

# Advisory report Lymbiq - CareXL



Advisory report Lymbiq - CareXL | Minor #GetConnected | Communications

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Rotterdam, December 6, 2020

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## Executive summary

In this advisory report a solution to the following question asked by the client, Atabey Senyurek, is given:

*The team is required to set up a digital platform called Lymbiq in order to create more health awareness and knowledge among the residents. A lot of the residents are low-literate and non-native Dutch people living in Afrikaanderwijk. Through this platform, people should be able to find accessible knowledge about health issues. It should also motivate them to adopt a healthier lifestyle. Four topics will be pivotal on this platform:*

- 1 social context/social well-being*
- 2 (healthy) food*
- 3 basic health care/small illnesses*
- 4 topical interests*

The team will discuss firstly how the research is done to gather enough information and insights for setting up advice. After that, you can read about the application of the Behavioural Change Wheel and how it is an addition to the formulated solution. The complete written out version of this application can also be found in appendix 2. In the next step, the team talks about several insights that are assembled and helped in gaining a better perspective on the target audience, the difficulties they face and what their pain points and wishes are. All the additional information about these insights are included as an appendix. This all resulted in a comprehensive advice and a solid prototype of the online platform, which you can read under the section 'solution'. The team added all the relevant references to this document as well, so that the client can see where the information is retrieved from.

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## **Introduction**

In the advisory report, all the relevant details of the research and development process will be discussed. This is done to substantiate the proposed solution by the group that will ultimately lead to Atabey Senyurek and EMI's problem being solved. In addition, the report will explain and advise the client on how the proposed solution is meant to be exploited in the future. The report and the information in it are based on relevant insights collected from several workshops which have been followed and the research carried out by the team.

The following information was provided to the team by the client, Atabey Senyurek, in the briefing:

*The team is required to set up a digital platform called Lymbiq in order to create more health awareness and knowledge among the residents. Through this platform, people should be able to find accessible knowledge about health issues. It should also motivate them to adopt a healthier lifestyle. Four topics will be pivotal on this platform:*

- 1 social context/social well-being*
- 2 (healthy) food*
- 3 basic health care/small illnesses*
- 4 topical interests*

Therefore, the deliverable of the project is an online platform from which the low-literate, low-income and non-native inhabitants of Afrikaanderwijk as the target audience, would be able to retrieve information. On this platform information about a healthy lifestyle is provided to implement it into their daily lives. The main challenge of the assignment is to make the platform as comprehensive and user-friendly as possible for every member of the target audience.

In this advisory report, the team presents the tested and semi-operational prototype of the platform Lymbiq that is going to generate traffic and connect people in Afrikaanderwijk. The platform is suitable for UGC and contributes to building a community. Moreover, the advice will be given using the collected insights and applying the Behavioural Change Wheel. Also, all the choices made by the team will be justified and explained.

# Research Design

To collect all the necessary insights to provide a functional solution, the team carried out extensive research of the target audience and the relevant field. In order to be able to gather a sufficient amount of relevant information that would allow the team to offer well-described advice, the following choices had been made. The team used both desk and field research. The information on which the final deliverable of the team is based was gathered through several interviews, following certain workshops, collecting information from the internet and paying a visit to Afrikaanderwijk. The interviews were held with experts and also people from the target audience itself. The team is persuaded that the interviews served as a necessary addition to the information gathered through the internet and offered workshops.

## Desk research

The team performed an online search of the similar practices already available abroad in order to get inspired and find out which feature could be implemented into the Lymbiq platform. The benchmarking was done by looking not only at initiatives available abroad but also at interesting activities in the Netherlands which were hosted for low-literate or non-native Dutch people. Furthermore, information was collected about the cultural factors in the non-dutch communities and what their view on health and a healthy lifestyle is. Overall information on low-literacy, stated numbers and facts were collected via desk research. The team finds that desk research gave a better insight into the problem and that it helped to make sure that the delivered solution has the potential to be effective.

## Field research

Additionally, the team organized qualitative interviews with members of the target audience and an expert to get credible insight into the matter.

In regards to the cultural factors that define the mentality of the non-dutch communities and may have an impact on the performance of the suggested online platform, the team reached out to [REDACTED]. [REDACTED] provided the team with insightful information about the culture, the faced problems, pain points and suggestions on how to reach the target audience.

Further, the team carried out another interview with [REDACTED], who considers himself as a low-literate person. The interview resulted in an in-depth insight into the struggles of the members of the target audience that possess a low level of literacy.

