

# Identifying Health Literacy Responsiveness Improvement Ideas in Danish Health Centers: Initial Testing of the OS! Approach

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## ABSTRACT

**Background:** Health services hold a critical role in mitigating the effect of health literacy challenges. Several tools and approaches have been developed to support health organizations in responding to their target population's health literacy needs. One of these is the OS! approach, which is an adapted and less rigorous version of the Australian Organizational health literacy responsiveness tool (Org-HLR). In this study, we aimed to report on our initial testing of the OS! approach in two Danish health care settings. **Brief description:** The OS! aim to prompt and support the development of local organizational health literacy improvement ideas. The process consists of three consecutive workshops focusing on reflection, self-evaluation, and prioritization. For each workshop tools are provided to support implementation. **Implementation:** The OS! approach was tested in two Danish municipal health centers (Tårnby Health Centre and Frederiksberg Health Centre), where both staff members and leaders took part in the processes ( $N = 62$  and  $N = 84$ ). In Tårnby, the process was closely facilitated by the research team, while local managers was in charge of the implementation in Frederiksberg. **Results:** In both settings, the process succeeded in identifying a list of relevant prioritized action ideas aimed at improving local health literacy responsiveness. In both instances, leaders were able to integrate some of these ideas in action plans for the organizations nearby future. **Lessons learned:** We found the OS! approach effective in its aim to identify health literacy responsiveness improvement ideas and based on our experience also less arduous to implement than the Org-HLR. We also learned that good implementation of the OS! approach depends strongly on careful facilitation including thorough introduction of the concepts of health literacy, openness, and creativity in relation to local adaptations within the overall framework of the approach, and the consolidation of consistent leader support throughout the organization. [*HLRP: Health Literacy Research and Practice*. 2022;6(3):e232–e238.]

**Plain Language Summary:** This study describes the initial testing of the OS! approach. The OS! approach is based on the Australian methodology “Org-HLR” and use a participatory approach to prompt and support the identification of local health literacy responsiveness improvement ideas in health care organizations. The article provides valuable experiences regarding local development of organizational health literacy in practice.

After the acknowledgement of health literacy as an independent, but modifiable social determinant of health (Kickbusch et al., 2013; World Health Organization, 2016), the role of health systems and organizations in mitigating the effect of health literacy challenges has been flagged (Lloyd et al., 2018; Willis et al., 2014). Organizational health literacy or health literacy responsiveness (i.e., the way in which services, organizations, and systems make health information and resources available and accessible to people according to health literacy strengths and limitations) is now a key concept in the global health literacy discourse (International Union for Health Promotion and Education, 2018; World Health Organization Office for Europe, 2019).

In 2012, Brach et al. described the “ten attributes of a health literate health care organization” (Brach et al., 2012). Since then, several tools and approaches have been developed to support organizations in evaluating their organizational health literacy and responding to their target population's health literacy needs (Farmanova et al., 2018).

Among these is the Australian organizational health literacy responsiveness process and tools (Org-HLR) by Trezona et al. (2018). The Org-HLR is a framework developed empirically through a concept mapping process involving consultations with more than 200 health and social professionals (Trezona et al., 2017b). The framework features seven domains: (1) external policy and funding environment; (2) leadership and cul-

ture; (3) systems, processes, and policies; (4) access to services and programs; (5) community engagement and partnerships; (6) communication practices and standards; and (7) workforce.

Contrary to most other approaches, the Org-HLR is not solely an evaluation instrument. It takes a co-creational approach to both the assessment and development of health literacy responsiveness. This implies the achievement of a local understanding of health literacy concepts and development of local health literacy improvement initiatives through bottom-up participatory self-assessment methodologies, thus engaging front-line staff and managers in the change processes.

Between 2017 and 2018, we translated and applied the Org-HLR in one Danish Municipal Rehabilitation Centre. Results were described in a brief report in this journal (Aaby et al., 2020). Overall, we found the method to be applicable and effective in its ability to increase local identification and prioritization of organizational health literacy improvement ideas. However, we also identified a few limitations in the design of the appertaining tools making the Org-HLR process too arduous for the participants and in consequence less convincing regarding the participatory aim and intention of creating local motivation and ownership (Aaby & Maindal, 2020). We therefore set out to address these issues and further adapt the Org-HLR tool for use in the Danish health care setting. The result was the creation of the OS! approach, which applies a process similar to the Org-HLR, but uses an adapted implementation strategy and revised tools and templates to further enhance dialogue and participation in the development of local health literacy responsiveness.

