

# Usage of Day Service Part of Composite Welfare Facility Converted a Closed School Case Study on 'HIDAMARI-NO-SATO' in Abu Town Yamaguchi Prefecture

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## Abstract

This paper aims at explaining the characteristics and validity of using closed school as the day service for elderly. The activities of users are analyzed based on the utilization survey method. The facility is consisted of living room, training room, toilet, bath room and rest room, and they are compactly connected. The entrance is close to the training room, so the uses of low nursing care level can go to the training room by themselves. There are tables and chairs in living room, and this room is used for act in free time and meal. The training room is mainly used for physical exercise and recreation, in addition users can take a rest in free time. The living and training room are divided completely, so they can select a room corresponding on the program, for example meal, nap and so on. And it can be evaluated that moving distance is short because various day service rooms are located centrally around the entrance. However, there is a problem that they can't be aware of each other because living room and training room are all separated by wall and entrances are stood in line.

**Keywords:** closed school, Day service, Usage of facility

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## 1. Introduction

Local governments have the subject of correspondence to the increase in the demand of medical welfare to support the old people's life and the maintenance improvement of service level in the depopulation area due to the simultaneous progress of the decrease in population and the aging. On the other hand, closed school facilities are on the increase caused by the decrease in number of schoolchild, and the cases to grapple with the activation of the area by making use of closed school are seen in recent years. To aim at the correspondence to the demand for welfare service and area activation, using closed schools as the welfare facilities for old people in the depopulation area is an effective method.

There are researches on the occurrence factors of closed school, the diversion process of closed school and so on in the previous related researches. About the reuse of closed school as the old people's welfare facilities, generally research accumulation hasn't proceeded though there is a case research of improvement by the inhabitant. Especially, there are

a little researches analyzed the use characteristics and management forms of old people's welfare facilities reused a closed school in the depopulation village area and the space function evaluations of the facilities are a few too, so it is the stage to put the results and subjects of school conversion in order by the accumulation of case studies..

## 2. The purpose and method of research

Abu town has been paid attention to as the advanced case that it proceeds with day service network construction of old people in the depopulation area, the usage of group home of "Hidamari-no-sato" converted a closed school for old people's compound welfare facilities is explained and the space function of the facilities is evaluated. About the investigation, firstly the building data collection and measurement of the facilities was done, secondly the collection of facilities user registration data collection and the usage research were done in 10.24-30, 2011.

## 3. The conversion process of "Hidamari-no-sato" and repair contents

The conference of using method of facilities was made with administration and local residents after the closing of Uda elementary school, as the result, it was decided to make use of it as the old people's welfare facilities that the request was the most

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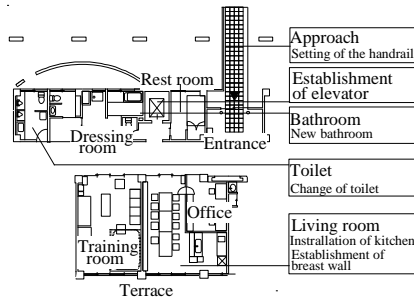
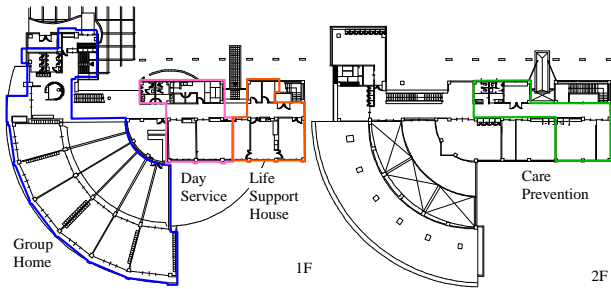


