep doing that till December 2019.

## 8. Evaluation

Cost-effectiveness analysis

The measurement will be analyzing the objective “stimulating meeting occasions: aiding/enhancing social contacts between neighbours”. This will be measured by monitoring the amount of participants/visitors for the three projects..

The absolute number of visitors is the highest at the “Speelothek” (2132 visitors), also the highest amount of meetings were organized within the Speelothek. Besides that the costs are the highest in the “Buurtmakerij” (64 282,76 EUR).

To have a bench mark to execute the cost-effectiveness analysis, we will base our analysis to an average visitor number per meeting per project (“ratio”). This ratio will express the relative attractiveness per project.

Based on the ratio, the “Buurtmakerij” is the most effective and efficient project and attract 60 persons per meeting. That is twice as much as the “Speelothek”, almost eight times more than “t Geburt”.

project	visitors	meetings	ratio
<b>t Geburt</b>	400	51	7,84314
<b>Speelothek</b>	2132	77	27,6883
<b>Buurtmakerij</b>	1808	30	60,2667

If we compare this ratio with the project specific costs, we can conclude that the “Buurtmakerij” is the most cost-effectiveness. If we focus on the absolute number of visitors, the “Speelothek” is the most cost-effective, 5,24 times less costs than “ t Geburt” and 2,5 times less costs than “Buurtmakerij”.

Based on the focus objective for this measurement, the conclusion is that the “Speelothek” is the most cost-effective compared to the two other projects.

project	Total cost	Ratio	Cost/ratio	Cost/ visitors
<b>t Geburt</b>	30 113,22 €	7,8431	3 839,44 €	75,28 €
<b>Speelothek</b>	30 610,80 €	27,6883	1 105,55 €	14,36 €
<b>Buurtmakerij</b>	64 282,76 €	60,2667	1 066,64 €	35,55 €

Speelothek: strongly increasing number of participants from beginning of 2018 till now. It concerns more new members, and also more visits of existing members. Policy gets to decide about an extra evening opening on Tuesday.

The Buurtmakerij encourages people to work out small or bigger projects which brings people together. The increasing number of projects or activities and their participants show it is a success and it fulfills a need. Its success means more work to do. The city of Turnhout plans to recruit 1 FTE who specifically will work in neighborhoods with a low of lack of social cohesion. The working method would be more bottom-up than we do now in the Buurtmakerij.

For t Geburt we see a lot of participants for some activities, for other activities it's more difficult to find the right answer to the need.

Activities that have to do with the history of the town and nearby neighborhood are a hit. We see a growing number of active participants, mostly elderly people. Also events like the new years drink and movie nights have a great turnout.

The event Coffee and cookies has the same participants mostly, a rather small number but cosy. For the activity Coffee and papers there is little interest. Maybe PR could improve, but we will also investigate the need (of whether this need is answered already by other organisations). Coffee and cardgames has a rather low number of participants, but the people who do come are enthusiastic and have become kind of friends. Games are a nice icebreaker to have a chat.

Visitors tend to get by to use the giving-library: it's definitely an added value.

We have learnt a lot already. Activities attract more participants if the idea comes from the visitors themselves. It helps a lot when you go on the streets and invite people personally, it persuades them to come. On the other hand it's very time intensive. A familiar face convinces people to hop in.

We see also challenges for the project. The visibility of the project could be improved. People could be more activated to take up ownership within the community centre. We don't reach all target audiences yet, each of them asks for a different approach, we are learning.

This project is a testing ground, and has been very inspiring for the policy. Vonk 3 (Thomas More) will write a report on how to implement given insights about working methods in other 'vulnerable' areas in the city. There is a municipal budget (2020-2025) to investigate which methods can be used to improve social cohesion in other neighborhoods. We plan to do a thorough citywide neighborhood analysis of the 'vulnerable neighborhoods'. We plan an inquiry about motivating people to volunteer of work actively within the community centre.

## Cost-effectiveness report –

### University of Agder

#### Interreg North Sea Region – In For Care project

##### SUMMARY

The cost-effectiveness analysis of UiA comprises input and output measures. The input measure refers to the cost of the training and implementation of the digital system called FRIDA, designed for management and recruitment of volunteers in three Norwegian municipalities, Grimstad, Vennesla and Songdalen. The output measure measures the satisfaction of the end-users of the system. The input measures are described next. In Grimstad municipality, the training and deployment of FRIDA costed 111400NOK for a period of 10.5 months. This results in a cost of 10610NOK/month. In Vennesla municipality the cost was 109500 NOK for a period of 10 months, what resulted in a 10950NOK/month. In Songdalen municipality, the pilot was cancelled soon after deployment and during training due to the merging of the municipality with another bigger, which resulted in a change of the political agenda of the previous municipality. Therefore Songdalen is excluded in the analysis. The output was the mature of end-user satisfaction after training and use of FRIDA. The measurements relate to the two municipalities left, Grimstad and Vennesla. In Grimstad, the number of respondents was 2, but it represents the total number of current users of the system. The overall satisfaction is positive, above the average in most of the aspects. The functionalities that scored highest (both 7/7) were when errors occurred, it was clearly explained how to solve the problems and the functionality of reporting work. The lowest score for a functionality was the one referring to the facilitation to recruit volunteers, which scored 2/7. In Vennesla the number of respondents was 6. The functionalities scored generally lower when compared to Grimstad. The functionalities that scored the highest were related to *the information (such as online help, messages on screen and other documentation) presented in the system were easy to understand (4.75/7); finding the information needed was easy (3,6/7); the information effectively helped users to complete their tasks (3,6/7); and that the system has all the features and capabilities that users expect to have (3,6/7)*. The functionalities that scored the lowest were *when error messages occurred it was clearly explained how to solve the problems (2,4/7); users felt it was intuitive and easy to use the system (2,5/7); the system was easy to use (2,7/7); and overall, users are happy with how easy it is to use the system (FRIDA) (2,7/7)*.

## Cost-effectiveness analysis

By Vincent De Tandt

Objective; measuring the effectiveness of the FRIDA implementation within two municipalities

The costs

	Grimstad		Venesla	
Total cost	111.400 NOK	11.288,53 EUR	109.500	11.095,99 EUR
Cost/month	10.610 NOK	1.075,15 EUR	10.950	1109,60 EUR
Satisfaction %	72,32 %		45,94 %	

\* further analysis will be expressed in NOK

If we translate the total costs to a bench mark, cost per month, we can conclude that the Grimstad project is less cost-intensive than the Venesla implementation. Remarking that the difference is very small (340 NOK = 3,11 %).

The output indicator

The output indicator is the mature of end-user satisfaction after training and use of FRIDA. The questionnaires were filled in by 8 respondents (2 Grimstad, 6 Venesla). The end-user satisfaction is being assessed by 16 questions/statements. The respondent should score each statement with a score from 0 to 7.

The average of the Grimstad implementation is 5,06/7 (72,32 %). Remarkable is that the average of the Venesla implementation is much lower with 3,22/7 (45,94 %). The impact on end-user satisfaction is 36,48% lower in Venesla than in Grimstad.

If we compare the investment with the output results (end-user satisfaction), following conclusion can be made:

Grimstad	Venesla	Difference
1 %* = 1.540,80 NOK	1 % = 2.383,54 NOK	35,29 %

\* % end-user satisfaction

In both analyse methods Grimstad benefits a 35 % more cost-effective implementation towards Venesla.

The end-conclusion is that Grimstad has the most cost-effective implementation of Frida, if we take costs and end-user satisfaction in account. Despite the almost similar level of costs, the difference



in end-user satisfaction between both implementations is high. The chosen methodology or respondents can be an influence to these divergent findings.

#### Limitations of the analysis

For the output indicator measurement analysis, the amount of respondents is very low. Especially for the Grimstad implementation. The reader should be aware that the conclusions of the analysis will be not fully representative.

There is a lack of zero point measurement, before implementation measurement, which results in the impossibility to measure the impact of FRIDA in sort of usefulness, process improvement, etc.

There is a big difference between the two implementations in response rate and output results.

#### INPUT

<b>Grimstad Municipality</b>		
<b>Time used for implementation and training</b>	213	Hour
<b>Personal standard cost/hour</b>	300	NOK
<b>Cost of implementation and training</b>	63900	NOK
<b>Cost Pilot FRIDA</b>	47500	NOK
<b>TOTAL</b>	<b>111400</b>	<b>NOK</b>
<b>Timeframe</b>	10,5	Month
<b>Cost per month</b>	<b>10610</b>	<b>NOK/Month</b>

<b>Vennesla Municipality</b>		
<b>Time used for implementation and training</b>	200	Hour
<b>Personal standard cost/hour</b>	310	NOK
<b>Cost of implementation and training</b>	62000	NOK

<b>Vennesla Municipality</b>		
<b>Cost Pilot FRIDA</b>		47500 NOK
<b>TOTAL</b>		<b>109500 NOK</b>
<b>Timeframe</b>		10 Month
<b>Cost per month</b>		<b>10950 NOK/Month</b>

<b>Songdalen Municipality</b>		
<b>Time used for implementation and training</b>		33 Hour
<b>Personal standard cost/hour</b>		310 NOK
<b>Cost of implementation and training</b>		10230 NOK
<b>Cost Pilot FRIDA</b>		47500 NOK
<b>TOTAL</b>		<b>57730 NOK</b>
<b>Timeframe</b>	<b>CANCELLED</b>	Month
<b>Cost per month</b>		NOK/Month

## OUTPUT

Q	Grimstad municipality Questionnaire 1 (-1-7(+))	Participant 1	Participant 2	Average
1	Overall, I'm happy with how easy it is to use the system (FRIDA).	6	4	5
2	The system was easy to use.	7	4	5,5
3	I was able to effectively complete tasks using the system.	7	4	5,5

Q	Grimstad municipality Questionnaire 1 (-1-7(+))	Participant 1	Participant 2	Average
4	I felt it was intuitive and easy to use the system.	6	4	5
5	The system was easy to learn.	6	4	5
6	I think (mean) I will quickly become more efficient using the system.	7	5	6
7	When error messages occurred it was clearly explained how to solve the problems.	7		7
8	When I made some system errors it was easy and quick to fix it (restore the system)	6		6
9	The information (like online help, messages on screen and other documentation) presented in the system were easy to understand.	4	4	4
10	Finding the information I needed was easy.	3	4	3,5
11	The information effectively helped me to complete my tasks.	4		4
12	The way the information was structured was clear / The structure of information in the system was clear	5	4	4,5
13	The system interface * was satisfactory	6		6
14	I liked (using / working with) the system's interface	4		4
15	The system has all the features and capabilities that I expect it to have.	5		5
16	Overall, I am happy with the system.	5		5

Average:  $(81/16)= 5,06/7$

Q	Grimstad municipality Questionnaire 2 (-1-7(+))	Participant 1	Participant 2	Average
1	Overall, to what extent do you think FRIDA meets the needs you have for coordinating volunteers?	6		5
2	To what extent do you think FRIDA facilitates the work of recruiting volunteers?	2		2
3	To what extent do you think FRIDA provides a better overview?	7	6	6,5
4	To what extent do you think FRIDA simplifies the work on planning activities?	6	3	4,5
5	To what extent do you think FRIDA simplifies the work on coordination of activities?	5	3	4
6	To what extent do you think FRIDA simplifies the work on documentation?	4	4	4
7	To what extent do you think FRIDA simplifies reporting work?	7		7
8	How confident are you about system security (privacy)?	7	6	6,5

Q	Vennesla municipality Questionnaire 1 (-)1-7(+)	P1	P2	P3	P4	P5	P6	AVG
1	Overall, I'm happy with how easy it is to use the system (FRIDA).	4	5	2	2	2	1	2,7
2	The system was easy to use.	4	5	2	2	2	1	2,7
3	I was able to effectively complete tasks using the system.	5	5	2	3	2	1	3
4	I felt it was intuitive and easy to use the system.	4	4	2	2	2	1	2,5
5	The system was easy to learn.	5	7	1	3	2	1	3,2
6	I think (mean) I will quickly become more efficient using the system.	5		4	3	2	1	3
7	When error messages occurred it was clearly explained how to solve the problems.	4	4	1	2	1		2,4
8	When I made some system errors it was easy and quick to fix it (restore the system)	6	4	1	3	2		3,2

