

Investigation of the health economic value of
MEMOplanner from a care provider perspective
- Care homes for people with disabilities

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1. Summary

This is a sub-report based on the report “Investigation of the health economic value of MEMOplanner from a care provider perspective”. This sub-report has a specific focus on the main target group: care homes for people with disabilities¹.

MEMOplanner is a digital time and planning device developed for people with cognitive disabilities. Previous studies have shown that MEMOplanner helps users to live more independent lives^{2,3}, make them feel more secure and reduce stress for both users and their family members, resulting in fewer conflicts^{4,5,6}. Studies have also shown that time-based support such as the MEMOplanner can help users improve their sense of time and make everyday life more predictable⁷. Furthermore, access to assistive technology is a precondition for equal opportunities, and the positive impacts do not only improve the lives of users, but also benefit their families and societies⁸.

Despite this evidence showing the positive impact on peoples’ lives, the current lack of financial resources in the health care sector risks to reduce the availability of MEMOplanner and other assistive devices. At the same time, assistive devices could potentially save both financial and human resources for organizations, ensuring quality of their service despite a lack of resources.

Little is known about the value of using MEMOplanner for care organizations. Therefore, a health economic study was performed to investigate the return on investment from a care provider perspective.

The study consisted of two parts: in-depth qualitative interviews with care personnel, and a quantitative survey. In total, 8 in-depth interviews were conducted with care personnel working at care homes and short-term homes for people with disabilities. The quantitative survey was answered by all interview participants as well as sent out to personnel at the participating organizations. In total, 23 responses were collected from personnel working in care homes and short-term homes.

The survey results show that care organizations save a significant amount of time when using the MEMOplanner. The time saved is primarily used to spend more qualitative time with users and to plan and carry out activities with users.

Time is saved in number of areas that vary between different types of organizations due to differences in user groups and how MEMOplanner is being used. Generally, most time is saved by

¹ The full report covers care homes and a minor part of day centers as well as time-saving regarding contact with relatives. Since the participating day centers were few and the time-saving results from the relatives were highly varied this sub-report covers only the care homes and the values provided by the MEMOplanner.

² Adolfsson P, Lindstedt H, Janeslätt G. How people with cognitive disabilities experience electronic planning devices. *NeuroRehabilitation* 2015;37:379–92.

³ Grön A, Lindahl K. *Contributing Factors for Goal Achievement with a Digital Calendar as Intervention – Occupational Therapists’ Experiences*. Bachelor’s thesis. Örebro University, School of Health Sciences and Medicine; 2014.

⁴ Thagesson L, Tholander J. *Experiences of Using MEMOplanner among People with Congenital Cognitive Impairments – A Qualitative Interview Study*. Bachelor’s thesis. Örebro University, Department of Health Sciences and Medicine; 2015.

⁵ Adolfsson P, Lindstedt H, Pettersson I, et al. Perception of the influence of environmental factors in the use of electronic planning devices in adults with cognitive disabilities. *Disabil Rehabil Assist Technol* 2016;11:493–500.

⁶ Meland C. *Ambient Assisted Living for Children with ADHD and/or ASD and Their Guardians*. Master’s thesis. Gjøvik University College, Department of Informatics and Media Engineering; 2015.

⁷ Söderström S, Østby M, Bakken H, et al. How using assistive technology for cognitive impairments improves the participation and self-determination of young adults with intellectual developmental disabilities. *J Intellect Disabil JOID* 2021;25:168–82.

⁸ World Health Organization. *Global Report on Assistive Technology*. ISBN 978-92-4-004945-1 (electronic version); 2022.

avoiding unnecessary repetitions and reminders, users carrying out tasks more independently, planning the day and weekly schedule and introduction of new employees.

In addition to time savings, this study shows that the MEMOplanner contributes to users feeling more secure and at ease as they have more information on future activities available. The organizations report that the MEMOplanner reduces the risk of mistakes from staff, reduces misunderstandings between staff and users, and leads to fewer conflicts with users around tasks and activities. The MEMOplanner works as a communication tool, both within the staff group and between staff and users. These results are in line with previous research as well as results from previous user studies.

In summary, the MEMOplanner contributes to a number of different values for the organizations:

- Time savings (which can be translated to direct cost savings)
- A calmer atmosphere, and
- More independent users

These values help the organizations reach their goals and show the resource savings as well as improvements that the MEMOplanner contributes to.



“We have more time for social conversation when we save time on reminders. But the most successful part is that the users’ independence has increased, and their experiences of being able to do more things on their own.”

2. Terms and definitions

Table 1: Terms, abbreviations and definitions

Term/abbreviation	Definition
ADHD	Attention-deficit/hyperactivity disorder
Care organization	In this report refers to care organizations that offer services to people with disabilities. The organizations included operate under the Swedish Act concerning Support and Service for Persons with Certain Functional Impairments (LSS).
Care home (permanent and short-term homes)	Type of care organization that offers permanent or short-term accommodation to people with disabilities. Short-term comprises different periods of time, e.g. one week per month or every other weekend. Care homes included in the report operate under the Swedish Act concerning Support and Service for Persons with Certain Functional Impairments (LSS).
LSS	Swedish Act concerning Support and Service for Persons with Certain Functional Impairments [Lagen om stöd och service till vissa funktionshindrade]. All care homes and day centers included in this report operate under this law.
Participant/respondent	Personnel at care organization that participated in interviews and/or survey.
User	Person using MEMOplanner (in Swedish: brukare/användare)
Personnel/staff/care personal	Person working at a care organization (in Swedish personalgruppen)

3. Background and objective

3.1 Abilia AB and MEMOplanner

Abilia AB is a company developing assistive technology primarily in the area of cognitive support with the aim of simplifying peoples' everyday lives and to give people with special needs the chance to participate and be independent. Abilia has more than 50 years of experience in the field and is present in Sweden, Norway, United Kingdom, and exports to more than 20 countries.