Fig.1. Plan of day service part

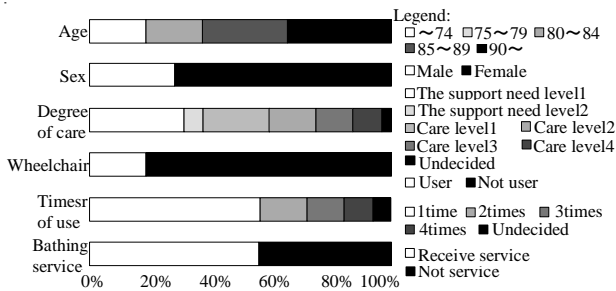


Fig.2. User's attributes

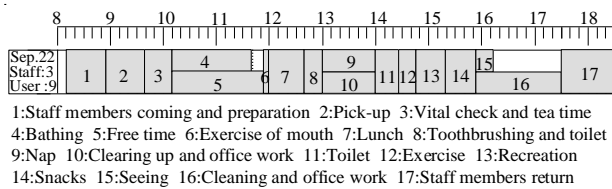


Fig.3. Life Program on one day

abundant. And it was decided to entrust the management to the social welfare corporation managing the nucleus facilities in October, 2009. "Hidamari" was established for day service facilities in center village of Uda area in 2008 by repairing a two storied wooden house, but the first floor space was small and the move to "Hidamari-no-sato" was decided

The separate entrances were ensured and the positions of wall in school management rooms were

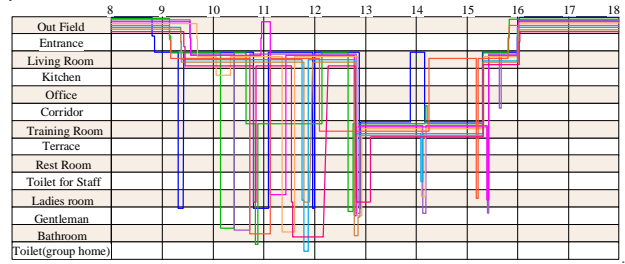


Fig.4. Behavior path of users (September 22)

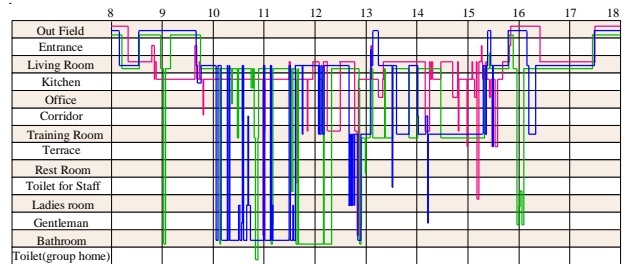


Fig.5. Behavior path of staff (September 22)

changed. The bathroom, kitchen, elevator and handrail are newly added. The living room, training room, toilet, bathroom and rest room are located compactly beside the corridor to make short the moving distance.

#### 4. Use attributes and staff's work

User's basic attributes are shown in figure 2. All users except two users come from Uda and Fusago area where is close to the facilities. The number of users over the age of 85 is large, and female users account for 70%. There are many users with the low degree of care. However, three persons of care occasion 4 are included and the wheelchair users account for about 20%. Some users have moved from "Kyogahama-day-service-center" that is the regional nucleus facility, so there are users with high degree of care. About the use times, users whose degree of care is low are many, so the one time use per week accounts 50%, but four users use 4 times or more per week. More than half of users utilize the bathing service including the main user whose degree of care is high.

The years of experience of the staff member's welfare business are seven years at shortest and it can be said that it is long on the average. Two staff members have worked since facilities opening. All of staff members have requirements. Although all staffs work sometimes, basically three staffs work per day and determine the care works.

