

# **A pilot study on value co-creation activities in health care: a study on continuous ambulatory peritoneal dialysis**

Dahlia Darmayanti  
Binus Business School  
Bina Nusantara University, Jakarta, Indonesia  
Email: ddarmayanti@binus.edu

Togar M. Simatupang  
School of Business and Management  
Bandung Institute of Technology, Bandung, Indonesia  
Email: togar@sbm-itb.ac.id

Priyantono Rudito  
School of Business and Management  
Bandung Institute of Technology, Bandung, Indonesia  
Email: priyantono.rudito@sbm-itb.ac.id

## **Abstract**

**Purpose** - The purpose of this study is to find the issues in approaching the participants as well as in developing interview questions in the pilot study. Moreover, this study seeks to understand value co-creation activities in health care which are derived from Continuous Ambulatory Peritoneal Dialysis (CAPD) therapy.

**Design/methodology/approach** - A qualitative exploratory pilot study is adopted. The three participants consisted of one expert in CAPD therapy and two CAPD patients. In-depth semi-structured interviews were conducted to obtain insights from the participants.

**Findings** - The pilot study indicates three phases of CAPD patients, namely the adaptation, stabilization, and acceptance phases. Several activities are conducted when patients and health care professionals engage in each phase. The patients reveal that engagement with a health care professional is crucial in CAPD therapy. The knowledge and skills of patients are enhanced since patients actively engage with health care professionals and other CAPD patients through several events and a mobile digital community forum.

**Originality/value** - This study provides an understanding of value co-creation activities in health care. The value co-creation activities help health care professionals or providers to understand CAPD patients and improve CAPD therapy services.

**Research and Practical implications** - The pilot study provides an initial step for the main exploratory study research, in order to obtain value co-creation activities in CAPD therapy.

**Keywords** Value co-creation, health care, continuous ambulatory peritoneal dialysis (CAPD)

**Paper type** Qualitative study

## **Introduction**

Chronic kidney disease (CKD) is a condition indicated by a reduction of kidney function and/or markers of kidney damage for a minimum of three months duration. If the kidney function is deteriorated, a person will reach end-stage kidney disease (ESKD) and he or she has several options for kidney therapy either to utilize dialysis, a kidney transplantation, or non-dialytic care (Webster *et al.*, 2016). One kind of dialysis kidney therapy is continuous ambulatory peritoneal dialysis (CAPD), in which a person could perform a dialysis at home by changing the dianeal peritoneal dialysis solution every four to six hours in a day. Since the therapy is self-conducted by the patient or caregiver at home, it is more suitable for people who are active and mobile as well as those who live in rural areas and reside far away from a hospital (Wearne *et al.*, 2017).

Even in Indonesia the most common therapy is hemodialysis; however, gradually CAPD therapy is considered by the ESKD patient. In Indonesia, there is one leading pharmaceutical firm that distributes the main CAPD therapy medication items, which consist of a dianeal peritoneal dialysis solution and the transfer set. This firm also provides a support service by educating doctors, nurses, and patients to acquire knowledge and skills in how to perform CAPD therapy. Before the CAPD therapy, the patients usually consult with their nephrologist or engage in a discussion with a peritoneal dialysis health care professional who understands the CAPD therapy. The doctor and/or CAPD health care professional will assist the patient or caregiver if there are any health issues related to the CAPD therapy.

## **Value Co-creation**

The goods-dominant (G-D) logic views that a human exchange consists of “one party is known as the creator of the product and the other party is the passive recipient of the value this product provides” (Joiner and Lusch, 2016). Companies that create the products emphasize the technical quality and rarely discuss the functionality from the customer’s perspective (Bitner and Brown, 2008). Vargo and Lusch (2004), who introduced the new logic in marketing, have argued that marketing should shift from a G-D logic to a service-dominant (S-D) logic, in which “service is defined as the application of specialized competences (knowledge and skills) through deeds, processes, and performances for the benefit of another entity or the entity itself.” Furthermore, McColl-Kennedy *et al.* (2012) define customer value co-creation as a “benefit realized from the integration of resources through activities and interactions with collaborators in the customer’s service network.” The activities include cognitive and behavioral actions in the form of performing or doing something and vary from low to high involvement. Interactions may take place between some individuals with many individuals or only with a few persons. When applied in health care services, patients should not be regarded as passive and inexperienced as viewed by G-D logic. From the S-D logic point of view, Joiner and Lusch (2016) argue that health care professionals and patients or consumers should be viewed as those who “sense and experience, create, integrate resources, and learn”.

