Deliverable D24.10

Acceptability, satisfaction and usability of a tablet application for Barthel index assessment by patients, relatives and geriatricians in ambulatory unit

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Glossary of Terms

ECHORD++: European Coordination Hub for Open Robotics Development Plus Plus (E++ for short)

TUG : Timed Up and Go test

DHG : Day Hospital Geriatric

MMSE : Mini Mental State Examination

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1   Abstract

Background

Regular evaluation of elderly people is primordial. Easy-to-use evaluation applications have been developed for such purpose. The aim of this study is to validate feasibility and usability of a computerised application during a patient evaluation of functional and motor autonomy for geriatrics day clinic diagnosis. In particular, we focused on simple but largely used test: The Barthel Index.

Materials and methods

Participants included elderly people from 65 years' old who need a day clinic consultation in Charles Foix geriatrics hospital in Paris. These patients have a MMSE > 16 and come with a relative. We assessed acceptability, satisfaction and usability of the computerised application of the Barthel Index.

Patients and relatives used alone the Barthel index app. A professional was here to help their if it's necessary. After that, they fill out acceptability tablet questionnaire and satisfaction and usability of the app questionnaire.

Results

Acceptability of tablet: 54% of the population who used the tablet during this study considers themselves as inexperienced or new to the new technologies. More than 80% of patients and 75% of relatives found it from satisfactory to very satisfactory use. Usability of the system: over 60% of patients and relatives would like to use this app frequently but 54.5% of patients felt it necessary to have help using this app where 75% of relatives feel they can use it alone. Satisfaction of the system: Mmore than 80% mostly agree and completely agree that the use of the application is easy, 50% of patients and 75% of relatives are agree to strongly agree that they would be effective using this app. For 91% of patients and 87% of the relatives, the information provided by the app are very clear, relevant and allow answering questionnaires. 81.81% of patients find the interface pleasant, while 60% of relatives find their interface pleasant.

Conclusion

Despite some difficulties of patients, the tablet tool is well accepted. Similarly, regarding the application to assess the Barthel index, patients, their relatives and health professionals have enjoyed using it and are satisfied with it. Rethinking the organization of the service to include such a system and the mistrust of patients and their relatives on new technologies are the two main obstacles to the implementation of a system such as the one proposed in this study.

2   Introduction

Many elderly people from 65 years old are considered as fragile, which means that they have a high risk of loss of motor and functional autonomy. Elderly people are considered as fragile if they have 3 of the 5 criteria between: unintentional weight loss (4.5 kg in the previous year), exhaustion, low grip force, slow gait speed and low physical activity level (Fried, 2001; Fairhall *et al.,* 2008). In these conditions, elderly people develop gait and balance disorders and high difficulties in maintaining their long-term functional capabilities. According to Institut de Veille Sanitaire (InVS), one-third of over-65s and more living at home and more than half of over-85s fall once per year (Ricard & Thelot, 2008). Each year in France, InVS take a census of more than 450 000 falls for the fragile people over-65s (80% of the daily life accidents) in which 9 300 are mortal, 70 000 neck of the femur fractures, 500 000 emergency visits, 100 000 hospitalisations.

A fall leads to mobility decreasing which increases dependency, lack of confidence and decline of functional capabilities of the people and consequently causes more hospitalisation. In their study, Rockwood *et al.* (1999) pointed out that this vulnerable population has a significantly higher risk of losing functional independence and to move to hospital or health institute. Yet hospitalisation, which is a high stress factor, often has negative consequence on elderly people (Gill *et al.*, 2011) as loss of functional autonomy (Subra *et al.*, 2012) and the occurrence of disability (Gill *et al.*, 2011). Risk of fall and functional dependency are highly correlated and predominant for this at-risk population. These polypathological elderly people need a special care with a regular and customised follow-up. This follow-up care allows early detection of aging degeneration and pathologies. Moreover, because in elderly people at-risk of autonomy loss, when pathologies appear, decline is quick and a regular monitoring and adjustments as close as possible to the patient needs are required. For this purpose, multidimensional geriatrics assessment was created in the 80's for early screening (Rubenstein, 1995). Thus, people with risk of fall and/or first-fall and people with high risk of functional autonomy loss are subjected of high vigilance in geriatrics day hospitals. These hospitals are mostly focusing their care on both evaluation of postural instability - mainly from the Timed Up and Go (TUG) test (Podsialo & Richardson, 1991) – and functional autonomy – mainly from Barthel index (Mahoney & Barthel, 1965).