#### 5. The life style on one day of day service

##### 5.1 Life program on one day

Life program on one day in survey period is shown in figure 3. Life program on one day is composed by 1) pick-up 2) vital check 3) free time,

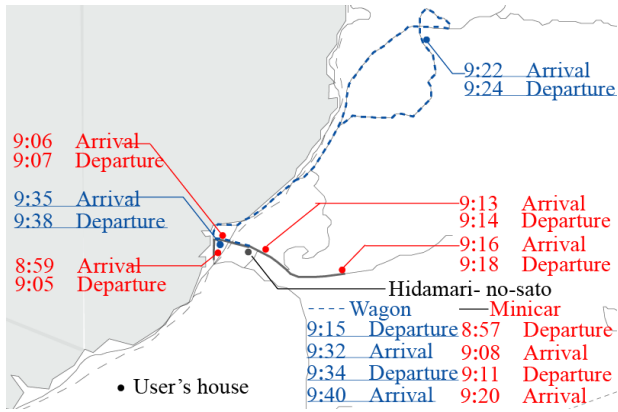


Fig.6. Route map



Fig.8. Scene of arrival time

bathing 4) lunch 5) nap 6) exercise, recreation 7) snacks 8)seeing. User's and staff member's behavioral pattern on one day is shown in figure 4 and 5. In the Morning, bathing is the main program and users enjoy games or talking. Staffs take care of bathing, cook and watch user's behavior. In the afternoon, exercise and recreation is the main program and two staffs lead the program. The living room is used in vital check, free time, lunch, snacks and tea. The training room is used in nap, exercise and recreation. So, the use rooms are changed according to life program.

### 5.2 Life time on one day and place of behavior

Pick up: The route map, the time required to carry users in a week and the arrival scene are shown in figure 6, 7 and 8. Two staffs pick users up by two units of van and mini car by dividing into

Date	Car	Staff	Time (min)					Coming time (min)	Return time (min)
			9	10	15	16	17		
Sep.18	Minicar	1					3(41)	3(49)	
	Wagon	1					5(26)	5(16)	
Sep.19	Minicar	1					6(27)	5(33)	
	Wagon	1					2(26)	3(23)	
Sep.20	Minicar	1					4(30)	4(25)	
	Wagon	1					5(31)	5(25)	
Sep.21	Minicar	1					2(32)	2(38)	
	Wagon	1					3(22)	3(13)	
Sep.22	Minicar	1					4(37)	4(23)	
	Wagon	1					3(23)	4(20)	
Sep.23	Minicar	1					5(35)	4(18)	
	Wagon	1					2(18)	3(23)	

Fig.7. Time of carrying users in a week

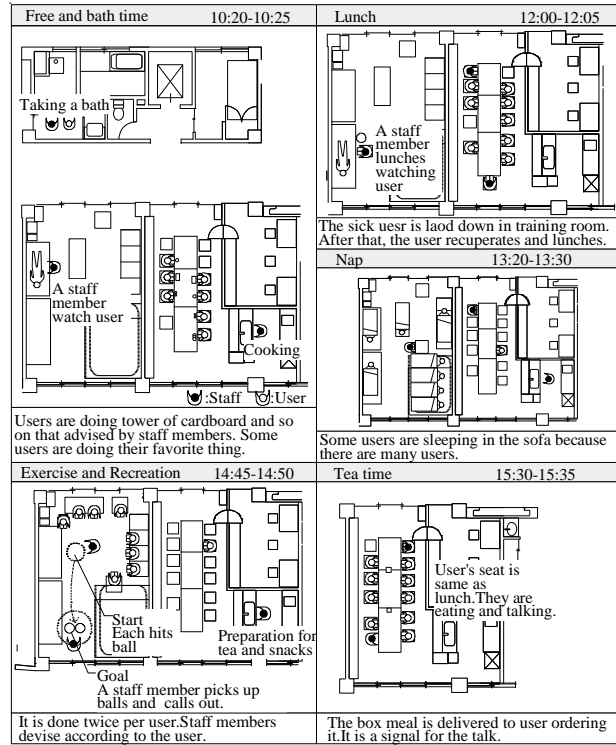


Fig.9. Life scenes of users

several times. The wagon car takes charge of Uda and the mini car takes Fusago. The pick-up time of mini car is short because Uda area is close to the facility. However, it needs more time to carry a user from the house where they can't approach by car. Staff members stop the car on the road and go to user's house on foot. Arriving at the facility, staff members stop the car in front of the entrance and take users to their room's seats. In cases of wheelchair user, one staff who waits at the facility takes care.