In this article, we aim to report on our initial testing of the OS! approach in two different setting exploring its effective implementation and ability to generate organizational health literacy improvement ideas using participatory self-evaluation and reflection.

## BRIEF DESCRIPTION OF THE OS! APPROACH

The OS! approach consists of three consecutive workshops similar to the Org-HLR process (Trezona et al., 2018) (**Table 1**). They focus on:

1. Reflection among participants on the concept of health literacy and its local application
2. Self-assessment of the organization's health literacy responsiveness and identification of improvement ideas
3. Prioritization of improvement ideas providing graded input to improvement planning

For each workshop, tools are provided to facilitate the co-creational processes. It is mainly the refinement of these tools and their application, which set apart the OS! approach from the original Org-HLR process. **Table 1** outlines the major differences between the original Org-HLR tools as they were composed in the Danish pilot study (Aaby et al., 2020), and the final tools of the OS! approach.

In the adaption of the tools, we aimed to:

1. Reduce the number of items and (sub)domains for participants to relate and respond to
2. Loosen the regulation of the participant dialogues when using the tools allowing more discussion time for areas of local interest
3. Developing support material to facilitate the implementation of the approach across diverse organizations and by nonscientific professionals

Regarding the tool for the reflection workshop, we did not make any changes.

In contrast, the tool for self-evaluation was changed significantly. The original tool in the Org-HLR consisted of 110 items distributed on 22 subdomains, which again were ascribed to one of the Org-HLR framework domains (save the domain on external policy and funding environment). In developing the OS! approach, we merged the specific items within each of

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TABLE 1

### Comparison of the Danish Organizational Health Literacy Responsiveness Process and the OS! Approach

Variable	Danish Org-HLR Process	OS! Approach
Supporting the process facilitation		
Facilitation guidance	Org-HLR user guide to support application (Trezona et al., 2017a)	OS! manual to support application (Aaby & Maindal, 2020)
Reflection workshop (2 hours)		
Tool(s)	Reflection exercise consisting of five open-ended questions	Reflection exercise consisting of five open-ended questions (unchanged from the Org-HLR) (tool 1) Template (PowerPoint) for introduction of the concepts of health literacy and health literacy responsiveness Short film on health literacy and the OS! approach
Self-evaluation workshop (4 hours)		
Tool(s)	Self-evaluation support tool based on 110 items distributed on six domains <sup>a</sup> covering 22 subdomains (3-8 items in each subdomain)	Self-evaluation support tool based on 18 discussion points distributed on six domains <sup>a</sup> (tool 2)
Prioritization workshop (3-4 hours)		
Tool(s)	Prioritization support tool assessing each improvement idea within domains and subdomains based on importance, urgency, and resources required	Prioritization support tool assessing improvement ideas within each of the six domains <sup>a</sup> based on importance, urgency, and resources required (tool 3)
Planning for the future		
	-	Action plan template framed upon the six domains <sup>a</sup>

Note. Org-HLR = Organizational Health Literacy Responsiveness.

<sup>a</sup>The domains used in both the org-HLR and the OS! approach correspond to the Org-HLR framework developed by Trezona et al. (2017b) and the demands they place on people. Public health and social service organisations have a responsibility to provide services and information in ways that promote equitable access and engagement, that are responsive to diverse needs and preferences, and that support people to participate in decisions regarding their health and well-being. The aim of this study was to develop a conceptual framework describing the characteristics of health literacy responsive organizations. Methods: Concept mapping except the exclusion of the domain on "external policy and funding environment."

the subdomains into less specific statements on health literacy responsiveness. As in the original Org-HLR, participants were asked to evaluate their practices as to what they did well and what they could improve in relation to the statement in question and then score the performance on a 0 to 4 scale. However, in the OS! approach discussions were less rigorously framed to allow a more dynamic dialogue focusing on issues of local interest and relevance.