Currently, these assessments are managed by the medical staff using paper based questionnaires. Information and Communication Technologies (ICTs) provide technological tools to improve practices and to gain free time for healthcare professionals while maintaining the necessary and unavoidable analysis of results by them. Despite all the efforts of many researchers in this field (Wrobel *et al.*, 2014), there is no on-the-shelf system to able to provide to hospital healthcare professionals assessment tools for multidimensional geriatrics evaluation. Only few online applications have been introduced (Rocha *et al.*, 2013), but most of them are limited to forms similar to questionnaires or requesting a direct collaboration between the patient and the healthcare professional. There are some mobile applications, generally used for cognitive evaluation (A Arean *et al.*, 2013; Bandera *et al.,* 2013). For instance, in Zorluoglu *et al.* (2015), cognitive tests are displayed as a mobile application on Android OS.

The goal of this project is to develop a system that allows health professionals to perform geriatric assessments using the benefits of technology to make assessment of functional and motor independence easier, faster, more traceable, reproducible and providing value-added results. The idea is to develop a system for passing the various geriatric monitoring tests through an application available on a tablet. In order to develop a system that is closer to the needs of end-users, we focus on one test: Barthel index.

The aim of this study is to evaluate acceptability, satisfaction and usability of tablet application for the Barthel index pass by patients, relatives and healthcare professionals during consultation in geriatrics day clinic.

The studied work hypothesis was that the application is easy-to-use for patients, relatives and is not a constraint for the healthcare professional and accepted by these 3 entities.

3 Materials and methods

3.1 Type of study

3.1.1 Description of the evaluated test

Barthel index

Barthel index allows measuring elderly people autonomyows a follow-up of their independency loss state and short-term decline. They must answer a 10 questions to assess the following topics: feeding, washing, rectal and urinary continence, displacement, stairs, dressing, personal care, use of the toilet and transfer from the bed to the chair.

3.1.2 Description of different profiles of the study

<u>Patient profile</u>: The patient answers for himself to questions of the Barthel index with the app. The patient handles alone the tablet and the application.

<u>Relative profile:</u> The relative answers for patient to questions of the Barthel index with the app. The relative handles alone the tablet and the application.

<u>Healthcare professional profile:</u> Within the care, healthcare professional asks questions from the Barthel index to the patient and enters the answers directly into the application. In this case the application is used as a computerised questionnaire. Healthcare professional handle alone the tablet and the application.

3.1.3 Hardware technical specification

The tablet used to allow the pass of the Barthel index is a *Samsung* ® Galaxy Tab A_6 tablet, 10,1 inches' screen and 32 Gb hard disk.

3.2 Population study

3.2.1 Inclusion criteria

Patients included in this study are over-65s with MMSE higher than 16. They came in day clinic or geriatrics ambulatory service of Charles Foix (Ivry sur Seine) for a consultation. They came with their relatives.

3.2.2 Non-inclusion criteria

Non-included patients have important cognitive troubles (MMSE<16), have eye-problems or are blinds, with a heavy pathology, had a less than 3 months' surgery, have a juridical protection, participate to another protocol.

3.2.3 Recruiting modalities

Patient and relative are recruited during consultation with the doctor caring of the patient forlder. If patients fit in the inclusion criteria, an information letter is given and explained by the doctor. The doctor answers all the patient questions relative to the study. Recruitement is done on the very day.