Q	Vennesla municipality Questionnaire 1 (-1-7(+))	P1	P2	P3	P4	P5	P6	AVG
9	The information (like online help, messages on screen and other documentation) presented in the system were easy to understand.	5	4	5	5			4,75
10	Finding the information I needed was easy.	5	4	4	3	2		3,6
11	The information effectively helped me to complete my tasks.	5	4	3	4	2		3,6
12	The way the information was structured was clear / The structure of information in the system was clear	4	4	3	2	2		3
13	The system interface * was satisfactory	5	4	4	3	2		3,4
14	I liked (using / working with) the system's interface	5	4	4	2	2		3,4
15	The system has all the features and capabilities that I expect it to have.	6	3	3	4	2		3,6
16	Overall, I am happy with the system.	4	5	3	3	2		3,4

Q	Vennesla municipality Questionnaire 2 (-1-7(+))	P1	P2	P3	P4	P5	P6	Average
1	Overall, to what extent do you think FRIDA meets the needs you have for coordinating volunteers?	6		3		3		4
2	To what extent do you think FRIDA facilitates the work of recruiting volunteers?	5		2		2		3
3	To what extent do you think FRIDA provides a better overview?	6		4		3		4,3
4	To what extent do you think FRIDA simplifies the work on planning activities?	6		4		2		4
5	To what extent do you think FRIDA simplifies the work on coordination of activities?	6		4		2		4
6	To what extent do you think FRIDA simplifies the work on documentation?	6		3		3		4
7	To what extent do you think FRIDA simplifies reporting work?	5		4		3		4
8	How confident are you about system security (privacy)?	7		3		3		4,3

	Grimstad		Venesla	
Scores	6		2,7	
	7		2,7	
	6		3	
	4		2,5	
	3,5		3,2	
	4		3	
	4,5		2,4	
	6		3,2	
	4		4,75	
	5		3,6	
	5		3,6	
	5		3	
	5,5		3,4	
	5,5		3,4	
	5		3,6	
	5		3,4	
tot pt	81		51,45	
gemid pt	5,06		3,22	
percent	72,32%		45,94%	
	cost		cost	
totaal cost	111400		109500	NOK
cost/month	10610		10950	NOK
1 % =	1540,38	NOK	2383,54	NOK
1 NOK =	0,0649%		0,0420%	
	0,003286535			



# Cost-effectiveness report – University of Abertay

## Interreg North Sea Region – In For Care project

### 1 Cost Effectiveness: Integrated Health and Social Care – Perth and Kinross

#### 1.1 The aim of this Cost Effectiveness exercise is to:

Compare previous separate health and social care model with the new integrated health and social care approach. Integration of adult health and social care is part of the Scottish Government's programme of reform to improve outcomes for adults who use health and social care services. The aim is to make sure that services are tailored to meet the particular needs of individuals and local communities, to ensure that people can lead, happy, healthy and independent lives in their own communities. Measured by key performance indicators linked to national health and wellbeing outcomes. Figure 1 presents the overall approach using the InForCare Cost effective study model.

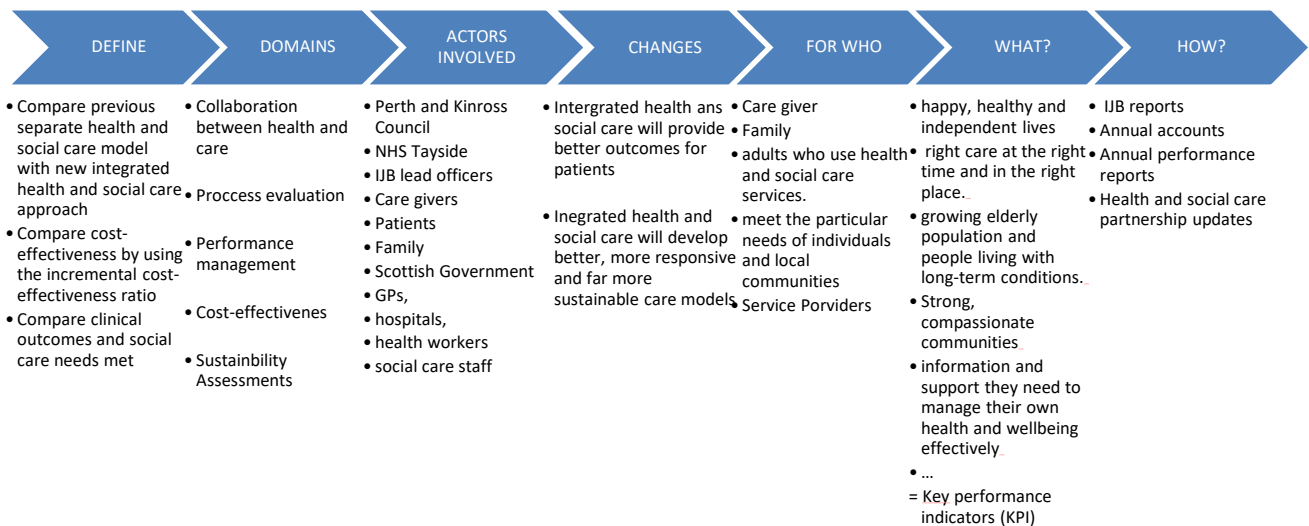


Figure 1 Cost Effectiveness study model – Integrated Health and Social Care

## 1.2 Summary of the Integrated Health Care Approach

The Integration Scheme devised a framework designed to deliver the National Health and Wellbeing Outcomes prescribed by the Scottish Ministers in Regulations under Section 5 of the Public Bodies (Joint Working) (Scotland) Act 2014<sup>1</sup>. The Integration Joint Board (IJB) is made up of representatives from NHS (Tayside), Local Authorities, the Third and Independent Sectors and those who use health and social care services.

The IJB Strategic Plan sets out a number of Strategic Objectives and Policy Priorities with accompanying Implementation and Resource Plans, Performance Framework and Strategic Risk Assessment, devised to achieve a successful Partnership consistent with National Objectives. The Partnership's agreed Strategic Objectives are as follows:

- 1. Prevention and early intervention*
- 2. Person-centred health, care and support*
- 3. Working together with our communities*
- 4. Reducing inequalities and unequal health outcomes and promoting healthy living*
- 5. Making best use of available facilities, people and other resources*

Prior to April 2016, the IJB had developed the financial governance infrastructure required to allow it to assume new responsibilities from 1st April 2016. That financial governance infrastructure continues to be reviewed.

### 1.2.1 Focus on Perth & Kinross IJB

The Integration Joint Board approved the following Vision for the Health and Social Care Partnership as part of its approved Strategic Plan for 2016-19:

*“We will work together to support people living in Perth and Kinross to lead healthy and active lives and live as independently as possible in their own homes, or in a homely setting with choice and control over the decisions they make about their care and support.”*

The IJB has responsibility for providing social care and defined health care services for the residents Perthshire and Kinross (P&K) encompassing an area of 5,000 square kilometres and a population of 150,000. In addition, the IJB provides specific health care services across Tayside by means of hosted services

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<sup>1</sup> <https://www.legislation.gov.uk/asp/2014/9/section/5>

arrangements agreed in the Integration Scheme between NHS Tayside and Perth & Kinross Council. Perth & Kinross Council and the NHS Tayside (Health Board),

The operational structure is a composite of three principal service areas:

- Community Health / Hospital & Other Hosted Services
- Adult Social Care Services
- Inpatient Mental Health Services

Data is available for P&K IJB for performance in relation to the 9 National Health and Wellbeing Outcomes, which are:

- **National Health and Wellbeing Outcome 1** People are able to look after and improve their own health and wellbeing and live in good health for longer.
- **National Health and Wellbeing Outcome 2** People, including those with disabilities or long-term conditions, or who are frail, are able to live, as far as reasonably practicable, independently and at home or in a homely setting in their community.
- **National Health and Wellbeing Outcome 3** People who use health and social care services have a positive experience of those services and have their dignity respected.
- **National Health and Wellbeing Outcome 4** Health and social care services are centred on helping to maintain or improve the quality of life of people who use those services.
- **National Health and Wellbeing Outcome 5** Health and social care services contribute to reducing health inequalities.
- **National Health and Wellbeing Outcome 6** People who provide unpaid care are supported to look after their own health and wellbeing, including to reduce any negative impact of their caring role on their health and wellbeing.
- **National Health and Wellbeing Outcome 7** People who use health and social care services are safe from harm.
- **National Health and Wellbeing Outcome 8** People who work in health and social care services feel engaged with the work they do and are supported to continuously improve the information, support, care and treatment they provide.
- **National Health and Wellbeing Outcome 9** Resources are used effectively and efficiently in the provision of health and social care services.

The data are available in the following reports:

2016-2017 Full Report: [https://www.pkc.gov.uk/media/40166/PKHSCP-Annual-Performance-Report-2017/pdf/2017287\\_PKHSCP\\_Annual\\_Report\\_-\\_Final.pdf?m=636386471994070000](https://www.pkc.gov.uk/media/40166/PKHSCP-Annual-Performance-Report-2017/pdf/2017287_PKHSCP_Annual_Report_-_Final.pdf?m=636386471994070000)

2017-2018 Full Report: [https://www.pkc.gov.uk/media/42439/Perth-and-Kinross-Health-and-Social-Care-Partnership-Annual-Performance-Report-2017-18/pdf/2018115\\_PKHSCP\\_Annual\\_Report\\_2017-18\\_FINAL\\_3.pdf?m=636675211195400000](https://www.pkc.gov.uk/media/42439/Perth-and-Kinross-Health-and-Social-Care-Partnership-Annual-Performance-Report-2017-18/pdf/2018115_PKHSCP_Annual_Report_2017-18_FINAL_3.pdf?m=636675211195400000)

Summary Report 2017: [https://www.pkc.gov.uk/media/40167/PKHSCP-Summary-of-Annual-Performance-Report-2017/pdf/2017200\\_PKHSCP\\_Summary\\_5th\\_-\\_Final.pdf?m=636386472850200000](https://www.pkc.gov.uk/media/40167/PKHSCP-Summary-of-Annual-Performance-Report-2017/pdf/2017200_PKHSCP_Summary_5th_-_Final.pdf?m=636386472850200000)

## 1.3 Results of National Health & Wellbeing Indicators since the introduction of the Integrated Health & Social Care Partnership.

### 1.3.1.1 Perth & Kinross indicators linked to Outcome 1:

National Outcome 1 People are able to look after and improve their own health and wellbeing and live in good health for longer.

Indicators O1	15/16	16/17	17/18	Trend
Percentage of adults able to look after their health very well or quite well. (Source HACE**) = IFC Ind1	95%	N.A. 94% (Scotland)	95%	N.C.
Percentage of people requiring no further services following Reablement.	38%	34%	31%	-7%
Percentage of people who have received a newly confirmed dementia diagnosis who are supported to understand the illness and manage their symptoms.	94%	98%	100%	+ 6%

Table 1 Indicators for National Health & Wellbeing Outcome 1.

Indicator	2015/16 Perth and Kinross	2016/17 Perth and Kinross	2017/18 Perth and Kinross	How we compared to our last Perth and Kinross result	How we compared to the Scottish Average	2017/18 Scotland Average
% of adults able to look after their health very well or quite well. (Source HACE**)	95%*	n/a	95%	no change	↑2%	93%
Rate of emergency admissions per 100,000 population for adults.	11,040	11,158	10,762	↓396	↓1,197	11,959
% of people requiring no further services following Reablement.	38%	34%	31%	↓3%	n/a	n/a
Within 12 Months of a Diagnosis of Dementia, all patients will have commenced Post Diagnosis Support***	94%	98%	100%	↑2%	n/a	n/a

\*RAG:

*Red = performance is declining above tolerance level; Amber = performance is declining but within tolerance level; Green = performance is improving. \*\*HACE survey is undertaken every two years therefore information is not available for 2016/17.*

Table 2 Summary of key indicators which support the National Health and Wellbeing Outcome 1

### 1.3.1.2 Perth & Kinross indicators linked to Outcome 2

National Outcome 2 People, including those with disabilities or long-term conditions, are able to live, as far as reasonably practicable, independently and at home or in a homely setting in their community.