One of Abilia's assistive devices is MEMOplanner, a digital time and planning solution. MEMOplanner provides support for daily time management by showing what day it is, what time of the day, and which activities are scheduled for the day, week and month in a cognitively accessible way. It also provides clear reminders and checklists to help users structuring tasks. MEMOplanner uses the "Quarter Hour Principle" that helps people to understand time by visualizing time as dots where 15 minutes correspond to one dot. Pictures, colors and sound further support the accessibility for people with cognitive disability.

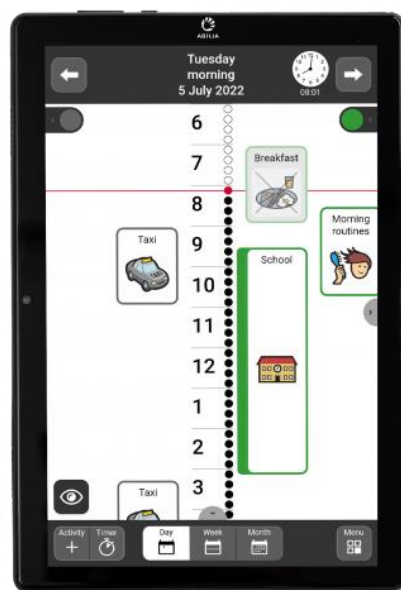


Figure 1. Picture of a MEMOplanner showing the daily activity view

MEMOplanner is available in two sizes (Medium and Large) and can be used in different ways; as a personal solution or as a group solution. When used as a personal solution MEMOplanner belongs to an individual and shows their personal activities and schedule. When used as a group solution MEMOplanner is placed in a common area at a care organization providing information relevant for a group of people like mealtimes, staff schedules and common activities. Information and activities can be entered directly on the MEMOplanner device or remotely via a web interface from another device.

Previous studies have shown that MEMOplanner helps people with special needs to take control of their lives, making them feel more secure and enabling them to live richer lives^{9,10}. It can also reduce stress for both users and their family members resulting in fewer disagreements over daily tasks^{11,12}. Other studies show that time-based support such as the MEMOplanner can help users to increase their sense of time and improve their time management¹³. Results from various pilot-tests both in care homes and day centers also show benefits not only for the user but also for the organization, e.g., better working environment¹⁴.

3.2 User group

The MEMOplanner is intended for people with cognitive disabilities such as Attention-deficit/hyperactivity disorder (ADHD or ADD), autism spectrum disorder or intellectual disability.

In Sweden, these patient groups may receive services provided by care organizations operating under the Swedish Act concerning Support and Service for Persons with Certain Functional Impairments (Lagen om stöd och service till vissa funktionshindrade, LSS) which is a law regulating the support and service to patient groups with disabilities, which aims to promote equality, participation and self-determination.

There are different types of care organizations operating under the LSS-law. At care homes users stay permanently while at short-term accommodations people usually stay for shorter periods of different length, e.g. one week per month or every other weekend. Day centers offer day-time activities or occupation with the aim of contributing to personal development and to promote participation in society.

3.3 Study objectives

In order to get a better understanding of the return on investment for organizations using the MEMOplanner, this study looked at efficiency potential in care organizations. This study focused on operational efficiency, such as time savings, reduced sick leave and other relevant outcome measures that can be but do not need to be transferred into monetary values.

4. Methodology

4.1. Study design

To determine the purpose and scope of the project, the consultant bureau Point, with focus on strategic design – conducting insight and innovation projects within the health care area, was employed to conduct the study. Point initially facilitated a Pin-Point workshop with Abilia, which

⁹ Adolfsson P, Lindstedt H, Janeslätt G. How people with cognitive disabilities experience electronic planning devices. *NeuroRehabilitation* 2015;37:379–92

¹⁰ Söderström S, Østby M, Bakken H, et al. How using assistive technology for cognitive impairments improves the participation and self-determination of young adults with intellectual developmental disabilities. *J Intellect Disabil JOID* 2021;25:168–82.

¹¹ Adolfsson P, Lindstedt H, Pettersson I, et al. Perception of the influence of environmental factors in the use of electronic planning devices in adults with cognitive disabilities. *Disabil Rehabil Assist Technol* 2016;11:493–500.

¹² Meland C. *Ambient Assisted Living for Children with ADHD and/or ASD and Their Guardians*. Master's thesis. Gjøvik University College, Department of Informatics and Media Engineering; 2015.

¹³ Thagesson L, Tholander J. *Experiences of Using MEMOplanner among People with Congenital Cognitive Impairments – A Qualitative Interview Study*. Bachelor's thesis. Örebro University, Department of Health Sciences and Medicine; 2015.