3.3 Judgement criteria

3.3.1 Main judgement criteria

For the 3 profiles (patient, relative, and the healthcare professional), the main judgement criteria match the answers to acceptability questionnaires of the tablet and to satisfaction and usability questionnaires of the application.

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3.3.2 Secondary judgement criteria

Secondary criteria is the difference of the Barthel index between the patient and relative.

3.4 Intervention Protocol

3.4.1 Research agenda

Patients and relatives are solicited once for the study. The total study duration for a patient and his relative is about one hour (~1h). This duration includes: experimentation presentation duration; Barthel index acquisition; tool acceptability questionnaire execution and satisfaction and usability of the system. Total study duration was 4 months.

3.4.2 Study roll-out

In the framework of hospital consultation, the doctor host the patient and relative in the usual consultation room. The doctor explains the study object, what the Barthel index is and how the execution goes. The doctor answers all the questions.

In the first time, the relative is requested to wait the patient in the waiting room. During this time, the patient answers Barthel's questions asked by the doctor, who directly fill the application tablet which is connected to the Internet.

Secondly, patient and relative are cared by another habilitated professional, knowing the application and the test. This habilitated professional lead them to the examination room. He provides them a tablet for each, help them to connect their own account and start the tests. The patient answers for himself. The relative answers to Barthel's questions for the patient he came with. In case of problems, they can ask the habilitated professional (Tablet use, misunderstanding of the question, etc.).

3.5 Statistical aspects

3.5.1 Description of the study population

Description of the population will be done by mean and standard deviation of the typical quantitative data: gender; age; MMSE.

3.5.2 Primary endpoint

For the 3 profiles (patient, relative, healthcare professional), the primary endpoint is satisfactory if:

+ *Acceptability* of the digital tablet is superior or equal to seventy percent ($\geq$70%);
+ *Satisfaction* of the tablet application for Barthel index execution is superior or equal to seventy percent ($\geq$70%);
+ *Usability* of the tablet application for Barthel index execution is superior or equal to seventy percent ($\geq$70%).

3.5.3 Secondary endpoint

Secondary endpoint is satisfactory if the Barthel index score difference between the patient and relative are fewer or equal to three points ($\leq$5pts);

4 RESULTS

During the month of November 2018, 21 people (12 patients and 9 caregivers – *Figure 1*) were included during the 7 slots of 4 hours each, carried out during consultations of the service. The majority of patients included are women

(66.67%) with a median age of 78.62 years (± 9.13) and a median MMSE of 22.5 / 30 (± 5.61). Relatives, for their part, are predominantly men (66.67%) with a median age of 64.50 years (± 10.87) (*Table 1*).
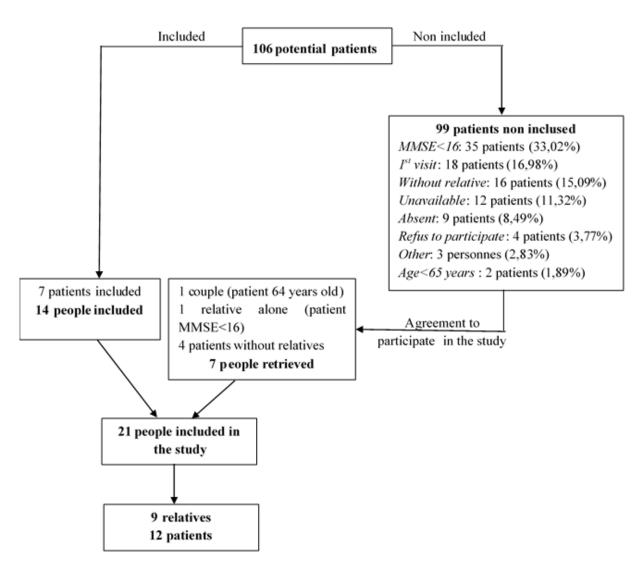