Indicators O2	15/16	16/17	17/18	Trend
Percentage of adults supported at home who agree that they are supported to live as independently as possible. = IFC Ind 2	81%	n.a 84% (Scotland)	83%	+2%
Proportion of last 6 months of life spent at home or in a community setting	88%	88%	89.6%	+1.6%
Percentage 65+ with intensive care needs receiving care at home.	32%	37%	38%	+ 6%

Table 3 Indicators for National Health & Wellbeing Outcome 2.

Key indicators which supports the National Health and Wellbeing Outcomes 2 and 3.

Indicator	2015/16 Perth and Kinross	2016/17 Perth and Kinross	2017/18 Perth and Kinross	How we compared to our last Perth and Kinross result	How we compared to the Scottish Average	2017/18 Scotland Average
Percentage of adults supported at home who agree that they are supported to live as independently as possible. (Source: HACE**)	81.00%*	n/a	83.00%	↑2.00%	↑2.00%	81.00%
Rate of emergency bed day per 100,000 population for adults.	124,651	118,566	109,842	↓8,724	↓5,676	115,518
Readmissions to hospital within 28 days of discharge per 1,000 admissions.	115	117.97	109.7	↓8.27	↑13	96.7
Proportion of last 6 months of life spent at home or in a community setting.	87.90%	88.27%	89.64%	↑1.37%	↑1.38%	88.26%
Percentage 65+ with intensive social care needs receiving care at home.	32.00%	37.00%	38.00%	↑1.00%	n/a	n/a
Number of people using SDS Options 1 and 2 as a percentage of all people accessing services via SDS.	11.70%	14.40%	18.6%	↑4.20%	n/a	n/a
Percentage of adults with intensive needs receiving care at home.	58.00%	60.00%	n/a	n/a	n/a	Not available until Dec 2018

### 1.3.2 Table 4 Summary of key indicators which support the National Health and Wellbeing Outcomes 2 & 3

#### 1.3.2.1 P & K Example indicators linked to Outcome 3

People who use health and social care services have a positive experience of those services and have their dignity respected.

Indicators O3	15/16	16/17	17/18	Trend
Percentage of adults supported at home who agree that they had a say in how their help, care or support was provided IFC Ind 3	82%*	n/a	78%	-4%
Percentage of adults supported at home who agree that their health and care services seemed to be well co-ordinated. IFC Ind 4	76%	n/a	75%	-1%

Proportion of care & care services rated good or better in Care Inspectorate inspections.	85%	83%	88%	+5%
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Table 5 Indicators for National Health & Wellbeing Outcome 3.

Indicator	2015/16 Perth and Kinross	2016/17 Perth and Kinross	2017/18 Perth and Kinross	How we compared to our last Perth and Kinross result	How we compared to the Scottish Average	2017/18 Scotland Average
Percentage of adults supported at home who agree that they had a say in how their help, care or support was provided. (Source: HACE**)	82%*	n/a	78%	↓4%	↑2%	76%
Percentage of adults supported at home who agree that their health and care services seemed to be well co-ordinated. (Source: HACE**)	76%	n/a	75%	↓1%	↑1%	74%
Proportion of care and care services rated good or better in Care Inspectorate inspections.	85%	83%	88%	↑5%	↑3%	85%

**1.3.3 Table 6 Summary results from HACE surveys which lets us see what people think of the services they have received.**

### 1.3.3.1 P & K Example indicators linked to Outcome 4 / 6

**Outcome 4** Health and social care services are centred on helping to maintain or improve the quality of life of people who use those services. **Outcome 6** People who provide unpaid care are supported to look after their own health and wellbeing, including to reduce any negative impact of their caring role on their own health and well-being.

Indicators O4 / O6	15/16	16/17	17/18	Trend
Percentage adults supported at home who agree that their services and support had an impact in improving or maintaining their Quality of Life = IFC Ind 5	84%	n.a.	81%	-3%
Percentage of Carers who feel supported in their Caring Role = IFC Ind 6	40%	n.a	41%	+1%

Table 7 Indicators for National Health & Wellbeing Outcomes 4 & 6.

Indicator	2015/16 Perth and Kinross	2016/17 Perth and Kinross	2017/18 Perth and Kinross	How we compared to our last Perth and Kinross result	How we compared to the Scottish Average	2017/18 Scotland Average
Percentage of people with positive experience of care at their GP practice. (Source: HACE**)	91%*	n/a	88%	↓3%	↑5%	83%
Percentage of adults supported at home who agree that their services and support had an impact in improving or maintaining their quality of life. (Source: HACE**)	84%*	n/a	81%	↓3%	↑1%	80%
Number of bed days lost to delayed discharge (excluding complex cases).	17,029	15,429	15,078	↓351	n/a	n/a
Number of days people aged 75+ spend in hospital when they are ready to be discharged per 1,000 population.	1,005	875.2	674.3	↓200.9	↓97.7	772
Number of people delayed in hospital for more than 14 days.	191	198	239	↑41	n/a	n/a
Percentage of carers who feel supported to continue in their caring role. (Source: HACE)	40%	n/a	41%	↑1%	↑4%	37%



### 1.3.4 Table 8 Summary results from some key indicators which support the National Health and Wellbeing Outcomes 4 and 6

**Outcome 5** Health and social care services contribute to reducing health inequalities.

**Outcome 7** People who use health and social care services are safe from harm.

Indicators O5 & 7	15/16	16/17	17/18	Trend
Percentage of adults receiving any care or support who rate it as excellent or good. (Source: HACE**) = IFC Ind 7	83%	n/a	81%	-2%
Percentage of adults supported at home who agree they felt safe. (Source: HACE**)	80%	n.a.	85%	+5%

Table 9 Summary of Outcome 5/7 Reduced Health Inequalities/Safe from harm

Indicator	2015/16 Perth and Kinross	2016/17 Perth and Kinross	2017/18 Perth and Kinross	How we compared to our last Perth and Kinross result	How we compared to the Scottish Average	2017/18 Scotland Average
Percentage of adults receiving any care or support who rate it as excellent or good. (Source: HACE**)	83%	n/a	81%	↓2%	↑1%	80%
Premature Mortality Rate per 100,000.	352	348	364	↑16	↓61	425
Number of households presented to the Council as homeless.	898	825	999	↑174	n/a	n/a
Number of overcrowded households in Council tenancies.	127	115	108	↓7	n/a	n/a
Percentage of households in fuel poverty.	38%	22.3%	32%	↑9.7%	n/a	n/a

Table 10 Performance Indicators for Outcome 5 - Health and social care services contribute to reducing health inequalities.

Indicator	2015/16 Perth and Kinross	2016/17 Perth and Kinross	2017/18 Perth and Kinross	How we compared to our last Perth and Kinross result	How we compared to the Scottish Average	2017/18 Scotland
Percentage of adults supported at home who agree they felt safe. (Source: HACE**)	80.00%*	n/a	85.00%	↑5.00%	↑2.00%	83.00%
Falls rate per 1,000 population age 65+.	20.92%	21.67%	21.75%	↑0.08%	↑0.07%	21.68%
Percentage of adult protection cases screened within 24 hours of notification.	94.00%	96.00%	93.00%	↓3.00%	n/a	n/a
Number of service users with Telecare equipment installed (excluding community alarms).*	n/a	n/a	1,416	n/a	n/a	n/a
Community Alarm: service users (number).	n/a	2,864	3,681	↑817	n/a	n/a
Percentage of health and care resource spent on hospital stays where the patient was admitted in an emergency.	28.30%	27.18%	26.01%	↓1.17%	↑3.01%	23.00%

Table 11 Summary of key indicators which support the National Health and Wellbeing Outcome 7 - Keeping People Safe from Harm.

#### 1.3.4.1 Performance Indicators for Outcome 8

People who work in health and social care services feel engaged with the work they do and are supported to continuously improve the information, support, care and treatment they provide

Indicator	2015/16 Perth and Kinross	2016/17 Perth and Kinross	2017/18 Perth and Kinross	RAG	2017/18 Scotland
Percentage of staff who say they are treated fairly at work.	82.0%	85.0%	83.4%	↓1.6%	n/a
Percentage of staff who say their daily role provides them with opportunity to use their strengths.	79.0%	80.0%	81.8%	↑1.8%	n/a
Percentage of health staff who say they are treated fairly and consistently.	79.0%	80.0%	Due July 18	n/a	n/a
Percentage of health staff who say their work gave them a sense of achievement.	71.0%	81.0%	Due July 18	n/a	n/a

Table 12 Summary of key indicators which support the National Health and Wellbeing Outcome 8 – Staff support/fairness.

## 1.4 Financial Information for Perth & Kinross Health & Social Care Partnership

**Outcome 9** Resources are used effectively and efficiently in the provision of health and social care services.

#### 1.4.1 Finance and Best Value Financial Plan 2017/18

Strong financial planning is required to ensure that our limited resources are targeted to maximise the contribution to our objectives. Like many other public sector bodies, we face significant financial challenges and will be required to operate within extremely tight financial constraints for the foreseeable future due to the difficult national economic outlook and increasing demand for services.

The 2017/18 Financial Plan set out that based on the budget offer from Perth & Kinross Council and NHS Tayside, break-even was achievable on all services except GP Prescribing and Inpatient Mental Health (which is hosted by the Partnership on behalf of all three Tayside IJBs). We have been working with NHS Tayside to develop a 3 Year Recovery Plans for both areas however financial balance was not anticipated in 2017/18 with an overall gap of £2.4m forecast.

Across all services, the Financial Plan set out anticipated recurring savings of £2.8m. The level of savings required reflects the underlying level of unavoidable cost and demand pressures facing health and social care services.

An evaluation of the balance of care and the extent to which integration services demonstrate best value Financial Performance 2017/18 Budget monitoring of IJB delegated functions is undertaken by finance teams within the Perth & Kinross Council and NHS Tayside, reflecting the IJB's role as a strategic planning body which does not directly deliver services, employ staff or hold cash resources. However, it is important that the IJB has oversight of the in-year budget position as this highlights any issues that need to be accounted for when planning the future delivery of health and social care services. In 2017/18 we achieved a balanced budget position despite there being key pressures on the system. During the year, we worked closely with NHS Tayside to identify transformation and cost reduction plans to address the shortfalls in GP Prescribing and Inpatient Mental Health, however as anticipated both areas incurred significant overspends. This was funded by NHS Tayside through their achievement of an overall break even position. The cost of NHS delivered services therefore matched the income available.

Within Social Care Services a significant under spend of £2.6m was achieved. £1.3m of this was through acceleration of 2018/19 planned savings. Perth & Kinross Council carried forward this under spend in a reserve earmarked for social care and therefore a break even position is also reported on social care services. Perth & Kinross Council financial performance for the year is summarised in the table detailed below:

	Budget £000	Actual £000	Variance Over/ (-)Underspend £000
Older Peoples Service/Physical Disabilities including AHPs	65,371	63,777	(1,594)
Learning Disabilities	18,237	17,378	(859)
Mental Health and Addictions	4,943	4,958	15
Planning/Management/Other Services	7,780	7,047	(733)
Prescribing	26,763	28,467	1,704
General Medical Services	23,392	23,204	(188)
Family Health Services	16,481	16,474	(7)
Hosted Services	20,666	20,970	303
Large Hospital Set-Aside	11,793	11,793	-
<b>Total</b>	<b>195,426</b>	<b>194,068</b>	<b>(1,358)</b>

**Breakdown of Variance:**

<b>Health</b>	145,865	147,144	1,279
<b>Social Care</b>	49,561	46,924	(2,637)

*Table 13 Financial Performance for P&K for the year 2017-2018*

Overall, recurring savings of £2.8m were delivered against the £2.8m plan. The current challenging financial climate reinforces the importance of managing expenditure within the financial resources available and this will require close partnership working between the IJB as service commissioner and NHS Tayside and Perth & Kinross Council as providers of services.