This additional insight information helped the team to find ways to engage with the target audience more effectively and to gain an understanding of their needs. Consequently, the team was able to create an effective platform for the given target audience.

# Application of the Behavioural Change Wheel

The Behavioural Change Wheel, provided during the workshop from Healthy'R, is highly useful in the given case framework in utilising all the insights gained during the workshops and the assignments linked to them. The application of this framework is relevant since it advises on how to

1. attract the target audience to the platform
2. persuade people to adopt a healthier lifestyle

This helped the team with formulating concrete steps that can stimulate behavioural change among the target audience. The wheel consists of three components named capacity, occasion and motivation. Since the desired outcome is behavioural change, considering the following subjects and triggering them using an intervention is necessary. The filled-in form on the target audience's desired behaviour can be found in appendix 1. The specified target audience is mothers due to the advice given to the team by [REDACTED]. She explained which health problems the mothers are facing because of the lack of knowledge about the unhealthy diet they are following. Because of this, other family members pursue a similar lifestyle. Consequently, the stimulation of the behavioural change should then begin with mothers since they are known as the caretakers in the household. The full explanation of the application of the wheel can be found in Appendix 2.

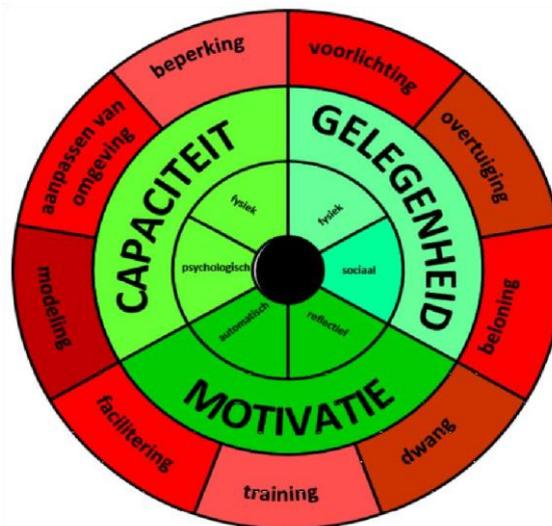


Figure 1: The Behavioural Change Wheel (PPT Healthy'R, 2020).

## Other relevant information and collected insights

Besides the Behavioural Change Wheel model, other insights and information aided in formulating advice for the online platform. All of the insights below are taken into consideration while building a prototype and writing the advisory report. The detailed information can be found in appendix 3-7. The team chose to include some of the insights in the body of the report as to utilise the full potential of the platform, one must be aware of the problems the target group is facing and what their wishes are.

### **Insights from interviews with [REDACTED] (used to be low-literate):**

- Most of the low-literate people make little or no use of online devices and channels. - One of their wishes is to always encounter where they can go for offline help or to insert a telephone number that they can call. This information should be recognisable, clear and prominent mentioned on the homepage.
- The usage of videos and images is more effective than using text.
- Low-literate people often go to family members or other confidants for help.

*The detailed script of the interview can be found in appendix 3.*

### **Insights from the interview with [REDACTED]**

- Many mothers/grandmothers in the Somali community have diabetes, cholesterol and high blood pressure. This is more common with mothers than fathers. Also, overweight with women mainly. This is due to the food since Somalis eat a lot of pasta, dough and rice. A lot of double carbohydrates are also eaten at dinner, such as rice with potatoes.
- Somalis often think that the food they eat is healthy when it is not. They rather think that the food could not be healthy because it does not come from Somalia but the Netherlands, for example. It is also something that Somali men do not see a meal without meat as a real meal and they should always get pasta or rice. This behaviour is of course taken over by the children.
- One of the mothers [REDACTED] knows said that they have started exercising and eating healthier but those are women who came here earlier and they are better integrated. - It differs per family whether the mother knows where to go for help. What [REDACTED] often notices is that the women from the neighbourhood started asking her mother if she knew where to get help. In this way, they tend to ask confidants for help faster.

*The detailed script of the interview can be found in appendix 4.*

### **Insights from benchmarking:**

- Applying for funding from the government can help to implement more global and expensive ideas.
- Using visuals, animations and audio is a good way to simplify learning and explain complex concepts.
- Organizing physical events amongst communities helps to spread the information while contributing to a community spirit.

- Collaborating with local clubs, events and communities to spread the relevant information to the given issue. E.g. football club encouraging low-literate people to read and educate themselves.