Figure 1: Flow chart of study

Table 1: Basic characteristics of the study population

	Patients N=12	Relatives N=9
	Mean(±SD)	Mean(±SD)
Gender		
Men	4	6
Women	8	3
Age (years)		
Mean	76,66 (±8,08)	62,67 (±9,84)
Men	72,75 (±3,77)	64,50 (±10,87)
Women	78,62 (±9,13)	59,00 (±7,81)
MMSE		
Mean	23 (±5,36)	
Men	24 (±5,48)	
Women	22,5 (±5,61)	

4.1   Acceptability of the digital tablet tool

Table 2 shows the acceptability of the tablet to patients and relatives included in the study. It is shown that 54% of the population who used the tablet considers themselves as inexperienced or beginners with new technologies. More than

80% of patients and 75% of relatives found it from satisfactory to very satisfactory use. In addition, less than 30% of patients and 25% of relatives would have preferred paper support to tablet support to pass these tests. Overall, more than 70% of patients and 100% of relatives are satisfied with using this tool to answer Barthel's index questions.

Table 2: Acceptability of the digital tablet tool

	Patients N = 11 ; n/N					Relatives N = 8 ; n/N				
	1	2	3	4	5	1	2	3	4	5
What is your level of expertise in new technologies?	5/11	1/11	3/11	2/11	0	0	2/8	3/8	1/8	2/8
How did you feel about the use of the tablet	0	1/11	1/11	5/11	4/11	0	0	2/8	3/8	3/8
How do you think the tablet works	0	1/11	1/11	4/11	5/11	0	0	0	3/8	5/8
Encountered difficulties	no difficulty = 9/11 non acceptation = 0 technological break = 2/11					no difficulty = 6/8 non acceptation = 1/8 technological break = 1/8				
Did you appreciate the tablet support to pass these tests?	1/11	2/11	2/11	4/11	2/11	0	0	1/8	5/8	2/8
Would you have preferred another medium than the tablet?	non = 8/11 oui = 3/11					non = 6/8 oui = 2/8				
If so, what other support?	paper = 2/11 oral = 1/11					paper = 2/8 oral = 0				
Do you think you have managed to use the tablet alone?	1/11	1/11	0	6/11	3/11	0	0	0	6/8	2/8
Are you satisfied overall with having passed these tests using the tablet?	2/11	1/11	0	4/11	4/11	0	0	0	4/8	4/8

1: No experience - Very complicated / Not at all satisfactory; 2: Beginner - Rather complicated / Unsatisfactory; 3: Moderately expert - Moderately simple / Moderately satisfactory; 4: Rather expert - Rather simple / Rather satisfactory; 5: Expert - Very simple / Very satisfactory

4.2 Usability of the application for users

Table 3 shows the usability of the application for patients and relatives. It is shown that over 60% of patients and relatives would like to use this app frequently. More than 70% of patients and more than 50% of relatives find it easy to use. 54.5% of patients felt it necessary to have help using this app where 75% of relatives feel they can use it alone. More than 80% of patients and 100% of relatives found this application not at all compelling to use.

Table 3: Usability of the application for users

	Patients N = 11 ; n/N					Relatives N = 8 ; n/N				
	1	2	3	4	5	1	2	3	4	5
I think I would like to use this application frequently	3/11	0	1/11	0	7/11	1/8	1/8	1/8	0	5/8
I found this application unnecessarily complex	6/11	1/11	0	0	4/11	6/8	1/8	0	0	1/8
I found this application easy to use	1/11	1/11	0	2/11	6/11	0	1/8	1/8	1/8	5/8
I think I would need the support of a specialist to use this application	4/11	0	1/11	3/11	3/11	6/8	0	1/8	0	1/8