### 1.4.2 Financial Outlook

The IJB, like many others, faces significant financial challenges and will be required to operate within very tight financial constraints for the foreseeable future due to the difficult national economic outlook and increasing demand for services. Whilst a significant transformation and efficiency programme has been identified for 2018/19 the scope of opportunity for further major transformation across services will not be sufficient to address the level of social care pressures moving forward. Early discussions are taking place with NHS Tayside and Perth & Kinross Council around the 2019/20 Budget Settlement however both parent bodies are facing a very difficult financial outlook.

Notable things that P&K have introduced recently (reported in the latest Annual Performance review [https://www.pkc.gov.uk/media/42439/Perth-and-Kinross-Health-and-Social-Care-Partnership-Annual-Performance-Report-2017-18/pdf/2018115\\_PKHSCP\\_Annual\\_Report\\_2017-18\\_FINAL\\_3.pdf?m=636675211195400000](https://www.pkc.gov.uk/media/42439/Perth-and-Kinross-Health-and-Social-Care-Partnership-Annual-Performance-Report-2017-18/pdf/2018115_PKHSCP_Annual_Report_2017-18_FINAL_3.pdf?m=636675211195400000)) that are relevant to InForCare:

- Implemented a successful ‘Why should I care?’ campaign to encourage more people to become home carers. <https://www.pkc.gov.uk/caring> (Formal Care)
- Agreed a new internal care at home model to meet the rising demand for care at home services.
- Social Prescribing Posts: Three new Social Prescribing posts are under recruitment and will be aligned to localities to work with identified GP practices and frontline statutory workers. Social Prescribers will support individuals to explore their goals relating to health and wellbeing and access appropriate community based supports.
- Local Health and Wellbeing Groups: A series of Local Health and Wellbeing Groups have been established across localities to support community dialogue and action around health and enable direct connections with Locality Steering/ Management groups. For example in Perth City the Health and Wellbeing group identified the need for a city centre information and support hub. Representatives from the group presented their ideas to the Locality Steering Group and following a positive response, work is now ongoing bringing together key community organisations and other partners to develop a business plan. At present in Perth City, two community representatives sit on the Locality Steering Group.

### Care at Home for Older People

During their inspection visits, the Care Inspectorate carried out inspections across quality themes for Care and Support, Staffing and Management and Leadership. Out of the 11 services inspected 26 quality themes were assessed in total. The following grading was awarded:

- 2 quality themes inspected received Excellent for the quality of Care and Support and for Management and Leadership.
- 17 quality themes inspected received Very Good/ Good grading: 8 Care and Support, 6 Staffing and 3 for Management and Leadership. These grades awarded by the Care Inspectorate represent increasingly better levels of performance.
- 4 quality themes inspected were awarded Adequate grading: 1 Care and Support, 2 for Staffing and 1 for Management and Leadership. Grading represents performance that the Inspectorate finds acceptable but which could be improved.

- 3 quality themes inspected received grading of Weak for quality of Care and Support and Management and Leadership (2) which indicates concern about the performance of the service and that there are things which the service must improve.

### **1.4.3 P&K Finance & Best Value**

#### ***1.4.3.1 The Financial Plan 2017/18***

Strong financial planning is required to ensure that Perth & Kinross Council limited resources are targeted to maximise the contribution to Perth & Kinross Council objectives. Like many other public sector bodies, we face significant financial challenges and will be required to operate within extremely tight financial constraints for the foreseeable future due to the difficult national economic outlook and increasing demand for services. The 2017/18 Financial Plan set out that based on the budget offer from Perth & Kinross Council and NHS Tayside, break-even was achievable on all services except GP Prescribing and Inpatient Mental Health (which is hosted by the Partnership on behalf of all three Tayside IJBs). We have been working with NHS Tayside to develop 3 Year Recovery Plans for both areas however financial balance was not anticipated in 2017/18 with an overall gap of £2.4m forecast. Across all services, the Financial Plan set out anticipated recurring savings of £2.8m. The level of savings required reflects the underlying level of unavoidable cost and demand pressures facing health and social care services.

#### ***1.4.3.2 Financial Performance 2017/18***

Budget monitoring of IJB delegated functions is undertaken by finance teams within the Perth & Kinross Council and NHS Tayside, reflecting the IJB's role as a strategic planning body which does not directly deliver services, employ staff or hold cash resources. However, it is important that the IJB has oversight of the in-year budget position as this highlights any issues that need to be accounted for when planning the future delivery of health and social care services.

In 2017/18 we achieved a balanced budget position despite there being key pressures on the system. During the year, we worked closely with NHS Tayside to identify transformation and cost reduction plans to address the shortfalls in GP Prescribing and Inpatient Mental Health, however as anticipated both areas incurred significant overspends. This was funded by NHS Tayside through their achievement of an overall break even position. The cost of NHS delivered services therefore matched the income available.

Within Social Care Services a significant under spend of £2.6m was achieved. £1.3m of this was through acceleration of 2018/19 planned savings. Perth & Kinross Council carried forward this under spend in a reserve earmarked for social care and therefore a break even position is also reported on social care services.

Health and care services are always developing and in Perth & Kinross Council second year we continue to see evidence of improvement. More people being supported at home and fewer people are relying on care in hospital. More people are living healthy independent lives into older age. When something goes wrong, people need to know that the right care is on hand when they need it, delivered by the right person in the right place. For this to happen, professional practice has to change. We will always need to provide treatment and care services; however, Perth & Kinross Council teams will increasingly work with people to improve their health. By involving families, carers, communities and voluntary organisation and joining them up with more health and care services, we begin to see the benefits of Health and Social Care integration in practice. Looking forward, there is much to be done. We will continue to listen to the people who experience Perth & Kinross Council services and for whom our decisions are important.

#### **1.4.4 Future Direction**

To achieve Perth & Kinross Council ambitions we require input from the wide range of partners; health and social care professions; the third and private sectors, as well as the feedback and contributions received from Perth & Kinross Council customers and local communities. We acknowledge the strong support from members of the Third Sector Health & Social Care Strategic Forum who are driving collaborative action and strengthening partnership working with the Third Sector. Similarly, Health and Wellbeing Groups in localities and many other service user and carer groups are integral in helping us ensure a partnership approach. Collectively this input has proven invaluable in the achievement of the successes we have had so far. We need to continue to maximise the opportunities of this collaborative working if we are to fully realise Perth & Kinross Council ambitions and to transform the way services are delivered. There are many challenges ahead Perth & Kinross Council we recognise that our dedicated, skilled staff are committed to providing high-quality and responsive care. We will continue to be innovative, resilient and, importantly, focused on positive outcomes for the people of Perth and Kinross.

### **Summarising the Important Indicators (relevant to InForCare)**

Indicator		Current Trend 15-18
1	Percentage of adults able to look after their health very well or quite well.	No Change
2	Percentage of adults supported at home who agree that they are supported to live as independently as possible.	+2%
3	Percentage of adults supported at home who agree that they had a say in how their help, care or support was provided.	-4%
4	Percentage of adults supported at home who agree that their health and care services seemed to be well co-ordinated.	-1%
5	Percentage adults supported at home who agree that their services and support had an impact in improving or maintaining their Quality of Life	-3%
6	Percentage of Carers who feel supported in their Caring Role	+ 1%
7	Percentage of adults receiving any care or support who rate it as excellent or good.	-2%

Table 14 Final Table of Indicators Selected showing Trend from 2015- 2018 (P&K Health & Social Care Partnership)



Table 1: MSG Indicators

MSG Indicator	MSG Description	Perth and Kinross Total Previous Year 2016/17	Perth and Kinross Current Year 2017/18	Perth and Kinross YTD difference from 2016/17
1a	Emergency admissions	15,128	15,021	↓107
2a	Unscheduled hospital bed days	111,324	102,451	↓8,873
3a	A&E attendances	31,825	32,506	↑681
4.1	Delayed discharge bed days**	19,176	16,785	↓2,391
5.1	Proportion of last 6 months of life spent at home or in a community setting	88.27%	89.64%	↑1.37%
6.1	Percentage of population at home unsupported	97.97%	98.00%	↑0.03%

\*\* All ages including complex cases

Table 15 Ministerial Strategic Group (MSG) Indicators for 2017/18

The Ministerial Strategic Group for Health and Community Care (MSG) agreed a suite of indicators that will be used by Integration Authorities to measure progress under integration. These agreed indicators are in Table 15 above and show Perth & Kinross Council current 2017/18 values against previous year 2016/17 values. We are making good progress in all these indicators and Perth & Kinross Council work to ensure effective and appropriate flow into and from hospital services has impacted positively on both levels of delayed discharge and unplanned admissions. The exception is A&E attendances which shows a slight 2.1% rise in attendances since last year. We will monitor this indicator to help us understand what different strategies we can introduce that may reduce this number.

For Perth and Kinross there have been increases in staffing within social care discharge teams, Perth Royal Infirmary liaison services, and care home nursing. This, alongside improved funding procedures for care home placements, has supported speedier discharge to a care home setting or repatriation to such. There has been a reduction of 2,391 (12.5 per cent) delayed discharge bed days between 2016/17 and 2017/18 to 16,785.<sup>2</sup>

Our Strategic Commissioning Plan runs from 2016-2019 and work is now underway to refresh our priorities and plan from 2019 onwards. Much of this report has focussed on the key priorities set out in our strategic plan in order to deliver against our 5 key objectives and the 9 National Outcomes for Health and Social Care Integration. Whilst we have achieved a great deal, challenges remain and we have begun a

<sup>2</sup> [https://www.audit-scotland.gov.uk/uploads/docs/report/2018/nr\\_181115\\_health\\_socialcare\\_update.pdf](https://www.audit-scotland.gov.uk/uploads/docs/report/2018/nr_181115_health_socialcare_update.pdf)

process to ensure that the needs of a range of client groups are given a higher priority. The financial challenge has already been outlined and we need to focus on the areas for improvement we have identified to ensure we are able to deliver integrated health, care and support services to people in need. Our plans for people with learning disabilities, mental health, older people and carers will clearly focus on commissioning priorities and we best work in partnership with the Independent Sector and Third Sector. We will achieve further integrated strategic planning through organising our work around the following key priority areas:

- Unscheduled Care and Older People
- Wellbeing and Mental Health
- Carers
- Primary Care
- Working in Communities

This work will be supported by services such as Finance, Human Resources and clinical and professional leads. The involvement of those who use our services as well as engaging wider community members remains a priority and we are putting in steps to ensure participation. Our engagement and participation strategy outlines how we intend to do this, Public Partners along with the involvement of wider representatives will be central to this.

## **1.5 Difficulties in Carrying out a Cost Effectiveness Evaluation for Perth & Kinross**

It has been extremely difficult to obtain any accurate financial information regarding how Perth & Kinross performed financially prior to the introduction of Integration

The following information regarding the 2015-2016 financial information is from Perth & Kinross Integration Joint Board 2015/16 Annual Audit Report for members of Perth & Kinross Integration Joint Board and the Controller of Audit (Aug 2016)

The board was established in October 2015 and became operational on 1 April 2016. Therefore only corporate management cost (activities and costs that relate to the general running of the authority that provide the infrastructure that allows services to be provided) were recognised in the board's financial statements during 2015/16.

The board did not agree a budget for 2015/16 and did not monitor the actual cost incurred (including the value of services in kind provided by its partners). The board hold no information on the value of the services of kind provided by its partners during 2015/16.

As this has proved impossible to obtain then we have given a summary of the success of Integration at the National level, based on Audit Reports.

## 1.6 National Performance of Integration

N.B. The following information is from a report on Progress of Integration across the whole of Scotland<sup>3</sup> and not specific to Tayside/ Perth & Kinross.