¹⁴ AllAgeHub (2020–2023). Pilot tests of MEMOplanner: Final reports available on AllAgeHub's homepage. Available at: <https://allagehub.se/allagehub-arkiv/> (Accessed: 28 October 2024).

defined the project purpose, target groups, current blind spots and questions to be asked and laid the foundation for the study methodology.

In order to gather insights regarding in which areas and to which extent MEMOplanner contributes to health economic value in care organizations, qualitative interviews as well as a quantitative survey were performed with care personnel. Questions were based on previous knowledge and expertise in the area. Point developed the interview guide and survey questionnaire in cooperation with Abilia's project team. Point then validated the questions with help from an expert within the area prior to the start of data collection.

The qualitative interviews were semi-structured, ensuring that care personnel had the opportunity to raise aspects not included in the interview guide. The interviews ensured that softer values and the experiences of care personnel were collected and allowed in-depth insights into their experiences of using MEMOplanner.

The quantitative survey consisted of a questionnaire with specific questions about participants' perceived time savings in different areas of their daily work.

4.2. Participants

Care organizations of interest were those where MEMOplanner is used most commonly in Sweden today: Care homes and short-term homes. For recruitment of participants, Abilia contacted care organizations as a first step. Respondents that consented to participating in the study were then contacted by Point who booked and conducted interviews and questionnaires. Inclusion criteria for recruitment of participants were the following:

- Personnel working at care organizations with at least one user who has an individually prescribed MEMOplanner medium or large
- Personnel that have at least 6 months of experience of working with MEMOplanner and that have worked with the user(s) both before and after MEMOplanner was introduced
- Personnel with solid insight of MEMOplanner and users' interaction with the device. This might include different roles such as Head of Operations, Head of Unit, support educators, etc.
- If possible, personnel working at care organizations geographically distributed across the country

4.3 Data collection

All care organizations included in the data collection except one had large MEMOplanners in common areas. The number of individuals using MEMOplanners as a personal solution in care homes was between one and six.

4.3.1 Qualitative interviews

8 semi-structured interviews were conducted with personnel from care homes and short-term homes, whereof 6 with care homes and 2 with short-term homes, see

Table 2. The interviews were conducted digitally and lasted approximately 45 minutes. The interviews were recorded, and written notes were also taken by the interviewer for documentation.

Table 2: Number of interviews per type of care organization

Type of care organization	Number of interviews
Care homes	6
Short-term homes	2
Total number of interviews	8

In order to reach in-depth insights and verify existing insights, an iterative approach was used during interviews. This means that insights were analysed throughout the process, and new insights were used to develop the interview guide for upcoming interviews.

Participants worked as support assistants, support pedagogues and occupational therapists. Of the participants, seven were support assistants / support personnel, three were support pedagogues, and one was an occupational therapist. They had been using MEMOplanners between one and seven years, with an average 3.5 years.

4.3.2 Quantitative survey

The survey consisted of a 7-question questionnaire (see appendix 2). It was filled in by all interview participants and additionally sent out to further personnel working at the participating organizations via a web platform.

In total, 23 responses were collected, see Table 3: Number of survey responses per type of care organization

Table 3: Number of survey responses per type of care organization

Type of care organization	Number of survey responses
Care homes	19
Short-term homes	4
Total number of survey responses	23

11 of the survey responses were filled in by participants of the in-depth interviews, 12 responses were collected via a follow-up e-mail with a web-based link sent out to participating care organizations. In addition to the interview respondents presented above, the survey was answered by 12 support assistants.

4.4 Data analysis

Finally, the total insight material from interviews as well as the web-survey were analysed and summarized. The material was analysed using thematic analysis in order to find common themes and patterns. Insights were first clustered in broader thematic areas, e.g. "communication support", and thereafter the responses within each area were analysed and summarized.

5. Results

This chapter summarizes the results from the qualitative in-depth interviews and the quantitative survey for care homes.

The qualitative results are presented in text, and citations marked with a text bubble are quotes from the interviews. The results are based on insights from care homes and short-term homes.

The quantitative results from the survey are presented as diagrams showing participants' estimation of time savings they are experiencing when using the MEMOplanner, along with explanatory texts.

5.1 Background motives and expectations

5.1.1 Reasons for acquiring MEMOplanner

The organizations have had different motivations for acquiring MEMOplanner. Motives brought up are:

- An individual support for users to be more independent
- A communication support, where users can use listening and speech support functions
- To make it easier to create and overview common schedules
- To be able to change and adjust users' schedules digitally, without disturbing them in their apartments
- To save time on reminding users of tasks and activities

Participants feel that the MEMOplanner has met their expectations, that it facilitates their work and that it makes users feel more safe, calm and independent.



“It’s easier to go to work when you feel like you're doing a good job, and easier to do a good job with more time.”

5.1.2 Implementation phase

Participants see the implementation as a critical stage, affecting future usage and opinions by staff as well as users. It is important that the staff understand early how and why they should use the device. Unmotivated staff can lead to users choosing not to use it.

Staff who are not used to new technologies can find it difficult and need support when getting started. Time and patience are needed for the implementation phase. In some organizations, there has been a resistance towards using the MEMOplanner. This has decreased with time and when learning about the benefits.

Organizations who have reached out to Abilia for support in the implementation phase feel that they have received good help in finding their way of using it.

Users are generally positive and open to trying the MEMOplanner, which has sometimes come as a surprise to the participants.