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	1	2	3	4	5	1	2	3	4	5
I found that the deferent functions of this application were well integrated	1/11	0	2/11	2/11	6/11	1/8	0	0	0	7/8
I found this application too inconsistent	9/11	1/11	1/11	0	0	8/8	0	0	0	0
I think this app will be easy to learn for a lot of people	1/11	0	3/11	3/11	4/11	1/8	0	3/8	2/8	2/8
I found this application very restrictive to use	9/11	0	0	0	2/11	6/8	2/8	0	0	0
I felt con fi dence when I used this app	2/11	1/11	0	2/11	6/11	0	1/8	1/8	0	6/8
I had to learn a lot before I became familiar with this application	9/11	0	0	0	2/11	5/8	0	1/8	0	2/8

1: Strongly disagree 2: Little agreement; 3: Somewhat agree; 4: Mostly agree; 5 Strongly agree

4.3 Satisfaction of the application for users

The use part of the application is divided into three distinct parts making it possible to judge the utility of the system, the quality of the information as well as that of the interface.

4.3.1 System utility

Table 4 shows that regarding the utility of the system for patients and relatives, they are more than 80% mostly agree and completely agree that the use of the application is easy. 50% of patients and 75% of relatives are agree to strongly agree that they would be effective using this application. And over 70% would be able to respond quickly to questionnaires using this app. In addition, 72% of patients and 87% of caregivers felt comfortable using this app.

Table 4: System Utility

	Patients N = 11 ; n/N					Aidants N = 8 ; n/N				
	1	2	3	4	5	1	2	3	4	5
In general, I am satisfied with the ease of use of this application	2/11	0	0	2/11	7/11	0	1/8	0	2/8	5/8
It is easy to use this application	2/11	0	0	2/11	7/11	0	0	1/8	3/8	4/8
I will be effective using this app	3/11	0	2/11	0	6/11	0	1/8	1/8	1/8	5/8
I will be able to answer questionnaires quickly using this app	2/11	0	1/11	0	8/11	0	0	1/8	1/8	6/8
I will be able to answer the questionnaires with little effort using this application	2/11	1/11	1/11	0	7/11	0	0	1/8	1/8	6/8
I feel comfortable using this app	3/11	0	0	1/11	7/11	0	1/8	0	3/8	4/8
It's easy to learn how to use this app	1/11	0	0	1/11	9/11	0	1/8	0	0	7/8
I believe that I will be quickly more productive using this app	3/11	0	0	1/11	7/11	1/8	1/8	0	0	6/8

1: Strongly disagree 2: Little agreement; 3: Somewhat agree; 4: Mostly agree; 5 Strongly agree

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4.3.2 Quality of information

Table 5 highlights the feelings of patients and relatives about the quality of the information provided by the application. For 91% of patients and 87% of the relatives, the information provided by the app are very clear, relevant and allow answering questionnaires. In addition, 100% of patients and 87% of relatives found the organization of information on the screen very clear.

Table 5: Quality of Information

	Patients N = 11 ; n/N					Relatives N = 8 ; n/N				
	1	2	3	4	5	1	2	3	4	5
This application displays messages that clearly tell me how to solve problems	2/11	0	2/11	1/11	3/11	1/8	0	0	1/8	3/8
Even if I make mistakes using this application, I can solve them easily and quickly	1/11	0	1/11	2/11	6/11	1/8	0	0	1/8	6/8
The information provided by this app is clear	0	0	1/11	0	10/11	0	0	1/8	0	7/8
It's easy to find the information I need	2/11	0	1/11	1/11	7/11	0	1/8	0	0	7/8
The information provided by this application is easy to understand	0	0	1/11	2/11	8/11	0	0	1/8	0	7/8
The information is relevant to help me answer the questionnaires	1/11	0	0	1/11	9/11	0	0	1/8	1/8	6/8
The organization of the information on the screens of this application is clear	0	0	0	3/11	8/11	1/8	0	0	0	7/8

1: Strongly disagree 2: Little agreement; 3: Somewhat agree; 4: Mostly agree; 5 Strongly agree

4.3.3 Quality of the interface

Table 6 is focused on the interface of the application. In fact, the results show that 81.81% of patients find the interface pleasant, while 60% of relatives find their interface pleasant and 37.5% find it moderately pleasant. In general, 72.72% of patients and 87.5% of relatives are satisfied with the application.