Audit Scotland findings show that integration can work and that the Act can be used to advance change. Although some initiatives to integrate services pre-date the Act, there is evidence that integration is enabling joined up and collaborative working. This is leading to improvements in performance, such as a reduction in unplanned hospital activity and delays in hospital discharges. But there is much more to be done.

IAs are responsible for directing almost £9 billion of health and social care resources, money which was previously separately managed by NHS boards and councils (Fig XX Resources for integration diag) ) Over 70 per cent of this comes from the NHS, with the remainder coming from councils. As with councils and NHS boards, IAs are required to find efficiency savings from their annual budgets to maintain financial balance. Demands on services combined with financial pressures have led to many IJBs struggling to achieve this balance, with many needing additional financial contributions from partner organisations.

Financial pressures make it difficult for Integration Authorities (IAs) to make sustainable changes to the way services are delivered. The Act was intended to help shift resources away from the acute hospital system towards preventative and community-based services. However, there is still a lack of agreement about whether this is achievable in practice – or whether rising demand for hospital care means that more resource is needed across the system.

We have seen some examples of small-scale changes in the balance of care, which show that change can be achieved, but IAs now need to take the next steps to achieve wider-scale impact on outcomes over the coming years.

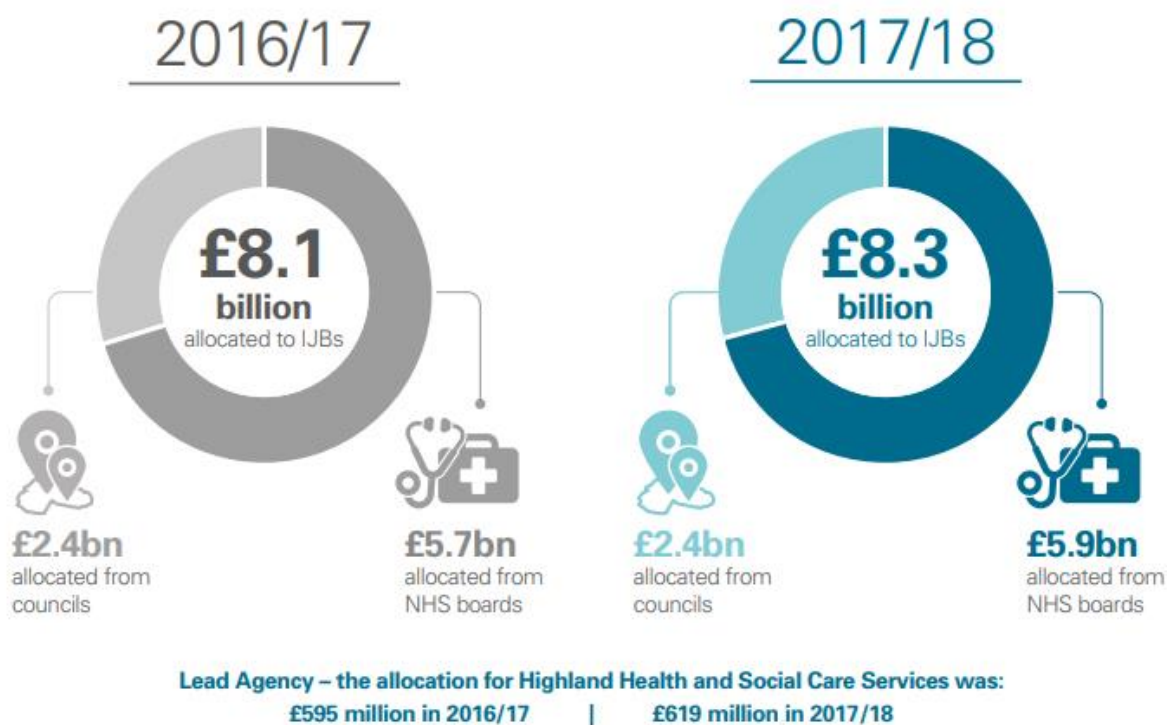
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<sup>3</sup> [https://www.audit-scotland.gov.uk/uploads/docs/report/2018/nr\\_181115\\_health\\_socialcare\\_update.pdf](https://www.audit-scotland.gov.uk/uploads/docs/report/2018/nr_181115_health_socialcare_update.pdf)

The context for integration is challenging, with many public bodies trying to work in partnership to achieve major changes while at the same time managing rising demand for services, financial pressures and continuing to deliver services and treat people. As we reported in NHS in Scotland 2018, the number of patients on waiting lists for treatment continues to rise while performance against targets is declining and an increasing number of NHS boards are struggling to deliver with the resources they have. We have also reported that local government operates in an increasingly complex and changing environment with increasing levels of uncertainty.

### Resources for integration

IAs are responsible for directing significant health and social care resources.



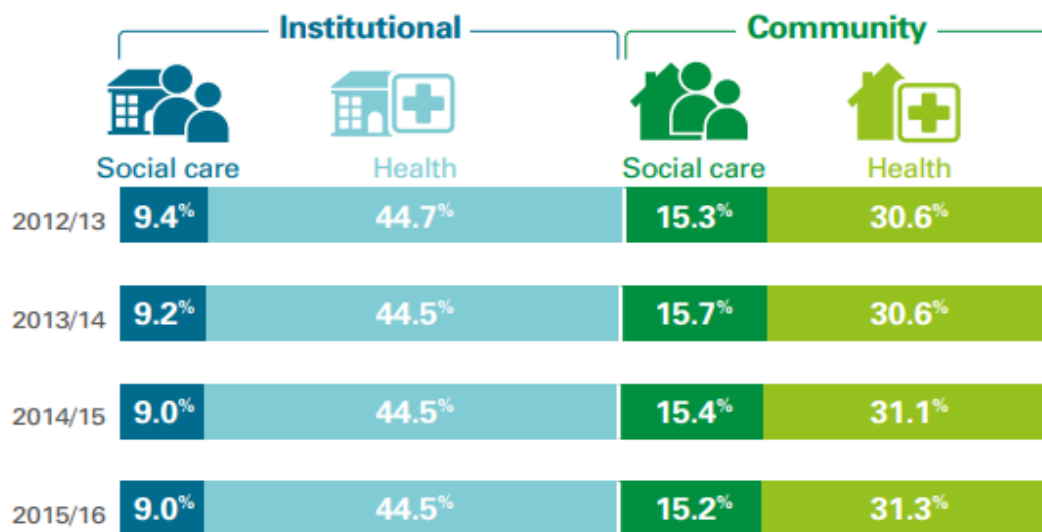
Note: Council allocations in 2016/17 and 2017/18 include criminal justice social work contribution.

Source: Audit Scotland, 2018



Figure 2 Resources for Integration

**The percentage of expenditure on institutional and community-based care**  
 The percentage of expenditure on institutional and community-based care remained static between 2012/13 – 2015/16.



Source: Information Services Division, 2018



Figure 3 Expenditure on Institutional & Community-based care

National data on the balance of spending between institutional care and care in the community is only available up to 2015/16. While this does not reflect any impact from IAs, it shows that the balance of spending changed little between 2012/13 to 2015/16 (Fig 3 above). Although this data is still collated, it is no longer published. This data should be publicly available and is a helpful indicator of whether IAs are influencing the shift of resources.

### 1.6.1 Monitoring and public reporting on the impact of integration needs to improve

(The following Information is from Page 14-16 of Audit Scotland Report)

A significant number of measures are being used to monitor national and local progress which means IAs are reporting against a range of different measures to demonstrate progress. For the public to understand how the changes are working at a Scotland-wide level, these indicators need to be presented in a clear and transparent way.

It is important that the Scottish Government can demonstrate that resources provided have led to improvements in outcomes, in line with its national health and wellbeing outcomes. These outcomes are

the Scottish Government’s high-level statements of what health and social care partners are attempting to achieve through integration. These national outcomes are not being routinely reported at a national level, although IAs refer to them as part of their annual performance reports.

The Scottish Government introduced the National Performance Framework (NPF) in 2007 and launched a new framework in 2018 (see fig 4). The NPF is made up of 11 national outcomes, each with indicators and aligned to the United Nations’ sustainable development goals. There is a clear alignment between the aims of integration and several of the outcomes and indicators.

A significant number of measures are being used to monitor local and national progress.



Figure 4 National Performance Framework

The Ministerial Strategic Group for Health and Community Care brings together representatives from the Scottish Government, NHS, local government and IAs to monitor a set of six national indicators. These are used as indicators of the impact of IAs (See Fig 5). These measures focus on the aim of integration helping to care for more people in the community or their own homes and reducing unnecessary stays in hospital. While these measures focus on health, performance can only improve with input from health and social care services. One of the six national indicators is supported by two measures: A&E attendances and achievement of the four-hour A&E waiting time target.

Four of the indicators show improved performance, but there is significant local variation in performance between IAs. The performance measures do not themselves provide a direct indication of

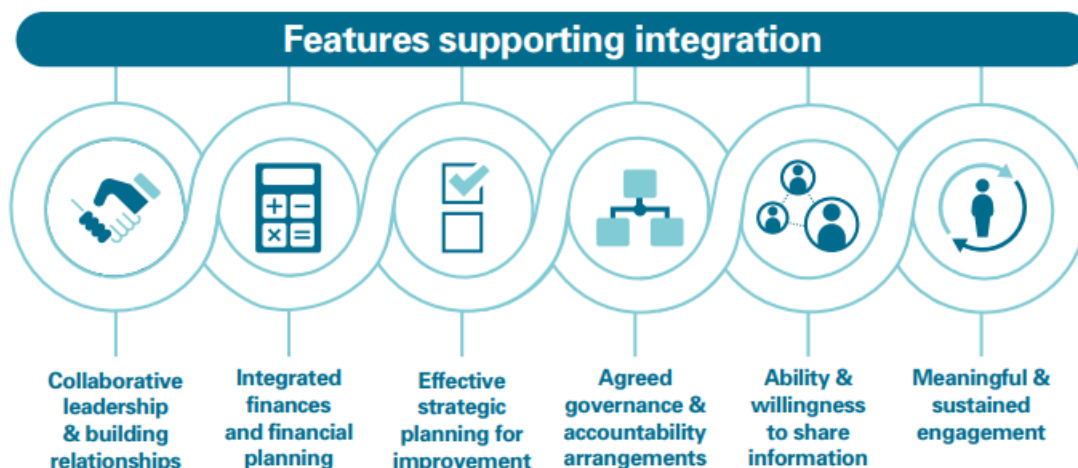
whether people’s outcomes have improved, although they do represent key aspects of care which should ultimately improve people’s lives.

Attempts at integrating health and social care go back several years and it is not possible to identify the full cost of the reforms. This, in part, is due to the scale of the reforms and the interconnectedness with the rest of the health and social care system.

Due to ongoing financial pressures, most new service initiatives have been funded using additional financial support from the Scottish Government, rather than through the re-distribution of health and social care resources. Therefore, there should be an ongoing commitment from the Scottish Government to provide continued additional funding over coming years. This will provide financial stability to IAs while they implement new ways of working and plan how to redirect funding from current services.



Figure 5 Principles and National Indicators from the National Performance Framework



Source: Audit Scotland

*Figure 6 Features Supporting Integration*

### 1.6.2 Lack of Financial Integration

There is little evidence that councils and NHS boards are treating IJBs’ finances as a shared resource for health and social care. This is despite the requirement to do this in the legislation, and budget processes set out in integration schemes describing budget-setting based on need. Partners must work with the IJBs to establish an approach to financial planning that considers the priorities of health and social care in the local community. Councils and NHS boards can be unwilling to give up financial control of budgets and IJBs can struggle to exert their own influence on the budget-setting process.

Fifteen IAs failed to agree a budget for the start of the 2017/18 financial year with their partners. This is partly down to differences in the timing of budget settlements between councils and NHS boards. It can also be due to a lack of understanding between councils and NHS boards of each other’s financial reporting, accounting arrangements and the financial pressures faced by each. This lack of understanding can cause a lack of trust and reluctance to commit funds to an integrated health and social care budget.