It is beyond the scope of this publication to refer all changes in the self-evaluation tool. However, we attempted to maintain the core content of each subdomain, while leaving it up to participants to weigh the local importance of different aspects within each subdomain in their discussions.

For example, the subdomain, "provides an appropriate service environment," consisted of three separate items, namely "our organization's buildings and venues/facilities are accessible," "our organization provides a welcoming and supportive environment for diverse and vulnerable groups," and "our organization provides clear signage and directions at all sites to ensure clients can find their way to and between services" in the original Org-HLR. This subdomain was then merged into the following statement and dialogue supporting examples: "Environment. In our organization, the physical environment supports our health literacy responsiveness."

Examples: Consider, the availability of public transport, parking, entrances, signing, and the physical space (reception, waiting areas, activity areas) as well as the environmental considerations of vulnerable groups including ethnic minorities and people with physical and mental limitations."

The purpose of the adapted tool was to foster a less restricted

discussion guided to a larger extent by local needs. In doing so, we hoped that the tool might provide a less detailed, but more locally focused, evaluation of health literacy responsiveness in the organization.

After cognitive testing of the new tool among three health professionals (one leader and two staff members from an organization comparable to the two settings described below), we were able to reduce the number of focus areas from 22 to 18

based on their experience of a significant overlap. We also found that the statements most related to daily health care practice, such as access and communication, was the easiest for health professionals to relate to, so we changed the order of the domains, starting with the easier ones.

The tool for prioritization was not changed initially. It remained a scoring of the identified improvement ideas based on importance, urgency, and resources required. However, in the finalization of the OS! approach after pilot testing, the layout was simplified and based on domains alone, making it easier to merge ideas relating to the same organizational area without considering the statement that incited it.

To support the tools, we produced the OS! manual (Aaby & Maindal, 2020). The manual took off from the Org-HLR user guide (Trezona et al., 2017a), but was adapted to fit the Danish health care system and facilitators with a background in health care practice. Like the Org-HLR user guide, the OS! manual included an introduction to health literacy and health literacy responsiveness, an exposition of the OS! approach, a guide for implementation as well as the tools to be used in the workshops. We also included a generic template for action planning as part of the manual to support the transformation of the prioritized ideas resulting from the OS! process into timed and delegated initiatives.

Additionally, we created a power point template and a short film to support implementers from health care practice in carrying out the introduction of health literacy and the OS! approach as part of the reflection workshop.

## IMPLEMENTATION

### Settings and Participants

We tested the OS! approach in the autumn 2019 in two different municipal health centers in Denmark, developing the approach and making adjustments before and between each application (**Table 2**). Managers in both health centers approached the involved researchers at their own initiative asking for advice for introducing the concept of health literacy in their respective organizations. The researchers then offered participation in the adaption of the Org-HLR. No recruitment strategy was developed prior to the study.

The original piloting of the Danish Org-HLR prompting the development of the first draft of the OS! approach has been described elsewhere (Aaby et al., 2020), and will not be further covered here.

Tårnby Health Centre (THC) offers free-of-charge public primary care services concerning disease specific or post-discharge rehabilitation, postnatal health visitor services as well as a number of general health promotion and prevention services. The center is placed in Tårnby suburb close to Copenhagen

(population 42,984 in 2019) (Statistics Denmark, 2019). The area is challenged by a relatively low educated population. For example, the highest educational level is grade school in 27.29 % of the population (national average 25.45% in 2019) (Statistics Denmark, 2019). A total of 62 staff members (e.g., physiotherapists, mother and child nurses, general nurses, dietitians, and occupational therapists) and leaders took part in the OS! workshops.

Frederiksberg Health Centre (FHC) is placed in Frederiksberg municipality in the heart of Copenhagen (population 103,940 in 2019) (Statistics Denmark, 2019). The area is characterized by an average social status well above national mean. Thus, 26.55% has completed a higher education (master's degree) versus 9.94% at national level. The health center basically covers the same primary care services as THC and employs comparable groups of health professionals, but it is larger and has a broader portfolio of activities. A total of 84 staff members and leaders took part in the OS! workshops.