Table 6: Quality of the interface

	Patients N = 11 ; n/N					Relatives N = 8 ; n/N				
	1	2	3	4	5	1	2	3	4	5
The interface of this application is nice	1/11	0	1/11	0	9/11	0	0	3/8	0	5/8
I like to use the interface of this application	3/11	0	0	1/11	7/11	0	0	3/8	0	5/8
This app has all the features and capabilities that I expect from it	2/11	0	1/11	2/11	6/11	1/8	0	0	2/8	5/8
In general, I am satisfied with this application	3/11	0	0	1/11	7/11	0	1/8	0	0	7/8

1: Strongly disagree 2: Little agreement; 3: Somewhat agree; 4: Mostly agree; 5 Strongly agree

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4.4 Difference score of the Barthel index between patient and relative

Eight patient/relative couples used the application simultaneously. Among these 8 couples, 1 patient did not want to use the application, 2 patients underestimate their level of autonomy, 2 patients overestimate it and 3 patients have the same assessment as their relative.

Table 7: Score difference of the Barthel index between patient and relative

	Score Patient	Score Relative	Difference P-R
1	80	85	5
2	100	100	0
3	100	90	-10
4	100	100	0
5	80	90	10
6	0	65	65
7	100	100	0
8	100	85	-15

5 DISCUSSION

The main objective of this study is to evaluate the acceptability of the tablet and satisfaction and usability of the application to know if the implementation of such a system in a geriatric ambulatory ward is possible.

During the 7 recruitment sessions, 106 patients were scheduled for a consultation. By strictly applying the inclusion criteria of the study only 6.6% of patients could be included. The main reasons being patients with an MMSE <16/30 (33.02%), patients coming for the first time in the service (16.98% - during these consultations the doctor draws up a complete assessment of the patient allowing, for future visits, to set up support in the service. These patients generally leave the service following this visit), patients without relative (15.09% - as a service where patients come only for the day, the relative drops the patient and comes to look for him at the end of the visits or the least degraded patients come alone), patients interested in the study but unavailable because of their schedule of consultations very loaded (11.32%), planned patients who do not show up for their consultation (8.49%) (Figure 1). Given all these constraints, during the recruitment sessions we decided to slightly increase recruitment. We found it interesting to use this data as part of the acceptability, satisfaction and usability of the application because these data are subjective and personal. However, regarding the difference between the test scores only the data of patients and relatives strictly entering the inclusion criteria were used.

For a population considered more than 50% as non-expert in the use of new technologies, more than 75 years old and composed mostly of women, the results show that the acceptability of the digital tablet is rather satisfactory. Indeed, despite the difficulties of use of the tool encountered by some patients, the digital tablet was relatively quickly taken in hand (at the end of the 5th question) which suggests an easier grip over time. The main difficulties encountered were related to too long nails, too long a support on the screen, a poor grip of the tool, the palm of the hand touched the screen slightly which subsequently prevented the application to work properly. This is a lack of knowledge about the tool and its particularities. For greater comfort of the user, especially the elderly who are very tiring, it is necessary that the tablet is installed on a fixed support. Ideally, this support should be slightly inclined. But also that the way to click (short click on the area) is reminded. To overcome this problem, there is voice recognition.