“Then the implementation went a bit too fast. The users understood it straight away, but the problem was the staff. It was the staff who didn't understand why they should use it.”

5.2 Organization and work environment

The MEMOplanner contributes a number of benefits to the organizations. Main benefits are time savings as well as soft values, such as a calmer atmosphere and users who are more at ease.

5.2.1 Time saving in care homes

In the following section the quantitative survey results from care homes & short-term homes are presented, showing the amount of time saved when using the MEMOplanner. There were 23 respondents in total, and 21-23 responses were collected to each question (in a few cases there was a “No answer”). See appendix 3 for details.

The values presented (time saved) are estimations by each respondent of how much time they themselves save in a day or per occasion. The values do not represent time savings across the entire organization, as such an estimation would have been difficult for the participants to make. The values are also not correlated to the number of MEMOplanners in the organization. Note that only participants actively using the MEMOplanner have been part of the study.

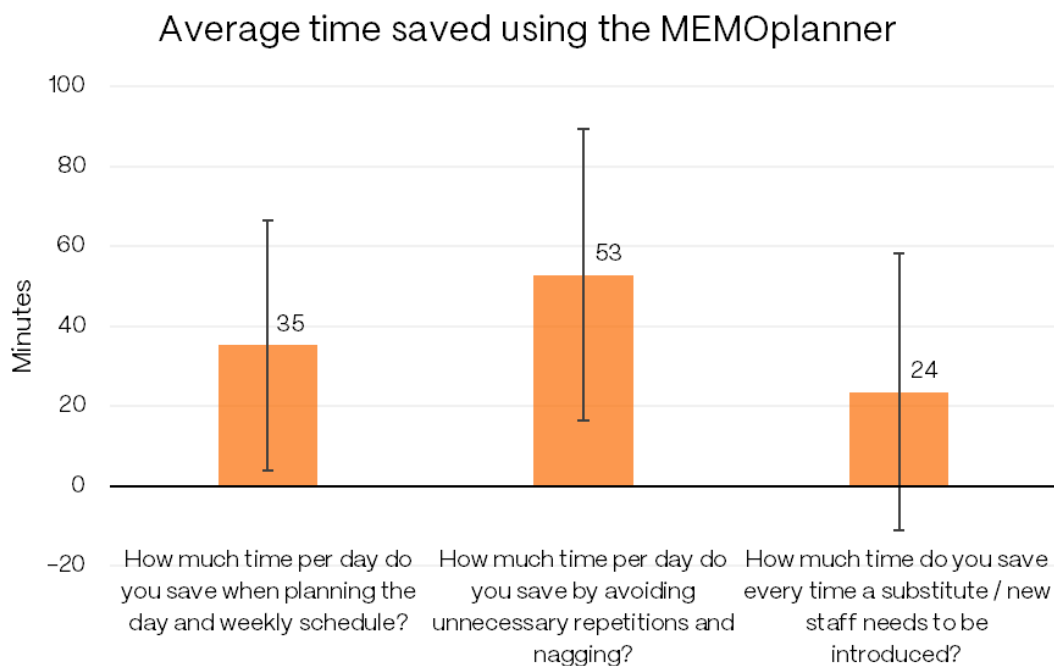


Figure 2 shows the average amount of time saved in different areas together with each standard deviation. Standard deviations describe the variation of the responses in relation to the mean. In this survey variation in responses was high which is visualised by the standard deviations presented in Figure 2: Average time saved using the MEMOplanner (minutes) in care homes and short-term homes - Dimension organization and work environment. Based on insights gained in the interviews, this might depend on differences in user groups as well as how and for which purposes the organization uses the MEMOplanner. While some users need many reminders, others might struggle more with performing tasks independently. This affects in which area the MEMOplanner helps the organization save time.