We tested the OS! approach in two phases. First, we adapted the original Org-HLR tools and tested their use and implementation in THC through a process closely facilitated by one of the investigators on the research team. The test took place between September 3, 2019 and October 29, 2019. Based on our experiences, we simultaneously developed the OS! manual to support nonscientific, local professionals in facilitating the OS! approach. Then, we tested the manuals applicability in FHC where the process was facilitated by a local project management team, using a researcher only as health literacy expert and supervisor. This test took place from between October 30, 2019 and December 13, 2019. A summary of the implementation process in both settings is available in **Table 2**.

No specific data collection was carried out relating to the effectiveness or face validity of action plan template, the Power-Point template, or the short film.

In both settings, THC and FHC, all staff members and leaders participated in the reflection workshop.

In THC, only staff members took part in the self-evaluation. The workshop was carried out as three individual sessions for the health promotion team, the rehabilitation team, and the child and maternity care team, respectively. In each workshop, the teams carried out the self-evaluation in groups of 5 to 9 individuals ( $n = 57$ ).

In FHC, the self-evaluation workshop was carried out in direct succession of the reflection workshop. Both leaders and staff members took part, but leaders were grouped together and not mixed with staff members during the session. As in THC, the self-evaluation was carried out in teams based on daily work function. There were 12 groups of 4 to 9 individuals ( $N = 84$ ). In both THC and FHC, the sessions lasted approximately 4 hours.

TABLE 2

### Pilot Testing of the OS! Approach in Tårnby Health Centre and Frederiksberg Health Centre

Workshop	Time Frame	Participants	Application
Tårnby Health Centre: September 3, 2019-October 29, 2019			
Reflection	2 hours	All staff members and leaders (N = 62)	Introduction of concepts and methodology by researcher
Self-evaluation	4 hours per workshop	Staff members (n = 57)	Reflections in groups facilitated by researcher One workshop for each work team: Health promotion, rehabilitation, and child and maternity care Group work using tool 2 facilitated by researcher, 8 groups of 5-9 participants
Prioritization	3 hours	Staff representatives and leaders (n = 12)	Common discussions using tool 3 facilitated by researcher
Frederiksberg Health Centre: October 30, 2019-December 13, 2019			
Reflection	2 hours	All staff members and leaders (N = 84)	Introduction of concepts and methodology by researcher
Self-evaluation	4 hours	All staff members and leaders (N = 84)	One workshop directly following the reflection workshop
Prioritization	4.5 hours	Staff representatives, project managers and leaders (n = 22)	Group work inspired by tool 3 but using graphic illustrations of high priority ideas facilitated by local project management team

In both settings, the number of improvement ideas identified in the self-evaluation workshop was overwhelming. Some were general ideas and others related to the specific tasks of a particular work team. Before the prioritization workshop, a selection process was therefore deemed necessary in both cases. In THC this process was carried out in the research team in close consultation with local leaders, while in FHC the selection was done by the project management team. Ideas with similar content and goal were merged. Then, all ideas were evaluated based on their relevance across work teams as well as their economic and practical feasibility.

Staff representatives from the eight self-evaluation groups as well as four local managers and leaders took part in the THC

prioritization workshop (n = 12), which adhered accurately to the tool.

In FHC, five leaders as well as twelve staff representatives and the project management team of five individuals took part in the prioritization workshop (n = 22). Because of the number of participants, the suggested prioritization tool was not applied in plenum. Instead, participants were distributed in five mixed groups where they discussed the improvement ideas within each domain collectively. They were asked to prioritize three ideas and rate them based on their importance and the resources needed for their implementation. The chosen ideas within each domain as well as their rating were visualized using large diagrams on the wall. This approach lengthened the workshop from approximately 3 hours to 4.5 hours. After the workshop an additional prioritization meeting was held with the leaders and selected members of the project management team (n = 7) focusing on initiatives among the prioritized ideas to be implemented in the following year.

## RESULTS

Table 3 shows a summary of the idea generation and prioritization in the two settings.