Free time, bathing: Each staff takes charge of care of bathing, cooking and watching users. When there isn't a volunteer staff for cooking, one staff who cooks can't watch users, so staffs can't watch users when one staff takes care of toilet use. The ill-conditioned users rest in the training room, but the staff members can't look at the user's behaviors from the living room.

Table.1. Behaviors of free time in each room

Date	Number	Living room	Training room	Rest room	Bathroom
Sep.18	User:8 (Wheelchair:1) Staff:3, Volunteer:0	Tower of cardboard, Sending frogs, Fishing, Tying loops, Puzzle to make a house, Catching beans, Putting strings through the straw, Watching TV	Taking a rest: 2 users	Taking a rest: 1 user	Bathing: 6 users
Sep.19	User:8 (Wheelchair:2) Staff:3, Volunteer:1	Puzzle, Nail clipper, Distributing the color of the ball, Standing a piece of the shogi, Search for mistake	Massage of teacher: 3 users Taking a rest: 1 user		Bathing: 3 users
Sep.20	User:9 (Wheelchair:2) Staff:3, Volunteer:1	Folding the laundry, Sending frogs, Fishing, Catching beans, Search for mistake			Bathing: 5 users
Sep.21	User:5 (Wheelchair:1) Staff:3, Volunteer:0	Painting picture of fish for the sports day of the district(All users), Folding the laundry	Massage of teacher: 3 users		Bathing: 3 users
Sep.22	User:9 (Wheelchair:1) Staff:3, Volunteer:0	Folding the laundry, Puzzle, Fishing, Watching TV, Putting strings through the straw, Coloring, Watching TV, Painting picture of fish, Catching beans, Search for mistake, Care for garden	Taking a rest: 1 user		Bathing: 5 users
Sep.23	User:7 (Wheelchair:0) Staff:3, Volunteer:0	Folding the laundry, Yamaguchi dialect karuta, Sending frogs, Tower of cardboard, Tiddlywink, Distributing the color of the ball, Reading books, Care for garden, Puzzle, Fishing, turning up bonzes(All users)			Bathing: 4 users

Exercise of mouth, preparations for lunch, lunch: They exercise of mouth before lunch to make digestion better. After that, some users help to prepare lunch like as distributing place mats and chopsticks. The space of living room is narrow because there is the office in living room. When two staffs work in the kitchen, it is narrow and hard to move for them. Staff members sit at the end of the table and have lunch with seeing user's behaviors.

Nap: Users who finished lunch brush their teeth in rest room and take a nap in the training room. When the rest rooms are crowded, users brush their teeth in bathroom. Users with high degree of care sleep on the bed and users with low degree of care sleep on the sofa and the rug. One staff stays to watch users sleeping in the training room. Other staffs do office work and become someone to talk to users who don't sleep in the living room. The living and training room is separated, so the carrying cart is used in several times.

Toilet, exercise, recreation: In this time the toilets are crowded, so they sometimes use the toilet in group home. After all users gather in the training room, exercise is started by sitting down to draw a circle and various recreations are performed after that. Staff members call out users actively. One staff does office work and prepare for snacks in the living room.

**6. Variation of the life program**  
**6.1 Free time in the morning**

Table.2. Variations of recreation

Date	Recreation	How to Sit
Sep.18	Put the stick into the bucket	Ciecle
Sep.19	The weight of the beanbags to 1000g Catch homemade poteto	Ciecle
Sep.20	Catch the ball using two sticks Poteto taking game (Team play ) Valley of the balloon usein the fan (Team play )	Ciecle Facing each other
Sep.21	Put the ball into the bucket Pass the beanbag to next singing songs Word chain	Ciecle Small ciecle
Sep.22	Grand golf Kick the balls	Incomplete circle Large ciecle
Sep.23	Late rock-paper-scissors Dog race Ball into the bucket Pass the beanbag to next singing songs	Ciecle

The behavior of free time in each room in the morning is shown in table 2. Activity is carried out mainly in individual. Watching TV, talking and folding the laundry are doing every day. Users were painting picture of fish for the sports event of the district in September 21, but each user are usually doing different things. In addition, users do various play in a day like as puzzle, tiddlywinks, fishing and so on. Staff members call out users and hand the new play while watching users.