*The full document that looks into how the issue of low-literacy is tackled in other countries can be found in appendix 5.*

**Insights from Programme Health4all:**

- Always provide a combination of online applications and face-to-face contact with the healthcare provider.

*All the information collected from the Pharos website can be found in appendix 6.*

# Solution

## Prototype online platform Lymbiq

As requested by the client's assignment, the prototype for the online platform has been created. The website makes use of bright visuals and short captions to make sure it is easy to navigate for every user. This was an insight the team got to hear multiple times, which is the reason why less text is used and more visuals are included. These pictures and videos explain what the subject is trying to tell them, so the target group understands immediately what it is about. This is all done without the usage of difficult words since the target audience does not understand these. It also contains the chat function, so that the users can get an answer to their questions. All the contact information (telephone number, email address and location) are prominently placed at the homepage of the website since that was one of the wishes provided by the target audience. Furthermore, all the important information is located on one and the same page (the homepage), so the target audience gets a clear overview of everything they need to know. Also, this stimulates the offline communication which is something important the team saw and heard during the research phase. It is namely important to combine online and offline events and communication with the target audience. Since the target group finds it hard to navigate through a complicated website that requires multiple clicks to find certain information, the choice has been made to place everything at the homepage. If they want to get more extensive information about a topic, they should be able to click on the pictures that navigate them to another webpage. User-generated content is shared at the end of the webpage with also additional information about events in Afrikaanderwijk or what other people from the neighbourhood are up to. This is done to stimulate the feeling of a community and that were both the conditions of this online platform. The prototype can be found via this link:

<https://dawnschaerlaeckens.wixsite.com/prototypelymbiq>

## Future implementation and management

The development of a fully-functional version of the prototype will require a professional or a person with skills in website creation. Services of this person will be needed continuously, as the proper functioning of the website will have to be maintained all the time. After the website is created, doctors, personal trainers and dieticians of Afrikaanderwijk can be in charge of putting out content onto the platform and staying in touch with users via the built-in chat, email and phone line in case of arising questions. However, it is advised to involve the community into the website activities. Users can suggest new topics for the blog, request new recipes, or even submit readily to be posted articles themselves. Those will later be reviewed by one of the professionals on the team and, if approved, published on the website.

## Advice about the online platform Lymbiq

After collecting the insights, the following advice can be given to help the online platform be highly effective. The implementation of this advice will guarantee that the online platform will be widely used among the target audience and understood better

Given the target audience, *it is advised to focus mainly on the mothers that are living in Afrikaanderwijk*. They often take care of the household and are the ones that prepare the meals for the rest of the family. Especially if they are not working, they can use the platform

as a lifestyle coach and best friend. The platform can be used to find new recipes and fill in the grocery lists. As mothers are also the ones that come together to drink some coffee and tea in the neighbourhood, they can tell each other about the platform and spread the word but also, give each other tips or prepare a meal together. This makes it entertaining for them to use the platform as a tool in their day-to-day life and brings out the community feeling.

When creating content or an online platform for this target audience, it is good to stimulate *more offline communication*, since they make little or even no use of online communication channels. It is important to keep using the key persons from Afrikaanderwijk, confidants, family members and some central points in the neighbourhood for this stimulation. In this way, not only the offline communication is stimulated, which makes the target audience feel more comfortable, but it also can be used as a marketing tool for the online platform. Lymbiq can be introduced and discussed with the target audience at these central points (think of the community centre in the neighbourhood) together with their confidants for example. Additionally, it contributes to community building, which was one of the conditions this platform should be stimulating.

*Organising an offline event* can be useful to transmit all the necessary information. This can be done in the community centre to introduce the platform to the target audience. A community centre is a place in which they feel comfortable to go to and most of them already know the place. That is important for the people since scheduling meetings and going to unknown places is hard for them, said [REDACTED] institution. It is important to invite significant others, such as children or friends from the target audience so that they can help the people from the target audience out when they have questions.

If you want to stimulate offline communication, try to *implement more time (up to at least 15 minutes)*, so you know for sure that the information you explained is well understood and received. It is good to *ask questions during a conversation* with one of the mothers from the target group, to know if they have understood your explanation.

*Participating more actively*, instead of waiting for them to find the online platform themselves, will make it easier to reach the desired outcome sooner. This is the reason why the platform should be prominently promoted in places the target audience is familiar with. Also, the practice of the client could be a good place to start promoting the platform.