## **Aims**

Prescott and Soeken (1989) define a pilot study as a miniature version of a planned or full-scale study or anticipated research. The pilot study helps to evaluate the feasibility of the planned

study, the instruments' appropriateness, and the obstacles in the data collection and proposed method. Moreover, van Teijlingen and Hundley (2002) state that one of the reasons for conducting a pilot study is to develop and test the research instrument. The aims of this pilot study are to figure out the willingness of people to participate and the challenges in conducting a CAPD value co-creation study; to develop and test the interview questionnaire; and to know the activities that occur in the engagement process between patients and health care professionals.

## Participants

Three people contributed in this pilot study. One was a CAPD expert from the firm that provided CAPD therapy items and support services in Indonesia. The other two participants were CAPD patients who resided in Jakarta. The researchers emailed and followed up by calling the CAPD expert and stated the intention to conduct a CAPD therapy study in Indonesia. Meanwhile, with the two CAPD patients, the researchers made a courtesy call and explained the purpose of the pilot study. The first patient had already been using CAPD therapy for about five years, while the second patient had just started five months ago using CAPD therapy.

**Table 1: Patient Participants**

<b>Patients</b>	<b>First Patient</b>	<b>Second Patient</b>
Gender	Male	Male
Age	30	56
Profession	Entrepreneur	Entrepreneur
Length of using CAPD therapy	5 years	5 months

## Data Collection and Analysis

Patton (2002) proposes three approaches for qualitative interviewing, namely an informal conversational interview, a general interview guide approach, and a standardized open-ended interview. The informal conversational interview or unstructured interview is the most flexible and open-ended approach of interviewing. Spontaneous and different questions will be asked during the conversational interview. The second approach, which is a general interview guide approach, conducts the interview with the guide list of questions or the outline set of issues to be investigated. During the interview, the interviewer has the freedom to word questions but with a focus on the subject. This type of interview uses a semi-structured interview instrument. In contrast, the standardized open-ended interview uses a fully structured interview instrument with fully worded questions.

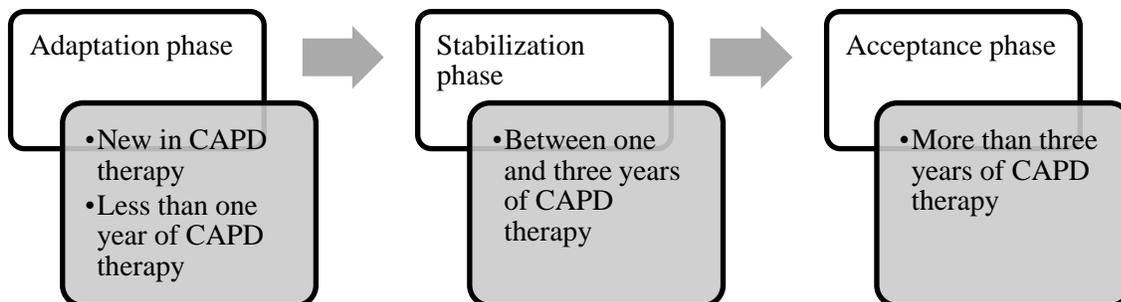
In this pilot study, the data is collected through in-depth interviews using a semi-structured interview instrument. Using a semi-structured interview will allow the participants to express their views freely about an issue and stimulate two-way communications between the interviewer and the patient (Wahyuni, 2012). The interview protocol was prepared as an interview guideline and consisted of basic questions such as background data about the interviewee (Jacob and Furgerson, 2012). The open-ended questions were in line with the topic and started with easy questions and continued to more challenging ones. The questions were structured based on the

subject area and designed to understand patients' experiences, interactions, and engagements with a direct or important CAPD brand therapy provider in forming value co-creation within an S-D logic notion. The interviews took place between March and April 2017. Before starting the interviews, the participants were told about the interview objectives, confidentiality, and duration of the study. Each in-depth interview took about 30–60 minutes and was conducted in Indonesian language. All interviews were recorded and transcribed for an in-depth analysis. A thematic data analysis was employed to describe and develop the activity theme.