Best value arrangements are not well developed. As IJBs are local authority bodies, the statutory duty of Best Value applies to them. This means that IJBs, from the outset, must clearly demonstrate their approaches to delivering continuous improvement. In July 2017, IJBs submitted their first annual performance reports in accordance with statutory requirements. One of the reporting requirements is that they demonstrate Best Value in the delivery of services. We found that some aspects of Best Value are



widely covered within IJBs' annual performance reports and annual accounts, including financial planning, governance and use of resources. About half of all IJBs had a section in their annual performance reports setting out how they intended to demonstrate the delivery of Best Value. **Overall the coverage varies between IJBs and is often not in enough detail to allow the public to judge the IJB's activity on continuous improvement.**

## Lack of Sharing Information

An inability or unwillingness to share information is slowing the pace of integration. There are several areas which need to further improve to help IAs and their council and NHS board partners make better use of data. These include:

- GP practices agreeing data-sharing arrangements with their IA
- IAs being proactive about sharing performance information, ideas and new practice with other IAs
- IAs and ISD agreeing data-sharing protocols for using data in national databases
- IAs identifying gaps in data about community, primary care and social care services and establishing how this information will be collected. This is something we have highlighted in several of our previous reports
- improving consistency in IAs' data, making comparisons easier.

Sharing of information, including both health and performance information, is a vital part of providing effective care that is integrated from the point of view of the people who use services. It is also vital in helping to anticipate or prevent need. Throughout our work we were told of examples where this was not happening in practice, because of local systems or behaviours. Examples include: GP practices being unwilling to share information from new service pilots with other IAs; IAs themselves being unwilling to share performance and good practice information with others; and difficulties in setting up data-sharing agreements between IAs and ISD. Different interpretations of data protection legislation are not helping with the ease with which information is being shared.

In April 2018, the Scottish Government published Scotland’s Digital Health & Care Strategy: Enabling, Connecting & Empowering<sup>4</sup>. As part of this, a new national digital platform is to be developed to enable the sharing of real-time data and information from health and care records as required, across the whole care system. We will monitor developments as part of our work programme.

#### Traits of effective collaborative leaders

There are a number of leadership traits which are important in integrating health and social care services.



Source: Audit Scotland, 2018; from various publications by The Kings Fund; Our Voice; Scottish Government; Health and Sport Committee and the Scottish Social Services Council.

Figure 7 Effective Collaborative Leadership Traits

<sup>4</sup> <https://www.gov.scot/publications/scotlands-digital-health-care-strategy-enabling-connecting-empowering/>

## 1.7 Lessons Learned in this Cost-Effectiveness Exercise

The approach taken was to compare previous separate health and social care model with the new integrated health and social care approach measured by key performance indicators linked to national health and wellbeing outcomes. This approach was chosen because the data from national health and wellbeing outcomes are collected widely and should be a reliable source of data for this study and future comparable work.

Performance reports from the Local Health & Social Care partnership for Perth & Kinross provided fairly clear information on the performance over the years since integration. However, the lack of visible financial data for separate Health & Social Care services prior to the implementation of the Integration in 2016 made it impossible to carry out the cost-effectiveness evaluation fully. To overcome this challenge data was drawn from reports from the Scottish Government about the effectiveness of the Integration of Health & Social Care across the whole of Scotland<sup>5</sup>. These reports, especially the Accounts Commission Report prepared by Audit Scotland, provided useful information and insights into the impact and effectiveness of the Integration process.

Key lessons learnt:

- Desk based approach rather than monitoring and evaluating a live project very challenging
- The model Cost Effectiveness study model – Integrated Health and Social Care was effective to plan the work and sources of data
- The importance of ‘Actors’ in the model. With the change in staff at P&K made staff engagement difficult to access unpublished data on cost.

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<sup>5</sup> [https://www.audit-scotland.gov.uk/uploads/docs/report/2018/nr\\_181115\\_health\\_socialcare\\_update.pdf](https://www.audit-scotland.gov.uk/uploads/docs/report/2018/nr_181115_health_socialcare_update.pdf)

# Cost-effectiveness report – Värmland County Administrative Board

## Interreg North Sea Region – In For Care project

### 1. Introduction

For a long time, we have lived in the industrial society. But time has changed. Society is becoming more digital. Fiber networks are being expanded, digital services are being developed and there are more requirements for actually being connected in order to participate in and benefit from many opportunities in society. At the same time, there is a risk that some groups will be set aside, unless special efforts are made to increase their digital skills. One of these groups of society are those who are 65 and older. This short study is about an initiative taken to increase the possibility for the elderly to become part of the digital society.

The initiative was to arrange two days of digital educational seminars in Eda Municipality in Sweden, with a training effort per afternoon/evening of three hours. The seminars were held on December 5-6, 2018. Approximately 75 participants per night sat divided into approximately 15 tables. Each table had 2-3 computers available, and the participants could also bring their own equipment in terms of mobile phones, tablets and more. At the seminar, there were around 40 high-school students as volunteers, together with educated supervisors from the municipality.

The high-school students showed then, based on the participants' needs and questions, how different digital services and features work. During the three hours, the participants were invited to coffee and also had an entertainer. The concept was arranged in close cooperation between public authorities, Eda municipality, a large enterprise (tele operator Telia) and high-school students as volunteers.

### 2. Background

Today's society is based on the fact that people can use information and communication technologies. However, the market does not offer solutions, products and services available to all yet. One of the groups that are digital excluded are older than 65 years, many are residents in rural or sparsely populated areas.

According to the Internet government in Sweden, 98% of Sweden's population have access to a mobile, and 93% have a computer in the home. However, having digital devices or internet access is not a guarantee that it's being used. Fresh figures show that half a million Swedes never use the internet and most of them are older. Nine percent of the 66–75-year-olds and 42 percent of those who are 76 or older do not use the internet at all.

Digital skills and digital trust are keys for understanding the benefits of digital development and are a prerequisite for taking advantage of and use digital tools and services. The individual has a need for education and information, and the municipalities have very good prerequisites to meet that need.

### 3. Project description

**Partner:** Värmland County Administrative Board, (VCAB), Karlstad, Sweden

**Project title:** Digitally Inclusion

**Project description:** VCAB are hosting digital educational seminars to get the target group, elderly 65+ more comfortable about digitalization. High-school students are volunteering to help the target group, using their own digital skills. An entrepreneur, Telia, is providing digital devices such as computers for the educational seminars. The seminars are in cooperation between public authorities, the municipality, an entrepreneur, high-school students and the target group, elderly 65+.

Two seminars were held in Eda Municipality on Dec. 5 and 6, 2018. For each seminar approximately 75 elderlies were participating and around 40 high-school students were recruited as volunteers.

### 4. Project objective

The main objective is that the target group; 65+ will become more comfortable about digitalisation after participating in a digital educational seminar.

### 5. Project sub-objectives

Sub- objectives are to get the target group; 65+ to use more digital services after the seminars. VCAB will try to find out the continuing needs of education in digitalisation for the target group. This will be useful in a long-term perspective. VCAB also would like to find out what the volunteers thought about helping out at the digital educational seminars.

## 6. Costs & effects of the project

### 6.1. Direct costs

Sound	Included in local rent
Entertainer	3000 SEK
Local rent	17 000 SEK
Coffee	Included in local rent
Compensation high-school students	Approx. 20 000 SEK incl. Social tax etc.
Invitations including postage	13 000 SEK

Bus for pick-up	Approx. 6000 SEK
Educational supplier incl. project management, marketing materials and technology.	96 100 SEK
<b>Totalt</b>	<b>152 100 SEK</b>
Participants, elderly 75 persons/day	150 persons
<b>Total cost/person</b>	<b>1014 SEK (approx 101 euro)</b>

All these costs, but the entertainer, are needed to measure the cost-effectiveness of our digital educational seminars. The entertainer added value.

## 6.2. Indirect costs

The digital educational seminars are arranged in close cooperation between public authorities, Eda municipality, a large enterprise and high-school students as volunteers. Indirect costs are working hours for employees at the public authorities and the municipality. Travel costs for employees are not included.

### Working hours for employees in total for two days including preparations.

**Municipality, supervisors:** approx. 71 hours x 400 SEK/Hour  
Municipality's project manager preparations: approx. 65 hours x 400 SEK/Hour  
**Public Authorities, Region Värmland:** approx. 40 hours x 500 SEK/Hour  
**Public Authorities, VCAB:** approx. 40 hours x 500 SEK/Hour

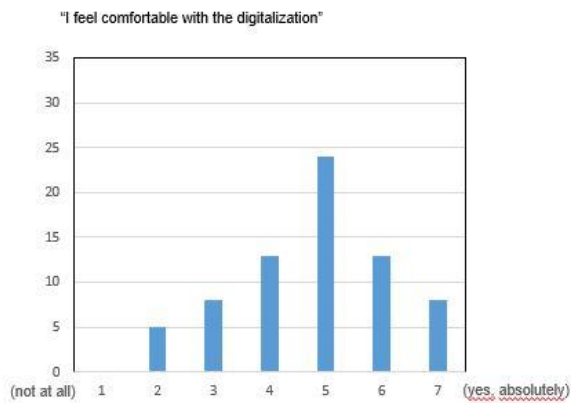
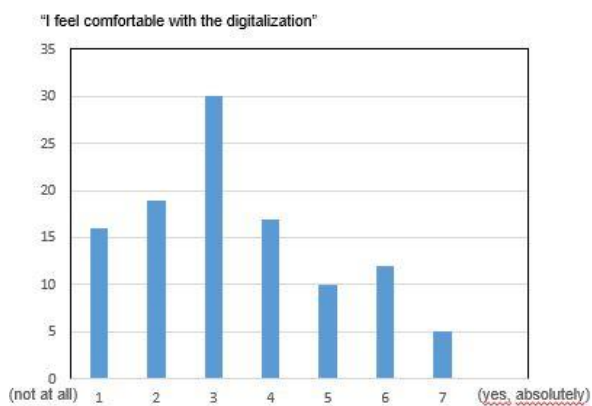
Total cost Municipality: 54.400 SEK

Total cost Public Authorities: 40.000 SEK

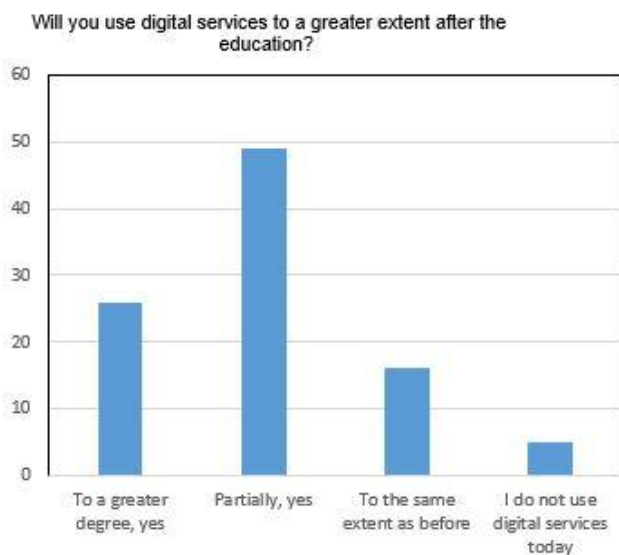
Total cost: 94.400 SEK

## 6.3 Direct sorts of effects and impact

The direct effect was clear! More elderly felt more comfortable about digitalization after the digital educational seminars than before. The chart to the left shows how the elderly felt about being comfortable with digitalization before the seminar. The chart to the right shows how the elderly felt about being comfortable with digitalisation after the seminar.



The chart below shows to what degree the target group will use digital services to a greater extent after the education.



## 6.4 Indirect sorts of effects

The indirect sorts of effects are reducing the threshold for the elderly to use digital devices and services. It seems to be a quick way of increasing their knowledge. It also got the target group more interested in trying and using digital services and digital solutions.

## 7. Effect measurements

These are the effect measurement (output) indicators VCAB will use and compare to the effects we want to achieve.