Furthermore, it is advised to attempt *reaching the members of the target audience indirectly*. They tend to trust their *significant ones and family members*. If you focus on those people, then you have a better chance that your message will be received by the mothers from Afrikaanderwijk. For this part, the key persons from Afrikaanderwijk can be used but also the children who are born and raised in the Netherlands (for the non-native Dutch people) and who go to school and college (for the low-literate people overall). They are familiar with online communication and can help the target audience with understanding the platform better.

The *information has to be as simple as possible*. All the main information should be mentioned on the same homepage, otherwise, the low literate people can not find the information that is provided to them. It is good to mention one offline location and insert a

telephone number to inform the target audience where to go for questions. The usage of pictures and videos is very important and limiting the use of text, especially hard words, as well.

### **How to stimulate the target audience to use the online platform**

The team suggests giving the target audience a training/offline workshop about living a healthy lifestyle, how to cook healthy food and informing them about the existence of the online platform Lymbiq that provides all this information. The training contributes not only to the promotion of the online platform but also contributes to being together as a community and helping them firstly via offline communication. This offline meeting will allow people to get familiar with the platform and ask all the questions they have before using it. After giving the information to the mothers that are present with at least one person they trust, it would be nice to cook one nice and healthy meal together. It is important to give a demonstration of how to use the platform while preparing the meal in small steps so that the mothers know exactly what to do when they are using it all by themselves at home. Such workshops don't only have to be held in the beginning during the introduction phase of the platform but also can be done more frequently. Mothers could organise those meetings themselves together with their friends from the neighbourhood. When doing such an activity together, it is easier to stimulate and motivate people than if they had to do it all by themselves.

## **Conclusion**

To conclude everything the team described above, the prototype for the comprehensive online platform is delivered for the client. Additionally, it is advised to organize an offline event, during which the purpose and usage of the platform are explained to the target audience. The online platform indeed has the potential to be effective in solving the client's

problem, if all the recommendations described above are taken into account and implemented.

It was an honour for the team to have a chance to contribute to the client's assignment. The team hopes the given advice will be of use for Lymbiq. Additionally, the client is welcome to contact the team in case of arising questions or clarifications.

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Appendix 1: Healthy'R assignment on mapping the (desired) behaviour

**What is the current undesired behaviour?**

People in Afrikaanderwijk have several health issues and don't know how to change it due to lack of facilities and information. A lot of these people are low literate and from a non-native background, so some things are really hard for them to understand. The most important thing is the unhealthy diet they follow in their households.

**Why is this a problem?**

First of all, the provided information to them is too hard for them to be understood. So if they want help and look for it, they don't know what to do with the information they get. The people in Afrikaanderwijk are also very passive, so they don't step up fast enough to get some help. They also don't trust everyone and everything, so they only search for help through a family member or keyperson in Afrikaanderwijk. But, when it comes to diets, they often tend to eat the traditional food of their culture, which is often not that healthy. Also these families tend to cook always more food than needed for their family, so most of them overeat themselves to not throw the food away (since that is forbidden in the culture/religion). Ultimately, health issues start to grow with younger kids as well, so with continuing this way, we will create an unhealthy generation.

**Who are showing this behaviour?**

Low literate mothers and mothers with a non-native background between the age of 35 and 45 years old.

**Who are also involved (stakeholders)?**

Keypersons they trust in the neighbourhood, family members, community centres, the government and gemeente Rotterdam, health organisations.

**Where is this behaviour shown (at home/**

**on the street/ at the office ...)? / When is this undesired behaviour shown?**

The behaviour is shown mostly at home, but also at grocery stores where they buy their food.

**What is the desired behaviour?**

How do I make sure that low literate and non-native mothers from Afrikaanderwijk are using the online platform we created for Lymbiq when cooking a healthy dinner for their families?

**Who need to show the desired behaviour?**

The low literate and non-native mothers in Afrikaanderwijk between 35 and 45 years old.

**Where and when do they need to show this?**

When facing health problems or having other questions surrounding healthy diets, when they want to eat more vegetables and fruits, drink less soda, use less sugar in their diets, use more outdoor activities > so everything surrounding a healthier diet for them and their children. You finish with completing the sentence:

How do I make sure that low literate and non-native mothers (35-45 years) from Afrikaanderwijk are using the online platform we created for Lymbiq when cooking a healthy dinner for their families?