In the training room, the ill-conditioned users take a rest and in the rest room, a user needing rest takes a rest. There is a day that volunteer staff teacher of the massage comes, and users move to the training room one by one and receive massage. Bathroom is used for users bathing every day. The number of bating users is different every day. It is finished in the morning in all schedules.

**6.2 Recreation in the afternoon**

In the exercise of the afternoon, users perform exercises by whole body including hands and foots in the training room, the recreation to strengthen a body like as a game is performed after that. The contents of recreation are thought by staff members on the day. The number of users is many, so recreation is changed every day. It is many that it is performed by sitting down in a circle. But it is sometimes seen to move sofa and chair because users become facing each other and a big circle depending on the contents. When users become a circle, content is that all users play same thing. When users become facing each other, content is that users are divided into two teams and play a game.

**6.3 Correspondence to wheelchair user, part 1**

Users with high degree of care visit "Hidamari-no-sato". The scene is shown in figure11. The wheelchair users sit near to the door because wheelchair cannot be entered the depths in

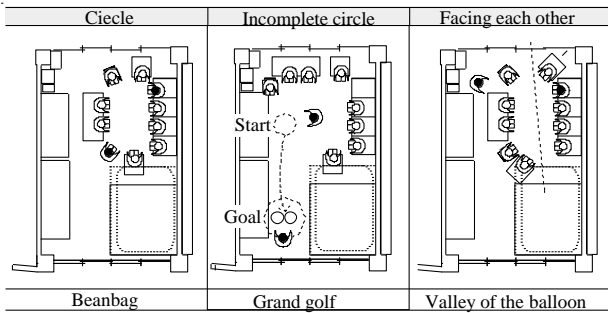


Fig. 10. Scenes of recreation

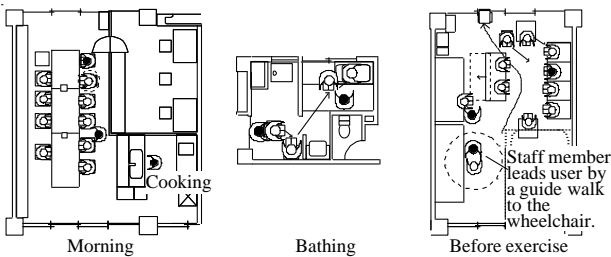


Fig. 11. Scenes of morning, bathing and before exercise

the living room. In addition, wheelchair cannot be entered in front of bath room. So user moves from wheelchair to the chair in the dressing room and staff leads user by guide walk to the bathroom.

Staff lets user sit down on the bathtub, and takes a bath from foot. When users wash their body and hair, staff members take care only in the case that user can't do it. The users sit on a chair in lunch time. After lunch, staff members let the wheelchair users go to toilet to brush their tooth because it is difficult for other users to go along the back of the wheelchair users. Next users sleep on the bed in the training room. By moving sofas at the time of physical exercise and recreation, when a wheelchair user is sleeping in the bed at the back space, wheelchair can't be taken so the behavior that the user was taken to the position of the wheelchair with staff's care was seen. On that occasion, when other users were around the entrance, they sometimes avoided the wheelchair user. On the other hand, the wheelchair users can move without disturbing other users at the wide corridor..

Moreover, there is only one rest room for female and it becomes combination with multipurpose rest room, so when there are many female users, toilet is often crowded. In that case, staff member takes wheelchair users to the toilet in group home.