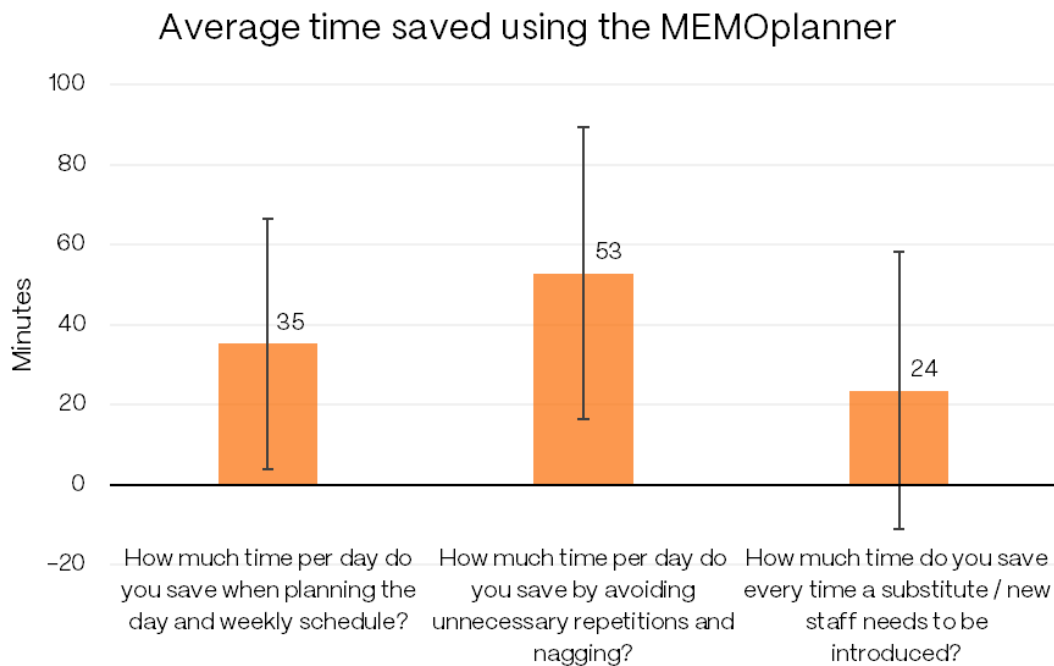


Figure 2: Average time saved using the MEMOplanner (minutes) in care homes and short-term homes - Dimension organization and work environment

The figure shows that for planning the day and weekly schedule, participants estimated an average of 35 minutes per day were saved. The high standard deviation (31 minutes) shows that responses differ greatly.

For avoiding unnecessary repetitions and nagging with users, the average time saved is 53 minutes per day. This is one of the areas where respondents experience the greatest amount of time savings.

For introduction of substitutes or new staff the average amount of time saved is 24 minutes per occasion. The standard deviation is 35 minutes, showing a large difference between responses. Twelve participants answered that no time was saved in total since it takes time to teach staff how to use the MEMOplanner (especially for short-term temporary workers). In interviews, however, respondents pointed out that although the introduction of new colleagues took as much time as previously, the new staff made fewer mistakes and more quickly caught up with work tasks.

Example statements about time savings in care homes:

- Two-thirds of care homes save 30 minutes or more each day when it comes to creating the schedule.
- Three out of four care homes save 30 minutes per day or more on reducing unnecessary repetitions, as users can find all the information in the MEMOplanner.



"Before, the residents would call us and ask about everything. /.../ Now there is less workload on tasks that don't add value to the residents. When we have more time, we can spend more time with each resident."



"We would have needed another staff member just to answer users' questions if we didn't have the MEMOplanner."

5.2.3 A communication tool

The MEMOplanner has resulted in less reminders and nagging, as users have the schedule available. This saves a lot of time and creates a calmer atmosphere.

The MEMOplanner is generally seen as an additional communication tool between staff and users, as well as within the staff group. For some users it is easier to communicate about activities through the MEMOplanner, as it provides a neutral way to communicate.

Staff members have gained a greater understanding of the importance a structured schedule and clear communication can have for users.



"This results in a different quality of our service, and less conflicts."

5.2.4 Scheduling and planning activities

The MEMOplanner makes it easier to set up and change the weekly schedule compared to previous calendars with printed pictures. It helps the staff to plan and organize activities in the way the users want, which creates less misunderstandings and conflicts.

For some users it is important that the activity starts at the exact time and with the right staff. The MEMOplanner helps staff keep track and be reminded.

The MEMOplanner provides more foresight, as it is easier to plan a full upcoming week and not only one day at a time. It is also easier and faster to add recurring activities.

Staff can use the MEMOplanner to gather information about activities in one place, ensuring that those working during the weekend have an easy overview of relevant information.

Checklists are used to communicate between staff and to involve users, for example when going shopping or writing down what users need to pack when returning home.

Being able to update the schedule remotely is an important function since some users need the schedule to always be up to date.

Lastly, users cannot change or destroy the information on the schedule.



"We have a better communication with users, and we feel like we are always one step ahead thanks to MEMOplanner."

5.2.5 Helpful for new staff

New or temporary staff appreciate the structure that the MEMOplanner provides, and the MEMOplanner makes temporary staff want to come back to the workplace.

Through MEMOplanner, new staff can get a better picture of their tasks, see what other staff members are doing, and find specific information about the users' preferences or habits. This is an important support in workplaces where mistakes or misunderstandings can create high levels of stress for users.



"It was easy to get an overview. I could sneak a peek in the MEMOplanner at what everyone's name is, what I'm going to do, where the other staff are."

5.2.6 Organizational goals

When it comes to the organizations' internal goals, the MEMOplanner has helped to improve performance in several areas. The care homes and short-term homes have differing organizational goals, often aiming to increase users participation, sense of community, autonomy, communication, sense of safety, and ensuring a predictable everyday life. The MEMOplanner has helped the organizations to develop in the following areas:

- It has increased users' personal responsibility and helped users become more independent
- It has increased users' sense of security
- Users are provided with a more predictable everyday life
- Planned activities are now easier to achieve. The MEMOplanner has increased users' engagement and participation, as well as the communal spirit
- Spending less time on giving reminders, unnecessary repetitions and similar means more time for staff to focus on tasks that benefit users, such as spending time together and planning activities.



"Our goal to strengthen the person's own resources. They have become more independent, and participate in more meetings and activities."

5.3 Users

5.3.1 Involvement in planning

With the MEMOplanner, users are more aware of and involved in activities happening throughout the day. Users have more information available and worry less about plans, which contributes to their feeling of security. They do not need to call or see the staff each time they have questions about future activities.

The MEMOplanner is a great support when it comes to users' time perception. Knowing what to do and when, as well as receiving reminders, makes it easier for those who have difficulties with time perception.