## 2. Analysis of the behaviour

Desired Behaviour: low literate and non-native people in Afrikaanderwijk will use the online platform we created for Lymbiq when having questions surrounding health topics.			
Does the target group have the:	Examples	What do they need to show the desired behaviour?	Do this needs your attention?
Physical capacity	Are they able to walk? Move? > they have fewer facilities to stay active and healthy in the neighbourhood than others. They have more non-native stores and supermarkets, so not all healthy foods can be bought there. The mothers can	They need more variety in supermarkets and maybe more healthy shelves in the stores with healthy options. They could need more money for healthier options or otherwise, given some tips on how to buy healthy food cheaper, e.g. buy their food at the	Yes

## 1. Make it specific

	<p><i>do their groceries by walking and do that with a car if needed.</i></p> <p><i>Do they have resources(money) to buy healthier options?&gt;they might have a very low income to buy more expensive food options(bioproducts), however, those could be replaced with cheaper but still healthy alternatives.</i></p>	<p><i>market on Wednesday and Saturday (this could be interesting to focus on in platform).</i></p>	
<p>Psychological capacity</p>	<p><i>Do they have the right knowledge? Social skills? Memory? &gt; Because they are often low literate, they don't understand the usage of difficult words, their social skills are less developed (they face difficulties with scheduling an appointment for example and explaining exactly in the right words what their problem is, but also don't understand if they get a prescription from the doctor what to do with it). They don't know what healthy and unhealthy food is, they believe that traditional food is already healthy enough. They don't know what the health effects on their family members and themselves are too. They need digital skills to use the platform but do not need to go somewhere to use the platform.</i></p>	<p><i>They need easier to understand and apply information about healthier diets and other recipes than they already know from their own culture.</i></p>	<p>Yes</p>

Physical Occasion	How does the neighbourhood look? Is the digital environment accessible? > <i>The neighbourhood is less developed than other neighbourhoods in Rotterdam.</i>	<i>To them, it is difficult to use online platforms for information, so they should need some key persons or people they trust that will bring this to their awareness and help them out with using the</i>	Yes
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	<p><i>They face problems with the environment (like having rats). Most of the stores are accessible for the mothers, but they don't have the access to information about healthy food and diets.</i></p> <p><i>Are they able to use online platforms? Not all of them have access to the internet, it should be easy and attractive for the moms to use.</i></p>	<i>platform. Also, we should make it as easy and attractive as possible for them to use.</i>	
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Social Occasion	<p><i>Social norms? Cultural norms? &gt; They often tend to hold onto their native religion and cultural traits. Most of the people are Muslim for instance and have because of that another lifestyle. The most important thing is that people don't want to hang their dirty laundry on the streets and talk that fast about their problems. Also, they don't throw away their leftovers from dinner, eat mostly traditional food from their culture which is more unhealthy (more pasta, bread, meat etc, sugar etc.)</i></p> <p><i>Do other members from the community eat healthily? Is there someone they trust that can give them tips on healthy recipes and products?</i></p>	<i>The mothers are already in big communities and have their rules. They go to other moms to drink some coffee together as well. We should make this feeling of a community visible in our online platform as well and try to trigger other moms to use it too.</i>	<p><i>No, they can still stick onto their cultural habits, but only need more variety in their diets. This can be stimulated through other steps.</i></p> <p><i>But, yes, we can change this with the social dinners with several families from the community can be organised, so that people can communicate and share tips for a healthier lifestyle.</i></p>
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Rational Motivation	The ability to look inward, to rationalize, to set goals, to know your boundaries > <i>This is harder for them than for other people that come from a higher class or have a native background.</i>	<i>We should provide them with more information about the effects on the health of their family members and themselves if they</i>	<b>No</b>
		<i>continue with the unhealthy diet, because this will trigger them to easier buy other ingredients, but also give them the healthy recipes, tell them where they can buy the ingredients (like with the combination of using the market to buy cheaper healthy products).</i>	
Automatic Behaviours	Emotions / learned triggers/habits> <i>They have learned to buy and make specific food from their culture. They easier stick to what they have learned already and don't like change or things they are not familiar with.</i>	<i>This should be mostly stimulated so that they automatically change what they buy when they are buying foods in grocery stores. We should make this easier for them because they have learned automatically to buy and make food from their specific culture or use specific ingredients.</i>	<b>Yes</b>

## Appendix 2: Application of the Behavioural Change Wheel

When looking at appendix 1 and the whitepaper, you can see that some areas need our attention to get to the desired behaviour. The following subjects from the wheel have to be changed/triggered:

- Physical capacity
- Psychological capacity
- Physical Occasion
- Social Occasion
- Automatic Behaviours

COM-B	Interventie							
	Beperking (door wet- en regelgeving)	Voorlichting (onderwijs)	Overtuiging	Beloning	Dwang (straf of kosten)	Training	Facilitering (in staat stellen)	Aanpassing omgeving
Fysieke capaciteit								
Psychologische capaciteit								
Fysieke gelegenheid								
Sociale gelegenheid								
Bewuste motivatie								
Automatische motivatie								

(Susan Michie e.a., 2011, April 23).