#### 6.4 Correspondence to wheelchair user, part2

There are some days that more than two wheelchair users visit the facility. The scene is shown in figure 12. Two wheelchair users visit on the day, users sit in the depths from the person who visit early, so user A visited in the first sits down on

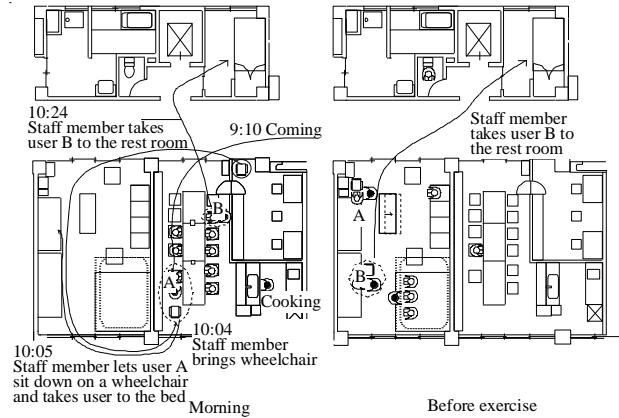


Fig. 12. Scenes of morning, before exercise 2

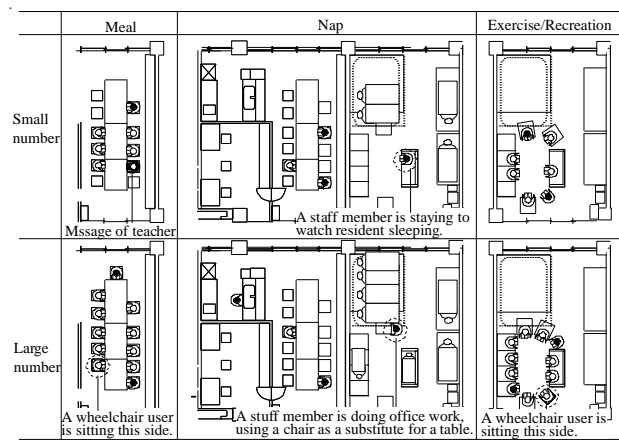


Fig. 13. Difference in number of users

the chair of the depth. After that, because the depths in the living room cannot be taken a wheelchair when they take user A to the bed of the training room, staff member takes the user through the terrace from the training room.

User B sits down near to the door. User B is high degree of care, so staff members sit down at the next of the user B. After that, staff member takes user B to the rest room not the training room and go to look at the state several times.

User A spends in the same room as other users after lunch, but user B sleeps in the rest room at the time of exercise and recreation.

User can take a rest calmly without being seen by anyone because the rest room is separated. So, the user with high degree of care often takes a rest in this room.

#### 6.5 Comparison of the life behavior by the difference in use number of people

The scenes of lunch, nap and exercise in the afternoon on days of few users and many are shown in figure 13. At lunch time seats are enough on a day with many users. In nap, the spare is enough even if all users lie on a day with many numbers of

users, because there are users staying in the living room. However, not only bed and mat spread on the floor but also sofa are used. In addition, one staff stays to watch users sleeping, staff member spend on a sofa and mat on a day with a few users, whereas staff spends a chair as the substitute for desk on the day with many users. The seat has space on the day of a few users, but it seems that the variations of recreation increase on the day of many users.

## 7. Conclusions

1) It is evaluated that this facility can be settled a function compactly, movement distance is short.

2) The living and training room are separated, so the room use patterns are changed according to life program. And the users who want to take a rest and are in the bad physical condition can take a rest without worrying about the others, because the rooms are separated.

3) The width of the living and training room are narrow. So it is hard to go through the back of the chair which a user sat down on and the rooms cannot be taken a wheelchair, so staff leads user by guide walk to the wheelchair.

4) The toilet is often crowded, because the toilet is used for female and multipurpose toilet. So staff member takes wheelchair users to the toilet in group home.

5) The staff thinks about the various recreations such as the recreation that all users can do and users can enjoy even few numbers of people, because the number of users is different every day. In addition, the users with high degree of care who cannot participate in recreation can take a rest in the rest room quietly.

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