### *Expert Interview*

Because there is little knowledge about CAPD therapy in Indonesia, it was necessary to explore the CAPD therapy in Indonesia from a CAPD therapy expert. This expert is the type of knower who has comprehensive knowledge in a particular field that allows such a person to identify and provide a principle solution to a problem (Bogner *et al.*, 2009). Before the pilot study began, the researchers had planned to interview two experts of CAPD therapy. One expert was a nephrologist and the other expert was a CAPD coordinator and supervisor from the company that provides medication and services for CAPD therapy in Indonesia. Unfortunately, the interview with the nephrologist was cancelled due to an unavailability of time. Therefore, an expert interview was only conducted with a CAPD expert who had a responsibility to coordinate with a peritoneal dialysis nurse and manage a CAPD marketing support service in Indonesia. She had more than 20 years in CAPD therapy with various experiences from coping directly with CAPD patients until training the doctors and nurses in major hospitals in Indonesia. From the expert interview, the researchers noted that CAPD therapy could be categorized into three phases: the adaptation, stabilization and acceptance phases. The adaptation phase was comprised of people who would use CAPD therapy or who had used the CAPD therapy less than one year. The second phase, stabilization phase, was consisted of a medium length period patient who used CAPD therapy from one year to three years. These patients had adapted to and were familiar with the CAPD therapy. Lastly, the acceptance phase included the advanced patients who had been in the CAPD therapy for more than three years. These patients had accepted and had a wide range of knowledge and skills about CAPD therapy.

**Table 2: CAPD Therapy Phase**



## **Results**

Both patients had chosen CAPD therapy because the therapy was good for their health and convenience, especially for the people who were still active and mobile. From the interviews, there were three important issues from this study: the establishment of rapport, the modification of questions, and the stage of CAPD therapy,

### **The Establishment of Rapport**

The researchers already knew the expert and the first patient participant before. However, the second patient participant was approached by sending a mobile message and followed by a phone call. Even though all the participants were willing to take part in this pilot study, it was hard to find the right schedule for the interviews. Some interviewees had cancelled a few times as the participants had to go away for a business trip or were not in good health. Finally, all the interviews were conducted either late in the afternoon or in the evening after office hours. The interviews took place in a coffee shop or small restaurant close to the interviewees' area, so that the interviewees felt relaxed and at ease.

Before interviewing, the researchers spent some warming up time with the patients, in order to establish comfort and trust, especially with the second patient whom the researchers had not known previously. Building a close rapport between an interviewer and interviewee is necessary, in which trust should be established (Fontana and Frey, 1994). Having a good relationship, the participants were willing to answer the questions and provide insightful explanations.

### **Modifying the Interview Questions**

In this pilot study, all the participants were keen to answer the questions and explain their answers. The interview questions were designed to get an understanding about what and how activities occurred in CAPD therapy. The interviewees were asked to refer to the cognition, emotion, and behavior elements, such as what kinds of knowledge and skills they obtained from the CAPD therapy; what was the emotional bond between the individual and the CAPD health care professional. These questions were designed and adopted from Frow and Payne (2008) who indicate that the consumer experience consists of cognition, emotion, and behavior factors. Sweeney *et al.* (2015) define customer value co-creation activities as the set of cognitive and behavioral activities carried out by the customer and motivated by the value proposition. The activities themselves can be self-generated, between the customer with the focal firm and/or beyond the focal firm.

In addition, there were also questions asked in regards to the when, what platform, and how the engagement happened, referring to the dialog, access, risks, and trust (Pralahad and Ramaswamy, 2004). During the interview sessions, on several occasions the researchers had to repeat and reword the questions in order to get more understanding from the interviewees. After completing the interview with the first patient, the researchers realized that some questions should be reworded and questioned in detail.