By giving the target audience a training/offline workshop about living a healthy lifestyle, how to cook healthy food and informing them about the existence of the online platform Lymbiq that provides all this information, can help change all the mentioned components. The training contributes not only to the promotion of the online platform but also contributes to being together as a community and helping them firstly via offline communication. By facilitating this offline meeting, the people have the time to get familiar with the platform but also get enough time to ask all the questions they have before using it. After giving the information to the mothers that are present with at least one person they trust, it would be nice to cook one nice and healthy meal together. It is important to give a demonstration on how to use the platform while preparing the meal in small steps so that the mothers know exactly what to do when they are using it all by themselves at home. In this way they are surrounded by confidants, get social interaction with other mothers, gain knowledge about (the usage) of the platform and learn how to live healthily. Such workshops don't only have to be held in the beginning during the introduction phase of the platform, but also can be done more frequently. The mothers could organise it themselves as well with mothers from

the neighbourhood. When doing such an activity together, it is easier to stimulate and motivate people than when they have to do it all by themselves.

### Appendix 3: Interview with [REDACTED] and [REDACTED]

1. It soon became apparent that online communication is more difficult to use to reach low-literate people. We wonder which channels/platforms they use the most. *They make little or no use of online channels. Some people are on Facebook, but those are the exceptions. Their wish is always that there is a counter where they can go or a telephone number that they can call.*

2. We are also curious about issues that [REDACTED] runs into if he did use an app/website / online platform and what he recommends to take into account.

*I went to a housing association with [REDACTED]. They wanted to test whether their website was accessible to people with problems with their basic skills. The site was open. [REDACTED] had to find the telephone number of the housing association. He couldn't find it. It wasn't on the same page and he didn't recognize where to click through to get to the phone number page. [REDACTED] does recognize a large one that he has to press. So it must be very clear and preferably on the same page. Clear images and a calm page layout help. Woonstadt is trying to make its site clear. There is still a lot of text > <https://www.woonstadrotterdam.nl/>*

3. We also want to know what kind of people they quickly approach to ask for help; are these family members, friends, acquaintances or people within a community centre? What do they feel familiar enough with to seek help when they have questions?

*Family and confidants, often their partner.*

4. Finally, we would like to know from [REDACTED] how he views a healthy lifestyle. Is he involved in this, how does he do it and what works well for him? If you know more about this (how several low-literate people deal with this), that would also be nice. Even if, for example, they have questions about illnesses and how they look up / take in that information.

[REDACTED]  
*is not very concerned with that, he is healthy and has a healthy weight. He moves enough and likes to work in the garden. He is a moderate person. He used to cycle a lot (also abroad)*

*also, check out our channel on youtube > <https://www.youtube.com/watch?v=LkhToHnVh6Q>*

## Appendix 4: Interview with [REDACTED] Abdi

[REDACTED] Abdi - 22 years old living in Rotterdam.

### Questions

- What (health) problems do people within the Somali culture mainly face? This can be quite broad, such as "too little healthy eating with dinner", but also "common diabetes". - Does the reason for immigration to the Netherlands (former war situation in your home country) have much impact on the Somalis?
- How do they feel about other cultures in the Netherlands? Do they feel well-integrated and do they feel they are getting the same opportunities? -What other social problems do people within the Somali culture face?
- Which media and resources are often used and read by the young people but also the parents within the Somali culture?
- How does the culture work? What is typical? (For example, strict hierarchy in the house with parents above the children or religion that is important)
- How aware are people within the Somali culture of a healthy life? Are they willing to change this? > for example, by exercising more often / cooking healthier?
- What are the fears and pain points that people within the Somali culture encounter? -Do the Somalis in the Netherlands know where to go for help and do they also ask for help if necessary?
- What specific food culture is there? (Lots of meat or not)
- Do you have any additions and insights that are good to include in our further research into offering help to the Somalis in Afrikaanderwijk?