1. Feeling comfortable about digitalisation.
2. Using digital services in a higher degree than before the seminar.

## 8. Measurement instruments

The measurement instruments for the output indicators were two questionnaires. The target group 65+ got to fill in one self-assessment questionnaire (on paper) before the digital educational seminar started (118 persons responded) and one after, just before they left (96 persons responded). We also used a questionnaire for the high-school students (volunteers), to fill in at the end of the seminar the first day (31 persons responded).

## 9. Measurement period

The digital educational seminars took place in Eda Municipality in Värmland Sweden, on Dec. 5 and 6, 2018, between 15:00-18:00. The measuring instruments, three questionnaires, were filled in during the same time.

The evaluation of the questionnaires was done by Värmland County Administrative Board in December 2018 and finalized in January 2019.

## 10. Evaluation

### Cost-effectiveness analysis

For the cost-effectiveness analysis, we need to include the personnel costs (mentioned as an indirect cost in 6.2). The total costs are 246.500 SEK (or 23.113,08 EUR).

Indicator feeling comfortable

When it comes to the other indicator “Feeling comfortable about digitalisation” we had a before and after survey. There were 125 participants at the seminar who were given the opportunity to answer the questionnaires. The two questionnaires were filled in by different numbers of participants, why the calculation below is based on the responders as a percentage instead of number of people. The indicator shows that 18 % of the participants were “Feeling comfortable about digitalization” before the seminar. After the seminar there is a clear difference where 67% respond that they are “Feeling comfortable about digitalisation”. That is 3,72 times more than before the seminars. **To increase the rate of feeling comfortable with digitalization with 1 %, using this project, the investment is 5.030,61 SEK.**

Indicator “getting 65+ to use more digital services after the seminars”

Regarding the indicator “Using digital services in a higher degree than before the seminar” we received data from 96 respondents, 74 (77%) of them will be using digital services in a higher degree than before the seminar. This means the CE analysis is 3.201,30 SEK ( $246.500/77= 3.201,30$  SEK). **If you want to increase the amount of people using digital services to a higher degree with 1 %, this way of working (seminar) cost 3.201,30 SEK.**



## General conclusion

The educational seminars in Eda municipality were arranged to help the target group 65+ to become more digital. The training effort was highly appreciated among the participants.

The elderly's expectation of the afternoon was to learn more about how a computer or Smartphone worked, learn more about digital services and internet but also to meet other people. When we asked if their expectation were fulfilled after the seminars, almost 70 % said mostly yes and 28 % said partly yes. Comments read on questionnaires were "Great, it was very nice" and "A positive experience". The majority of participants felt that their expectations was fulfilled.

Many elderly 65+ thought that digitalisation can increase knowledge, but also save time and increase the quality of life. Almost 80 % of the elderly will use digital services to a greater extent after the digital educational seminars. The services they were more likely to use were banking services, news services and communication. Some answered that they are not skilled enough or that they don't have a computer. The participants were more likely to try more digital things after the seminars.

The self-assessment questionnaires were also to identify the target groups needs of education after these seminars in a longer-term perspective. All, but two persons, wanted more education! Comments like "This was great. I want more education please".

The main objective in this study was that the target group; 65+ will become more comfortable about digitalisation after participating in a digital educational seminar. The effect is very positive! The result shows that the elderlies are feeling much more comfortable about digitalisation after only three hours of education (see chart in chapter 6.3). The results show that the participants have moved forward their boundaries.

96 % of the elderlies thought their view of digitalization improved during the education. The view off what digitalization really means, seems to have become less dramatic, meaning lowering the threshold for the participants.

High-school students were recruited as volunteer to help the target group with digital devices and services, using their own skills. This was highly appreciated by the elderly; 86 % thought it was mostly good and 12% thought it was partly good. The experience seems to be that the interaction and the relationship between the high-school students and participants worked satisfactorily. The social meeting between individuals, in smaller groups around the tables, have been highlighted as extra important.

Even the high-school students were to fill in a questionnaire after the seminar the first day. Their main motivations were; that "It's fun to contribute with knowledge" and "It's nice to help a fellow human". We asked them what they thought about volunteering and almost all said that it was rewarding to help someone and that it was nice! 94 % of the high-school students would most likely, or partly, do it again.

Since many elderly think that digitalization can increase knowledge, and many are interested in using the internet to check news and to communicate, this could be interpreted as saying that the elderly perceives social exclusion since they are not so digitally active. According to the research, digital exclusion can lead to social exclusion. A recent study shows that one year of social exclusion costs society half a million Swedish crowns per person affected. A whole new report highlights the importance of early intervention and the need to reformulate the problems.<sup>6</sup>

These educational seminars seem to have a quick, positive effect for a relatively small amount of money for each participant. In Eda municipality there were approx. 150 persons participating, costing approximately 1.643,33 SEK/person. The total cost for both the seminars were 246.500 SEK (includes personal costs 94.400 SEK).

Regarding the indicator “Using digital services in a higher degree than before the seminar” we received data from 96 respondents, 74 (77%) of them will be using digital services in a higher degree than before the seminar. This means the CE analysis is 3.201,30 SEK ( $246.500/77 = 3.201,30$  SEK). If you want to increase the amount of people using digital services to a higher degree with 1 %, this way of working (seminar) cost 3.201,30 SEK.

When it comes to the other indicator “Feeling comfortable about digitalisation” we had a before and after survey. There were 125 participants at the seminar who were given the opportunity to answer the questionnaires. The two questionnaires were filled in by different numbers of participants, why the calculation below is based on the responders as a percentage instead of number of people. The indicator shows that 18 % of the participants were “Feeling comfortable about digitalization” before the seminar. After the seminar there is a clear difference where 67% respond that they are “Feeling comfortable about digitalisation”. That is 3,72 times more than before the seminars. To increase the rate of feeling comfortable with digitalization with 1 %, using this project, the investment is 5.030,61 SEK.

Based on the questionnaires, we can see that these digital educational seminars have had a clear influence on the participants' attitudes and on their behavior regarding using digital technologies.

The digital educational seminars in Eda municipality for elderly 65+ were arranged to increase digital inclusion and help the participants to feel more comfortable about digitalization. Given the positive comments we have seen during the seminars and the actual changes in both behavior and attitudes to digitalization and digital technology in the questionnaires we cannot say anything than yes – it clearly helps elderly to feel more comfortable about digitalization. This will be an important part of creating a sustainable society in the long term.

“A good afternoon, I hope for continuation. Thanks to Eda municipality and school students.”

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<sup>6</sup> Ingvar Nilsson & Eva Nilsson Lundmark ”1+1=3 About collaboration between school and working life from a social-economic perspective”.

# Cost-effectiveness report – UC Syddanmark

## Interreg North Sea Region – In For Care project

### Autumn 2018 – Spring 2019

#### 1 Project description:

Education for volunteers, professionals and volunteer students with the focus on health communication and at the second course supporting the education by testing and using an existing health educational tool, in the form of an e-learning platform.

During the period, two courses in health promotion communication for volunteers and professionals have been completed. At the first course (2018), 17 volunteers, students and professionals participated. On the second course (2019), 13 volunteers and professionals participated.

#### 2 The output indicators are:

**A.** That volunteers and professionals can handle conversations with relatives and nearest networks (informal caregivers) with a health-promoting approach.

**B.** How much was the cooperation between voluntary, professional and informal caregivers improved?

Both indicators were measured by baseline surveys the first day of the courses and comparative surveys the last day of the courses.

*In the pilot course*, 17 participants were divided among 4 professionals - 3 students - 10 volunteers. 14 of 17 participants submitted the comparative survey and not all questions were answered.

*In the second course*<sup>7</sup>, 13 participants were divided among 4 professionals and 9 volunteers. 12 of 13 participants submitted the comparative survey and not all questions were answered.

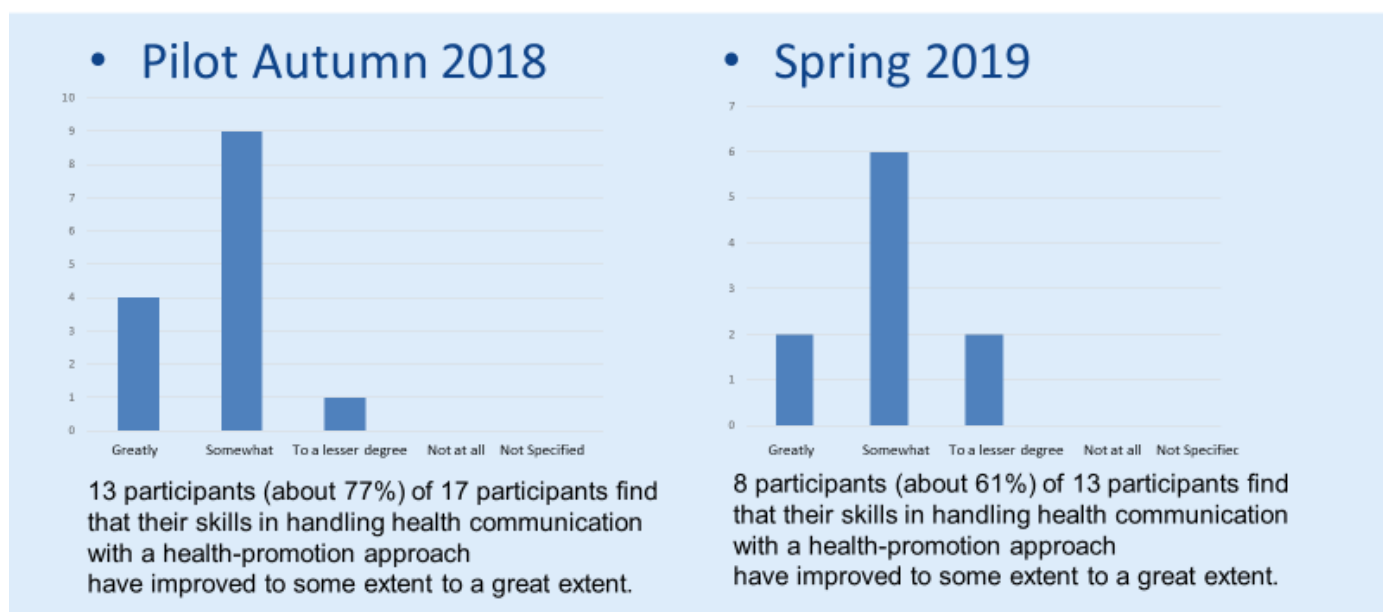
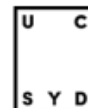
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<sup>7</sup> In this course, participants' prerequisites for participating were not communicated well enough from their leaders. Three participants were therefore administrative staff.