**Table 3: Interview Questions**

<b>Area</b>	<b>First Patient Interview questions before modification</b>	<b>Second Patient Interview questions after modification</b>
Cognition	<p>Why did you choose CAPD therapy?</p> <p>How did you get information about CAPD therapy?</p> <p>What is the brand of CAPD therapy service provider?</p>	<p>Why did you choose CAPD therapy <i>compared with another therapy? How did you decide to choose CAPD therapy?</i></p> <p>How did you get information about CAPD therapy? <i>What kind of information was exchanged? What did you learn from the exchange of information? What kinds of skills did you obtain from the CAPD therapy?</i></p> <p>What is the <i>health care professional provider's name and brand of CAPD therapy?</i></p>
Behavior	Do you follow the advice from the CAPD therapy service provider?	Do you follow the advice from the CAPD therapy service provider? <i>And how do you follow the advice?</i>
Dialog platform	What types of dialog platform are provided by the health care professional?	<i>What is the process of engagement? Do you have face-to-face interactions? Have you attended any CAPD events? Have you been exposed to CAPD products? Have you ever contacted the dedicated health care professional?</i>

### **The Stages of CAPD Therapy**

Two important phases were identified in CAPD therapy, namely before or pre- CAPD therapy and on-going CAPD therapy. Each phase involved cognitive, emotion, and behavioral experiences, resulting from the interactions between CAPD patients and health care professionals. It was found that each patient had different health care professionals whom they usually inquired to know about CAPD therapy. Before using CAPD therapy, the first patient had made several contacts with CAPD health care professionals from the company that provides CAPD's main medication and services (HP 1). Meanwhile, the second patient was in touch mostly with CAPD health care professionals from the hospital (HP 2).

#### ***Before or Pre- CAPD Therapy***

In the beginning phase, the health care professionals learned about the patients' conditions and history of illnesses. Both of the patients told and consulted about their health conditions to the health care professionals. The first patient had opted for hemodialysis therapy for two years and because he still felt sick after the therapy, he looked for other options. Since the second

patient had known that his kidney was not functioning well, for three years he had been in consultation with a reputable nephrologist who provided him with adequate information on hemodialysis, CAPD, and kidney transplants. Before deciding to use CAPD therapy, both patients searched for information about CAPD therapy. The first patient obtained information regarding CAPD therapy from the existing CAPD patients and HP1.

*“The health care professional from the company that distributes CAPD medication and provides CAPD service gave me information about the advantages and disadvantages of CAPD therapy. In addition, he also explained the effects of using such therapy.” (first patient)*

Meanwhile, the second patient who opted directly for CAPD therapy actively looked for more information through the Internet about CAPD therapy.

*“Even though the doctor gave me some information on CAPD therapy, the information was not enough. I searched on the Internet about CAPD therapy.” (second patient)*

The patients felt that in this pre-stage, the emotional connection between themselves with the health care professional had been established. The first patient felt that the information he received from the HP had built his confidence to move from hemodialysis to CAPD therapy. He also was comfortable to have a dialog with the HP1. Both of the patients also cooperated with the information that was provided by the health care professionals.

### ***On-going CAPD Therapy***

The on-going CAPD therapy started when the Tenckhoff catheter was implanted in the patients' bellies and it was ready to be used. The researchers were notified that there are two important periods of therapy: the training phase and the day-to-day phase.

- ***The Training Phase***

After the catheter was implanted and while the patient was hospitalized, a CAPD therapy handbook was given to the CAPD patients. In addition to the book, there was CAPD therapy training for three to seven days. During this training period, the health care professional informed the patient about the process of the day-to-day exchange of dianeal peritoneal dialysis solution that should be done. Both patients were taught the processes of filling, utilizing, and draining the dianeal peritoneal dialysis solution, as well as the exit-site that should be managed.

During the catheter implantation operation of the first patient, the HP1 waited during the operation, and this support from HP1 continued during the training phase in the hospital. The first patient felt he had received full cooperation from HP 1 during the extensive training phase. The HP1 taught the first patient how to change the dianeal peritoneal dialysis solution, record the solution balance in a record book, and take care of the exit-site.

The second patient mostly watched the process of changing it that was shown by the HP2 and self-studied from the handbook. During his stay in the hospital, he felt there was minimum conversation and engagement between him and the HP2 in regards to the CAPD therapy. He was active enough to question HP2 to understand the CAPD process of changing the solution. Additionally, he asked a special dietician to explain to him about the nutrition and diet for a patient under CAPD therapy.