### Answers

- Many mothers/grandmothers in the Somali community have diabetes, cholesterol and high blood pressure. This is more common in mothers than fathers. Also, overweight in women mainly. This is due to the food, Somalis eat a lot of pasta, dough and rice. A lot of double carbohydrates are also eaten at dinner, such as rice with potatoes. - The reason for the war in Somalia comes from the different tribes, also called qabil. Somalis are still very much attached to this and they often see the Netherlands as a temporary place and believe somewhere that they will return to Somalia.
- Somalis often feel better than other cultures in the Netherlands. Integration has been changing in recent years. More and more Somali mothers get their driving license and have started to learn Dutch better. Although when I look at my mother's friends, my mother was the only one with a driver's license.  
It is also difficult to say because Somalis came to the Netherlands in different streams. For example, you have the great flow that came at the same time as my parents in 1991/1992, but a large part of it passed through to England. The other major stream is not long here, at least 10 years, and they have more difficulty with integration.
- Parental involvement is very low among Somalis. I also notice it in my work with the students I have who are Somali. They do expect a lot from their children but do not investigate what they are actually doing. As a result, you see that the boys often go in the wrong direction and that the girls have "casual contacts" with different men.
- The Somali culture is quite a strict culture. They find it difficult to separate faith and culture and think that many cultural things have been said by faith. Almost all Somali children do go to Koran lessons and parents also clearly practice the faith towards the children. A big problem is single mothers, which is something of both my mother's generation and our

generation. It is thought that it is because the father was not there while growing up that the sons also abandoned their own families.

The families on both sides also interfere a lot in a marriage, which often leads to divorces. - To be honest, Somalis often think that the food we eat is healthy when it is not. As I said before, a lot of pasta, rice and not many vegetables. Also a lot of fat and oil. They rather think that the food could not be healthy because it does not come from Somalia but the Netherlands, for example. Unfortunately, my mother passed away but I still have contact with her friends. One of them said that they have started exercising and eating healthier but those are women who came here earlier and they are better integrated. It is also something that Somali men do not see a meal without meat as a real meal and they should always get pasta or rice. This behaviour is of course taken over by the children.

- I think it differs per family whether the mother knows where to go for help. What I often noticed is that the women from the neighbourhood started asking my mother again if she knew where to get help.

- The tribal war actually only exists nowadays very much in Somalia. This is only considered when someone is getting married. Whether the bride and groom are from the correct tribe.

*By the way, would you like to provide information on how the Somali culture views the use of online communication and online communication concerning health problems? Is it read a lot online and is that also Dutch or rather in your language?*

Regarding communication, Somali parents generally only watch Somali news on TV. And I don't know if you're familiar with it, but those 'WhatsApp aunties' do Somalis too. Some parents watch Dutch news, but usually, they get the news from their children. It also mainly occurs among Pakistanis and it is mainly fake news that they spread via WhatsApp. For example, at the beginning with corona, massively videos were shared about how ginger and honey would work against corona.

## Appendix 5: Benchmarking

The document below looks into how the issue of low-literacy is tackled in other than the Netherlands countries. Some of the issues and insights from these practices can potentially be implemented by Lymbiq in the Netherlands.

*Austria (Unesco Institute for Lifelong Learning, 2016, May 4):*

By implementing the Initiative for Adult Education Austrian Federal Ministry of Education and Women's Affairs and the nine Austrian federal states strive to enable and encourage adults who

lack basic skills or who never graduated from lower secondary school to continue and complete their education.

The initiative offers financial support to basic skills projects which fit certain criteria. Critically, projects must strengthen:

- Literacy competences in German in terms of reading, writing and speaking.
- Fundamental skills in other languages.
- Ability to calculate.
- Use of ICTs.
- Learning competencies such as 'autonomous learning' or 'learning to learn'.

One of the programmes sponsored by this initiative is the Basic Skills Programme based in Tirol. It consists of three levels targeting those who don't know how to write or spell, those who have limited language knowledge and those who are having difficulties with grammar and orthography of the language.

*EU (Literacy week, N.D.):*

Literacy Week is a lineup of events organized throughout Europe aiming to raise awareness of the low-literacy issue.

One of the innovative ideas presented during the Week was a digital platform Scratch, which makes information understandable for everyone using animations and visuals. Scratch is an app for creating visual stories for learning.

*UK National Literacy Trust. (N.D.):* a programme encouraging reading in prisoners and local communities. The initiative invited members of local communities to come to prisons and read and talk through books together with prisoners.

*Netherlands Adriaan Langendonk and Maaïke Toonen (2017, July 25):* a dutch approach showing how to reach and facilitate learning in low-literate people.