5.3.2 Increased privacy

Users who live alone can have more privacy and time for themselves as staff do not have to enter the apartment to change the schedule.

5.3.3 Communication support

Through users and staff working with the MEMOplanner together it becomes easier for users to communicate their needs regarding activities or events.

Users can see what will happen in advance, and more easily express if they want to change any part of the planning.

If users want to carry out the activity with another member of staff, they can easily show it through the MEMOplanner. This leads to fewer conflicts and misunderstandings.

Users can be supported in communicating about activities during the day or the week with other users through MEMOplanners speech synthesis function. This builds a feeling of community.

Through the MEMOplanner, users can more easily communicate with their relatives about what they have done during the day or week and respond to their relatives' questions. This affects their well-being and minimizes frustration.



“We have more time for social conversation efforts when we save time on reminders. But the most successful part is that the independence has increased, and their experiences of being able to do more things on their own.”

5.3.4 More independent users

Users become more independent through using the MEMOplanner, as well as more involved in communal activities.

Users get to practice keeping track of their own activities and can use checklists to complete tasks on their own.

Participants notice how users are developing as they use the MEMOplanners, and how they need less and less of the support functions.

The MEMOplanner supports users in establishing and remembering their morning and/or evening routines.

Users can get started with activities where they previously needed reminders, such as cleaning, showering, toothbrushing, packing an activity bag or changing to their spring jacket.

In some cases, users have become more active in planning the schedule. Users show the staff which activities they would like to take part in, can feel more prepared, and in some cases participate in a greater proportion of the activities.



"MEMOplanner has allowed users to evolve, and now they can plan a week in advance. Before it was just one day at a time."

5.3.5 A feeling of security

The MEMOplanner makes users feel more secure and assured. Security for users means security for staff, since it leads to less conflict and emotional outbursts.

In cases where users can become outwardly aggressive, the MEMOplanner has led to a reduction in threats and violence as users experience less frustration and uncertainty about present and future activities.

The days become more predictable, for both staff and users. The MEMOplanner provides a visual support, and it is possible to get an overview of the schedule a week in advance. With the MEMOplanner, everyone has the same information which reduces misunderstandings and mistakes.

There is less conflict and less confrontations as users find the reminders from the MEMOplanner less annoying or personal than continuous reminders or "nagging" from the staff.



"The MEMOplanner provides a security for them. It means predictability. When they know everything that MEMOplanner shows them, things don't start flying through the air."

5.3.6 Time saving in group homes

The following figure shows quantitative survey results of the amount of time saved when using the MEMOplanner in care homes and short-term homes. 23 responses were collected in total.

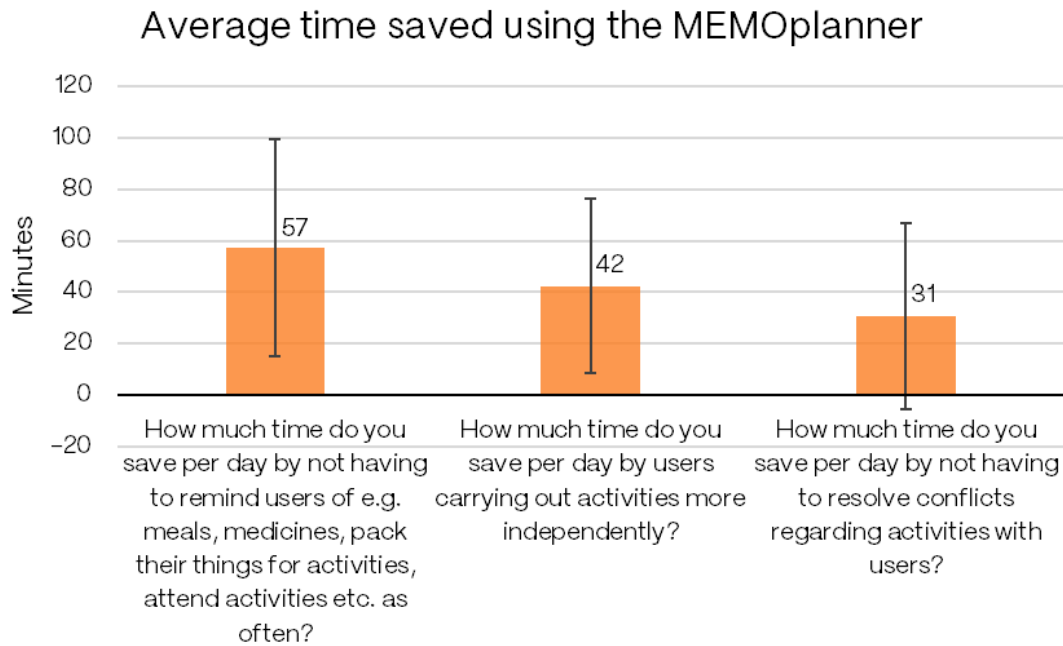


Figure 3: Average time saved using the MEMOplanner (minutes) in care homes and short-term homes - Dimension users

For reduced amount of reminders about mealtime, medications, activities etc. the average amount of time saved was 57 minutes per day.

The average amount of time saved because users can carry out activities more independently is 42 minutes per day.

For reduced conflicts around activities with users, the average amount of time saved is 31 minutes per day.