Indeed, the application has a voice synthesis allowing patients to listen to the questions, rather than read them, and a voice recognition to those who wish to avoid touching the screen (*"I do not like touching these machines but with that*

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(voice recognition) I like it."). The majority of patients who have used this option continue to read texts despite voice synthesis. Some do not like voice synthesis, so they have cut the sound. Others wanted to test the different features by cutting the sound. It then appeared a "default" in the graphical interface of the application. Indeed, on the interface the test questions are located at the top of the screen in a green rectangle. This box being fixed from one question to the other, patients did not read the question (*"I thought it was a general banner, it is believed that it is written the same thing and then it is green! ";"The question in the green band is not visible, it's like advertising so it's information we do not read"*). Beyond that, the majority of patients find the interface very pleasant. The relatives are more mixed. Indeed, their interface is much more efficient and basic. All the questions are grouped on one page with drop-down menus (*"At the beginning it's surprising but once you understand the system it's good, it has to be simple like that"*), for others this interface is too austere and would have preferred to use the patient interface (*"I would have preferred to have the same interface as my father, it is much nicer!"*). Health professionals who have used the application find it simple, basic and intuitive (*"We have little time so we need something that is efficient and clean, and that's fine."*). But find the font size too small for regular use.

Regarding the use of the application, despite difficult beginnings the majority of patients and relatives find it easy to use. Indeed, in the early days some patients (even some relatives) do not understand where to check to answer (*"well I'm doing it by myself, must I press what then?"*). Sometimes even they do not understand the question asked (*"What does it mean continent?"*), others need to be guided (*"I support that?"; "I arrived at the end of the test and I have to go back?"*) and to be encouraged (*"Grhhh! Susceptible Gear"*). However, it shows a satisfaction (*"I want to continue I like it"; "it's easy, if it remains simple (the application) I would like to use it frequently"; "it's simple, there is the right thing and we are guided"*). The patients, who needed it most, are very aware of their difficulties with this tool and that support is necessary in the use of such an application. Where most relatives feel more comfortable because they are already familiar with this type of tool. What is interesting to note in the results is the fact that the majority of the participants felt comfortable using it and find that using this application requires little effort.

In the same way, the application was built in a very refined way which gives a clear and relevant access to the information for patients and relatives (*"It's easy, if it remains simple (the application) I will like use it frequently"*). However, for the medical staff, the information provided by the application is too limited and should be refined so that they can use the application independently (*"The application must integrate elements of Orbis to limit the number of otherwise we will not use it, we do not have the time."*). Moreover, even if health professionals see a certain interest for them, they remain skeptical about its everyday use. The following questions emerged from the interviews: Who will create the patient profile? Who will give and recover the tablets, load them? Where are we going to store them? Who will support patients and relative? What to do when the internet connection does not work?

From the interview with health professionals, there was limited confidence in the responses that patients could provide to the Barthel index. However, the results collected concerning the Barthel index score difference between patients and relatives are very similar for more than 50% of the cases. It would be interesting to continue studying these differences score by including the medical professional profile and analyzing the correlations.

6   Conclusion

In a service like the one where the study took place, patients come for most of the day. After presenting themselves at the reception, a nurse comes to meet them in the waiting room to explain the course of their day. Once done, and after answering the different questions of the patient and his relative, the nurse gives to the relative a paper questionnaire assessing the patient's autonomy. This paper questionnaire will then be sent to the doctor during the consultation. This is where the application could be introduced. In fact, patients and their relatives could, during their waiting time, fill out the questionnaire on a tablet rather than on paper.

However, this solution has organizational and acceptability limits. Indeed, beyond the questions asked above, how to allow a place of privacy to answer the questionnaires and this mainly for patients who often use voice recognition. Obtaining a room dedicated to this application with healthcarers available to support them requires a complete reorganization in services already optimized in terms of room and healthcarer.

Although the percentage of patients and relatives who raised the issue is low, the fear of dehumanizing the management felt is important to consider (*"It does not suit me to talk to a robot and are closed questions "," it (the application) is not complex but useless ";" Effective?! If it serves something to agree on but I do not want to dehumanize the appointments."*). The introduction of new technologies into a geriatric service should be introduced with great care and support, especially for current generations who are not familiar with new technologies.

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