## Appendix 6: Information from Pharos website (desk research)

### **The situation, facts, numbers (Pharos, N.D.)**

- 2,5 million people have difficulty with reading and writing
- 29% of Dutch adults have limited health skills
- Almost half of the people that have difficulty with reading and writing are native

- Slightly more than half have a non-Western background
- People with only primary school level live an average of 6 years shorter and 15 years in less perceived health than people with higher vocational education or university education.

**Factsheet (Pharos, 2019, July).**

- SES is determined based on education, income and position on the labour market.
- SEGV has been demonstrated all over the world.
- In addition to education, income and position on the labour market are also important general indicators of socio-economic status and therefore health
- The higher the income, the higher the healthy life expectancy
- For example, having social assistance benefits or debts is associated with poorer health.
- With every step up the social ladder, the chance of good health increases
- People in good health are better able to obtain and maintain more favourable positions on the social ladder. Once in a favourable position, people are also more likely to stay healthy.
- People with a lower education experience more chronic stress as a result of social or financial problems, such as unemployment and long-term poverty.

*SEGV means Sociaal Economische GezondheidsVerschillen.*

*SEGV systematic differences in health and life expectancy depend on a person's position in society, often expressed in terms of Sociaal Economische Status (SES).*

*SES is determined based on education, income and position on the labour market.*

**Programme Health4all (Pharos, N.D.).**

At the moment, most eHealth applications are still complicated and difficult to use for people with primary or pre-vocational education, limited health skills, the elderly or people with a migrant or refugee background

eHealth offers advantages such as image use, pictograms, reading functions, interactivity and use at your own pace and possibly together with others

18% of the population aged 12 and older has difficulty using computers and the Internet

12% of people with Effective primary education or VMBO in the Netherlands have never used the internet

29% of adult Dutch people have limited health skills

Always provide a combination of online applications and face-to-face contact with the healthcare provider.

## Wensenlijstje taalambassadeurs – toegankelijke en begrijpelijke eHealth

### Algemeen

- Het materiaal/de toepassing is getest met taalambassadeurs

### Taalgebruik

- Gebruik geen Engelse en medische woorden, of geef uitleg
- Gebruik eenvoudige woorden (A2-B1 niveau) en korte zinnen
- Stel niet meerdere vragen in één vraag

### Vormgeving

- Gebruik afbeeldingen en iconen die overeenkomen met de titel/tekst
- Laat de zoekfunctie duidelijk zien, of maak de zoekfunctie goed vindbaar
- Gebruik een schreefloos lettertype
- Voldoende contrast tussen tekst en achtergrond

### Techniek

- Maak een voorleesfunctie en een inspreekfunctie
- Zorg dat de lettergrootte snel en makkelijk aanpasbaar is
- Geef de mogelijkheid om antwoorden tussendoor op te slaan

### Inhoud

- Zet alle afspraken op dezelfde dag bij elkaar op de eerste pagina
- Laat een foto zien van de arts (waarmee je een afspraak hebt, of bij in behandeling bent)
- Geef uitleg bij grafieken
- Maak duidelijk wat reclame is en wat niet

### Ondersteuning

- Zorg dat patiënten hulp en uitleg kunnen krijgen. Zie bijvoorbeeld de digipleinen en taalpunten in ziekenhuizen
- Biedt filmpjes aan met de uitleg
- Voeg een (gratis) telefoonnummer toe om te bellen voor vragen

## Appendix 7: E-learning Effectieve communicatie in de Zorg

What's happening right now?

- Patients keep coming back but why?

- They find it hard to find, understand and apply the information about health in their situation.

limited health skills are divided into three levels:

- functional level (reading, writing, calculating).
- interactive or communicative level (reading comprehension, distinguishing main issues from side-issues, asking questions to the care provider, abstract thinking).
- critical skills (applying the information, organizing, thinking ahead, setting priorities, a joint decision about the action with the care provider)

People with limited health skills:

- smoking twice as often
- they have obese 3x as often
- cancer is discovered later
- they got more stress (for example about debts)

Recognize people with limited health skills:

- educational attainment until mbo niveau 2
- higher age
- practical occupation or low-skilled work
- language barrier

For the healthcare callback method

- You can discuss low literacy.

Conversation techniques:

- \* Speak calmly and clearly, use simple words, use visual material.

Visual material - talk plate, conversation card, cartoon.

EXAMPLE: could use the cartoon idea > making an easy and clear video while explaining.