"Users have developed a lot. They bring up the dialog with us now, saying 'Eva is doing toothbrushing, but I don't want to brush with her'. Before, it wouldn't be a dialog, it would just lead to conflict."

Example statements about time savings in care homes:

- Half of care homes save one hour or more on users performing more tasks independently.
- More than half of care homes save at least one hour per day by giving fewer reminders.

5.4 Estimated cost savings

In this section we have estimated cost savings for care organizations when using MEMOplanner. The calculations are based on the estimated time savings made by care personnel in the survey. There were 23 respondents for care homes & short-term homes. Responses were collected in minutes per day or occasion, presented in the top row of the tables.

The salary cost was calculated from an average monthly salary plus employer fees for the professions that represented the majority of participants in the survey: support assistants and support pedagogues. An average was created out of the two professions resulting in a salary cost¹⁵ of 40 555 SEK per month or approximately 490 000 SEK per year when working full-time.

The average hourly cost of salary for care personnel was used to calculate the organization's cost savings per day per employee. For care homes and short-term homes, daily cost savings were multiplied by 365 as care homes and short-term homes are most often open all-year round.

¹⁵ Cost of salaries including sick leave, vacation, holiday and other benefits where applicable.

5.4.1 Estimated cost savings – care homes

Based on the assumptions described above

Table 4: Calculation of cost savings in long-term and short-term care homes

	How much time per day do you save when planning the day and weekly schedule?	How much time per day do you save by avoiding unnecessary repetitions and nagging?	How much time do you save every time a substitute / new staff needs to be introduced?	How much time do you save per day by not having to remind users of e.g. meals, medicines, pack their things for activities, attend activities etc. as often?	How much time do you save per day by users carrying out activities more independently?	How much time do you save per day by not having to resolve conflicts regarding activities with users?
Time savings (min/day)	35	53	24	57	42	31
Cost savings per day	143 SEK	214 SEK	95 SEK	232 SEK	171 SEK	124 SEK
Cost savings per month	4336 SEK	6503 SEK	2902 SEK	7065 SEK	5204 SEK	3777 SEK
Cost savings per year (OBS, based on 365 days per year, assumes they are staffed all year round)	52026 SEK	78039 SEK	34822 SEK	84783 SEK	62449 SEK	45326 SEK

5.4.3 Sources for estimations of costs

Salaries for support assistants (28 917 SEK) and support pedagogues (32 800 SEK) are taken from Kommunalarbetaren¹⁶. The information applies to permanent employees, the average salary is calculated on a full-time basis, without variable supplements on October 31, 2023. The statistics are based on information submitted by municipalities, regions and emergency services to the Municipal employee.

The average monthly cost per employee (salary + employer fees) is 40 555 SEK, and the hourly cost is 243 SEK.

Values for employer fees are taken from facket.net¹⁷.

¹⁶ Hedenström, M.G., Swahn, C. and Steen, E., Kommunalarbetaren. *Så mycket tjänar stödassistenterna*. (2023). <https://ka.se/2023/06/05/lon-stodassistent-dar-du-jobbar/> (Accessed: 25 June 2024).

¹⁷ Facket. *Beräkna arbetsgivaravgift/sociala avgifter 2024 - kalkylator*. <https://facket.net/kalkylatorer/arbetsgivaravgift/>. (Accessed: 25 June 2024).

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Appendix 1: Qualitative interview guide

Introtext

Som ett led i Abilias arbete att utveckla sina produkter och tjänster är det viktigt för Abilia att få ökade insikter i vilken nytta deras produkter och tjänster bidrar med, exempelvis gällande effektivisering, arbetsmiljö m.m. för de verksamheter som använder dem. Idag kommer vi att fokusera på MEMOplanner under intervjun, och vi kommer att diskutera om eventuella skillnader i verksamheten innan och efter att ni börjat använda MEMOplanner.

Intervjun kommer att ta cirka 30–45 minuter. Det finns inga fel svar – det är din åsikt och dina uppskattningar som vi är intresserade av. Alla svar behandlas konfidentiellt och anonymt. Svaren kommer inte att redovisas eller visas på ett sätt där respondenters namn, positioner eller verksamhetens namn avslöjas.

Tack för att du deltar i vår studie!

Bakgrund

(Notera – frågorna anpassas efter individuell intervju samt om flera respondenter deltar – ex. du / ni etc.)

1. Vilken arbetsroll har du?
2. Hur länge har du arbetat i din roll?
3. Hur länge har ni använt MEMOplanner i er verksamhet?
4. Hur många MEMOplanner(s) har ni i verksamheten?

Antal MEMOplanners i gemensamma utrymmen: _____

Antal MEMOplanners som individuellt stöd: _____

5. Varför skaffade ni MEMOplanner till boenden/er verksamhet?
6. Har införandet av MEMOplanner uppfyllt era förväntningar?

Om ja: På vilket sätt?

Om nej: Varför tycker du att MEMOplanner inte har uppfyllt era förväntningar?

Nyttoeffekter / Arbetsmiljö

Nu ska vi fokusera på verksamheten / personalen.

1. Vilka nyttoeffekter / fördelar har ni märkt för verksamheten / personalen med användningen av MEMOplanner, jämfört med innan? Något mer?
2. Anser du att det frigörs tid för verksamheten / personalen på grund av MEMOplanner?

Om ja: På vilket sätt/i vilka situationer frigörs tid?