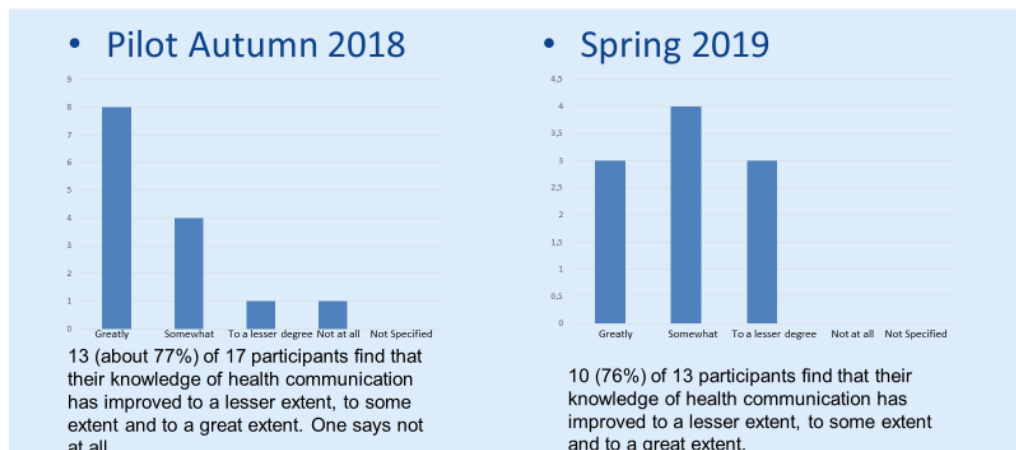
On a scale based on the following assessment<sup>1</sup>: Greatly - Somewhat - To a lesser degree - Not at all - Not Specified, the answers showed that:

### 3 The output (A) of the indicators for both courses:

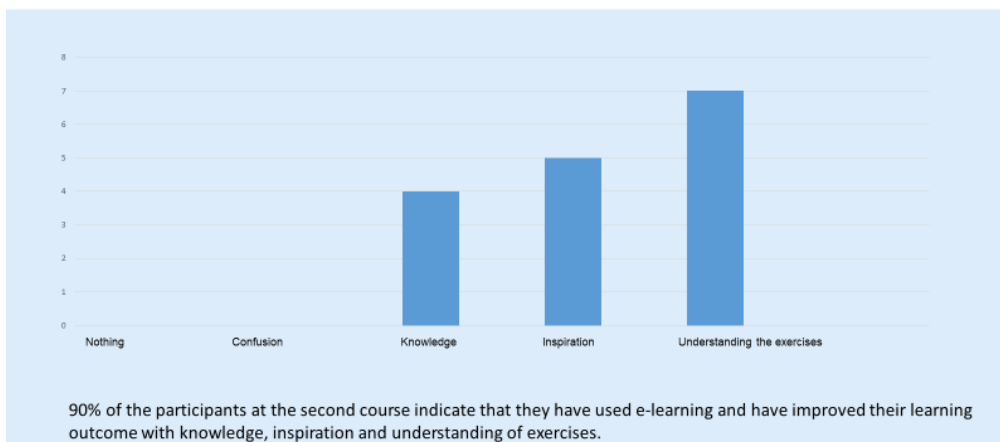
#### Volunteers and professionals can handle conversations with informal caregivers with a health-promoting approach.



#### Comparative measurement of participants' general knowledge of health communication



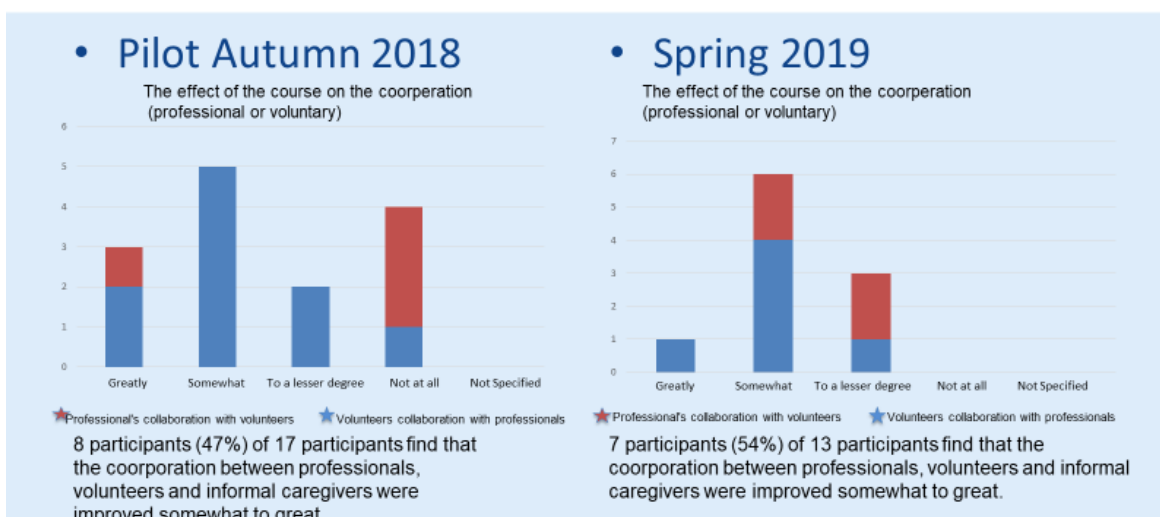
## Participants learning outcome from e-learning Spring 2019



Despite fewer participants in the second course and therefore fewer opportunities for the participants to exchange experience from practice between the courses, the learning outcomes for both courses show almost the same result. We attribute this to the fact that e-learning was only used on the second course. However, the final measurement will only appear after the third course in October 2019.

The output (B) of the indicators for both courses now testing and using learning:

## How much was the cooperation between voluntary, professional and informal caregivers improved?



## 4 Costs:

### Costs



Courses - In For Care						
	EUR	Materials	Catering	Personnel cost to organize the courses	Teacher fee	Total
Course 1 (2018)		407	721	4.753	1.410	7.291
Course 2 (2019)		924	736	2.990	1.410	6.060

This table shows exclusively the expenses settlement for the two courses.

- The costs of e-learning are not included in this table as the collaboration around this with the Region of Southern Denmark belonged to another project. However, hours have been spent from In For Care for the project's two employees to develop and test e-learning. But these hours do not appear in the table.
- The cost of the second course is less than that of the first course (pilot), as the teachers spent less preparation and meeting time with the partners in Esbjerg Municipality the second time.
- The project invested in the production of health educational materials for each participant in the courses. This expense rose on the second course as the only employee at UC SYD's own printing plant became long-term sick and a smaller medium-sized printing company was given the job.
- The course also invested in catering for the participants as the courses were held around lunch and afternoon tea which suited the participants best.

## 5 Cost-effectiveness analysis

**A.** That volunteers and professionals can handle conversations with relatives and nearest networks (informal caregivers) with a health-promoting approach.

Based on the impact on the capacity to handle conversations with relatives and nearest networks (informal caregivers) with a health-promoting approach, the course in 2019 was slightly more cost-effective. Thanks to the impact on general knowledge on health communication, the cost-effectiveness of this was 18 % higher in 2019 than in the pilot of 2018. In general, it was 8% cheaper to have a 1 % - impact on indicator A in the 2019 course than in 2018.

Pilot 2018:

CE: 1 % / 95,93 EUR

Handle output: 13/17 = 76%

Knowledge output: 13/17 = 76%

CE: 1 % / 95,93 EUR

Costs: 7.291

2019:

Handle output  $8/13 = 62\%$

**B.** How much was the cooperation between voluntary, professional and informal caregivers improved?

For indicator B the course in 2019 is also more cost-effective than 2018. For 1% more respondents who confirm that the cooperation between voluntary, professional and informal caregivers is increased, the investment was 42,91 (or 27,66 %) less in 2019 than in 2018.

**Pilot 2018:**

**Handle output:  $8/17 = \%$**

**CE: 1 % / 155,13 EUR**

**Costs: 7.291**

**2019:**

**Handle output  $7/13 = 62\%$**

**CE: 1 % = 112,22 EUR**

**Costs: 6.060**

CE: 1 % = 97,74 EUR

Knowledge output:  $10/13 = 77\%$

CE: 1 % = 78,70

Costs: 6.060

We can conclude that for both indicators the course in 2019 was the most cost-effective.

## 6 Lessons learned:

We learned that:

- It was a good idea to motivate students to participate in the courses, which we noticed on the second course where students did not participate. That is why we make an extra effort to get students on the last and third course.
- Both volunteers and professionals could have a great cooperation when they had a common cause namely the health communication.
- The eligibility criteria for participation should be more clearly marked in the recruitment of both volunteers and professionals so that only participants with contact in practice to informal caregivers are enrolled.
- Clarification that participants bring their own laptop as it is used for e-learning in teaching.
- On the first day of the course, we emphasize that the learning outcomes of the course are related, among other things, to the participation of all 4 teaching days.

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## Cost-effectiveness report – Province of Drenthe

### Interreg North Sea Region – In For Care project

## Informal caregiver consultant: saving or expense?

### Background

- The western world is aging, making the provision of / pressure on informal care an increasingly important social and political issue.
- The Oldest Old Support Ratio (OOSR), the number of people aged 50 to 75 divided by the number of people aged 85 plus, has declined from 30 to 15 from 1990 to 2015, and will decline even further to 6 in 2040 (PBL, 2018).
- 11.52% of the 18-plus Dutch citizens (~ 1.5 million people), mostly females and people aged 45 to 64, provide intensive informal care (SCP, 2016).
- The burden of informal care leads to substantial costs for Dutch employers due to employees' absenteeism and loss of productivity.
- This report evaluates the cost-effectiveness of an informal caregiver consultant (ICC) in mitigating caregivers' burden of informal care from employer perspective.

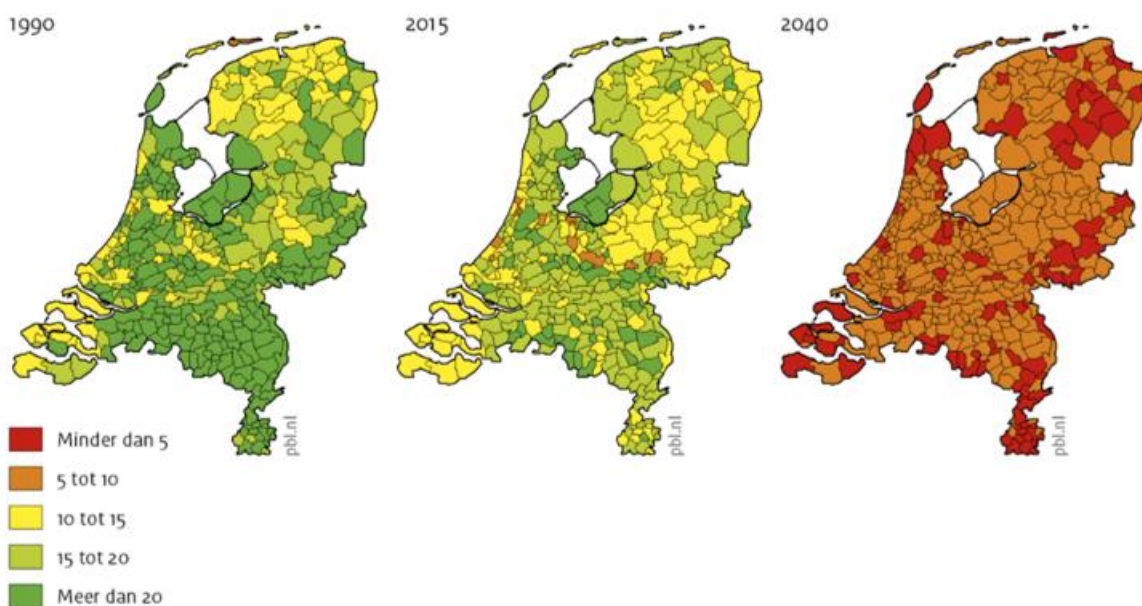


Figure 1. Oldest Old Support Ratio (OOSR) per Dutch municipality 1990-2040 (PBL, 2018)

### Health impact

- Previous research shows a direct effect of informal care on mental fatigue

( $p < 0.01$ ), which is 23% larger for employed people (Broese Van Groenou, 2015). Similar findings from local projects in Assen and Hoogeveen with right-skewed burden of informal care distributions (Pardoel & Dijkstra, 2018, 2019).

- De Boer et al. (2010) demonstrate that awareness and coping strategies on work could partially explain the variance in burden of informal care.

## Societal cost

- The economic value of informal care from a societal perspective is estimated at €6 billion (SCP, 2013), but what are the costs if caregivers fall ill or work less?
- Direct costs from an employer perspective due to absenteeism is estimated at €38 million of which 68% is related to burden of informal care (UMCG, 2017).
- Further research is needed to estimate the costs due to loss of productivity.

## Intervention: informal caregiver consultant

- Pardoel & Dijkstra (2019) show that an ICC shifts the burden of care distribution leftwards, i.e. positively affects caregivers' health.
- Next, we assume (i) annual cost due to absenteeism of €68,223 per employee, (ii) annual cost of an ICC of €65,800, and (iii) a reduced probability on absenteeism of 25% after adopting an ICC (UMCG, 2017; Pardoel & Dijkstra, 2019).
- Hence, the intervention ICC is dominant from an employer perspective, i.e. positively affects caregivers' health and is cost-saving, from a minimum of 8 employees.
- The ICC is dominant for all probabilities from 1-100% and number of employees from 1-7 from a societal perspective, as the care replacement cost in case of caregivers' overload outweigh the intervention cost for all parameters (SCP, 2013).

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