In THC, 80 unique ideas were identified and 31 (39%) was taken forward to the prioritization workshop. Following this, an action plan including the following activities was developed:

- Core values of THC to be specified
- Quality standards to be selected for each team
- Development of specific services for certain target groups to be encouraged
- Three cross-team work committees to be appointed focusing on external branding, physical environment, and facility utilization

TABLE 3

### Improvement Ideas Generated by Self-Evaluation in Tårnby Health Centre and Frederiksberg Health Centre

Domain	No of Unique Ideas Identified by Self-Evaluation	No of Ideas Carried Forward for Prioritization	Examples of Ideas
Tårnby Health Center			
All domains	80	31	
Supporting access to services and programs	13	8	Improved signage and guiding pictures in the invitation letter
Communication practices and standards	8	10	Development of a communication strategy including rules and responsibilities regarding use of social media
Community engagement and partnerships	10	4	Teaching sessions/theme meetings for the local population or particular target groups
Recruiting, supporting and developing the workforce	10	4	Professional supervision focusing on needs assessment among individual users
Supportive leadership and culture	16	3	Clearer leadership in relation to individualized care and care of vulnerable groups within the fixed boundaries of services and resource
Supportive systems, processes, and policies	23	2	Clearer quality standards and improved data collection to support their measurement
Frederiksberg Health Center			
All domains	154	45	
Supporting access to services and programs	35	10	Improved decor of the ground floor to lessen the sometimes chaotic experience
Communication practices and standards	37	11	Updating the webpage and include all offered services including access and referral information
Community engagement and partnerships	26	5	Try out face-to-face coordination meetings with selected external partners
Recruiting, supporting, and developing the workforce	29	7	Employment of more peer-to-peer mentors
Supportive leadership and culture	15	8	Clearer guidance in the prioritization of time and resources: Who should have less when some need more?
Supportive systems, processes, and policies	12	4	Follow-up on groups of vulnerable users using available data

- Guidance for competency development updated and practice for internal knowledge sharing and professional feedback developed

In FHC, 154 ideas were identified in total of which 45 (29%) were taken forward to the prioritization workshop and additional prioritization meeting. The result was an action plan including four focus areas for the following year:

- Improve collaboration on vulnerable users across teams
- Improve signing and décor of the center
- Offer patient education concerning coping of disease by health professionals
- Develop professional consensus on resources and time used for users with diverse needs



## LESSONS LEARNED

In our efforts to adapt and apply the OS! approach in two municipal health centers in Denmark, we did succeed in introducing the concept of health literacy in these organizations as well as producing and prioritizing a set of improvement ideas feeding into local quality development planning as evident from the resulting health literacy action plans.

We also found that the adapted tools and support materials with the offered facilitation initiated vivid discussions and worked to support the participatory aim of the OS! approach across many different health issues and among different groups of health professionals. Specifically, we found, that our rephrasing of the Org-HLR self-evaluation items into 18 open-ended discussion themes allowed a more locally tailored dialogue in the workshop, highlighting prevailing issues rather than pressing on with matters of less local concern.

In carrying out the process, we also had a few insights relevant in relation to future applications of the OS! approach.

First, we experienced great value in a thorough introduction to the concept of health literacy and health literacy responsiveness and ongoing support and reflection throughout the workshops. This requires the participation of an internal or external health literacy resource person. In many Danish health care settings, health literacy is still a new term. Many participants struggled to grasp the idea, affecting their ability to fully engage in the self-evaluation exercise. Therefore, in settings with very low health literacy experience we recommend a level of concept introduction and expert support exceeding the minimum described in the OS! manual.

Second, at more than one occasion, we experienced the need for local adaptations of the application of the process and tools. For example, when we implemented the prioritization exercises in FHC, changes were made to improve the accommodation of many participants. We found that some openness towards local adaptations was fully feasible while still focusing on achieving the workshop aim in a participatory manner.

Third, we found, that a successful OS! process in terms of the identification of health literacy responsiveness improvements ideas (and probably also the following planning of concrete action) was dependent on leader support and active engagement at all organizational levels. Overall, this was provided in both our settings; however, we did, at individual level, encounter some skepticism toward the concept of health literacy responsiveness and its potential in local practices. If expressed in critical fora or by influential persons, such opinions are potential threats to the effectiveness of the process and the sustainability of its results. Therefore, we recommend thorough matching of expectations before applying the approach and explicit accounts of the contributions needed from all involved to achieve useful outcomes.

To summarize, we found that if carefully facilitated, the OS! approach may be a valuable aid in the efforts to identify improvement potentials of local health literacy responsiveness in a participatory and engaging manner.

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