Fråga vid behov: Frigörs tid för verksamheten genom att använda digitalt stöd istället för att exempelvis skriva lappar, plasta in osv. Om ja, beskriv situationer

Ungefär hur mycket tid sparar ni i verksamheten per vecka?

Vad kan man använda den frigjorda tiden till i stället?

3. Har ni förändrat ert arbetssätt / arbetsstruktur sedan ni började att använda MEMOplanner?

Om ja: Hur har ni förändrat er struktur / ert arbetssätt? Något mer?

4. Har personalens engagemang / motivation till sitt arbete förändrats på något sätt?

Om ja: På vilket sätt?

5. Har MEMOplanner påverkat arbetsmiljön på något sätt?

Om ja: På vilket sätt?

6. Har tryggheten för personalen förändrats på något sätt (dvs känner du dig säkrare på din arbetsplats)?

Om ja: På vilket sätt?

7. Sjukskrivningar och hög personalomsättning är ett vanligt problem inom omsorgen idag, upplever du att detta kan påverkas av införandet av MEMOplanner?

Om ja: På vilket sätt?

8. Tycker du att ni har blivit en attraktivare arbetsgivare?

Om ja: På vilket sätt är ni attraktivare?

Fråga vid behov: Märker ni att personal vill jobba hos er pga. ni har en bättre arbetsmiljö?

9. Tycker du att MEMOplanner har förbättrat kommunikationen inom personalgruppen på något sätt?

Om ja: På vilket sätt?

Fråga vid behov: Bättre gemensam kommunikation? Tydligare kommunikation? Ökar delaktigheten?

10. Underlättar MEMOplanner övergången mellan olika platser/verksamheter där brukaren befinner sig, tex mellan familjen och boendet eller mellan boendet och daglig verksamhet.

Om ja: På vilket sätt påverkar det verksamheten?

11. Upplever du att MEMOplanner underlättar i upplärningen av nya kollegor / vikarier?

Om ja: Ungefär hur mycket tid sparar ni på det per tillfälle?

12. Vilka fördelar ser du med att aktiviteter i MEMOplanner går att lägga in/ändra på distans (till skillnad från att uppdatera en fysisk kalender/plan)?

Hur mycket tid sparas per tillfälle för personalen pga. möjligheten att uppdatera på distans?

Nyttoeffekter - brukare

Nu ska vi fokusera på brukarna.

1. Kan du se att brukare klarar av saker tack vare MEMOplanner som de tidigare behövde hjälp med?

Om ja: Vilka saker/aktiviteter?

Om ja: Hur många fler aktiviteter per vecka kan individen utföra självständigt som tidigare behövdes påminnas, hämtas osv. jämfört med innan ni hade MEMOplanner?

2. Har brukarnas engagemang / motivation / delaktighet i aktiviteter förändrats på något sätt på grund av MEMOplanner?

Om ja: På vilket sätt påverkar detta verksamheten?

Fråga vid behov: Är brukarna med på fler aktiviteter per vecka? I så fall hur många?

3. Har konflikter med brukare påverkats på något sätt?

Om ja: På vilket sätt påverkar detta verksamheten?

Fråga vid behov: Har det blivit lugnare?

Anhöriga

Nu ska vi fokusera på anhöriga.

1. Känner ni att anhöriga får några fördelar av användningen av MEMOplanner?

Om ja: vilka fördelar?

2. Har er kontakt med anhöriga påverkats sedan ni börjat använda MEMOplanner?

Om ja: På vilket sätt?

Fråga vid behov: Har kontakten blivit bättre / är anhöriga nöjdare?

Verksamhetsmål

1. Har ni fått en förbättrad målluppfyllelse för verksamheten pga. MEMOplanner?

Om ja: På vilket sätt hjälper MEMOplanner till att uppnå verksamhetens mål? (ex. fånga värden för individuell plan).

2. Finns det något förbättringsområde inom er verksamhet, där införandet av MP gjort skillnad/hjälpt till att uppfylla verksamhetens mål?

Om ja, ge exempel:

Övrigt

1. Finns det några andra fördelar med MEMOplanner som inte har lyfts?
2. Vad, om något, skulle du vilja se förbättras i MEMOplanner?

Appendix 3: Survey responses – care homes

Table 5: Number of responses per survey question in long-term and short-term care homes

Question / number of responses in total (n=23*)	0	15	30	45	60	75	90	105	120
Hur mycket arbetstid per dag sparar du vid planering av dagen samt veckoschema?	4	4	8	1	4	0	0	1	1
Hur mycket tid per dag sparar du på att undvika onödiga upprepningar och tjat med brukare?	3	2	4	1	6	4	0	0	3
Hur mycket tid sparar du per dag på att inte behöva påminna brukare om t.ex. måltider, mediciner, packa sina grejer inför aktiviteter, delta på aktiviteter etc. lika ofta?	3	3	3	1	5	2	1	0	5
Hur mycket tid sparar du per dag på att brukare genomför aktiviteter mer självständigt?	4	5	1	1	8	0	2	0	1
Hur mycket tid sparar du per dag på att inte behöva lösa konflikter kring aktiviteter med brukare?	7	5	3	3	1	1	0	0	2
Hur mycket tid sparar du varje gång en vikarie / ny personal behöver introduceras? (per tillfälle)	12	2	1	0	4	1	0	0	1



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