*“The first day after the operation, I was confused about the CAPD changing process. I just watched the nurse to learn how to change the solution. I read the CAPD handbook and later I was taught about how to change the solution, but not how to clean the exit-site. It was limited information about CAPD, such as the solution type and the diet that the patients should know. Then, I asked the nurse to have a dietician explain the CAPD diet to me. A lot of people do not know about a CAPD diet. In fact, all of the problems come from the intake or diet.” (second patient)*

Before these two CAPD patients went home, the health care professional tested whether the patients or the caregivers were capable of performing dianeal peritoneal dialysis changing by themselves.

- *The Day-to-Day Phase*

After being discharged from the hospital, the CAPD patients had to self-conduct and practice the CAPD therapy at home or at their premises by themselves.

The adaptation phase occurred right after the CAPD patient self-conducted the CAPD therapy for a one-year period. The patient adapted to the process of changing the solution, taking care of the exit-site, as well as following the nutrition or diet rules. Since the second patient was on CAPD therapy for only five months, he still had to learn and seek information to understand the important knowledge and skills of CAPD therapy. Even though HP2 provided access to communicate with patients by sharing a call center or hotline service number, the second patient joined several CAPD mobile digital communities, such as a CAPD WhatsApp group to obtain more knowledge and skills as well as a faster response. Additionally, the information obtained from the Internet also helped him to enrich his knowledge. The second patient followed and practiced the CAPD therapy process as guided by HP2.

After several years, CAPD patients are usually familiar with and accept the CAPD therapy. It has been five years for the first patient on CAPD therapy. He was so blessed that the therapy worked well on him, as before he had had hemodialysis for his kidney therapy. During this five-year time, he gained more knowledge and skills about CAPD therapy. Even though he less frequently contacted HP1 as he was more familiar with CAPD therapy, the monitoring activity by HP1 was still continued through mobile messages. The engagement with HP1 was deeply than before during the five-year period. He shared the experiences that he had had in his five years of therapy with other CAPD patients at the CAPD event and in the CAPD mobile digital community group. He was asked by the company several times to become a guest speaker in an event organized by the CAPD company and to be a CAPD patient spokesperson for a CAPD educational video.

## **Discussion**

Through the pilot exercise, several issues were identified. Although an interview is the most common form of a qualitative research method, there were several issues that the researchers learned from this pilot study with the data that was collected through interviews. The interview process would not have happened if the researchers did not approach the participants properly and conduct the interviews at convenient times for the participants. A good time to conduct an interview was after lunchtime or after office hours when the participants were free outside of work. The interview with the second patient allowed the researchers to try the modified

questions from the first interview. Such modifications gave a better understanding of the questions to obtain clear answers.

The patients actively looked for information about CAPD therapy. Their first source of information was from health care professionals. The first engagement between CAPD patients and a health care professional began before the CAPD therapy. Face-to-face interactions helped the patients to understand about the therapy, such as the effects, the advantages, and the disadvantages. This engagement continued when the CAPD patients started and was ongoing with the therapy. However, there was no standard for what information was given before and after the operation. In fact, the training phase, in which the patients were hospitalized was the best time to enhance the engagement, since the patients had the opportunity to learn about CAPD therapy and the health care professional could educate the patients more. Other sources of information were from the CAPD guidebook, CAPD events that mainly were initiated by the health care professionals, and WhatsApp group chats formed by CAPD patients and the company. The CAPD patients exchanged useful information, enriching their knowledge and skills from the WhatsApp chat.

The three participants willingly participated in the study. The expert participant gave information more from the view of health care professionals, such as in how a health care professional should understand the patient's condition and properly demonstrate CAPD therapy. Meanwhile, the patient participants explained the engagement processes with their health care professionals.

## **Conclusion and Recommendations**

The participants who were involved in this study provided their true views in regards to CAPD therapy. Therefore, the findings of this pilot study are important for the patients who participated in this study, and for the firm or hospital at which health care professionals work. Educating and performing CAPD therapy is challenging. The CAPD patients had to get an understanding how the therapy works and practice it, in order to obtain adequate knowledge and skills. Unfortunately, this pilot study did not cover the patients who were in CAPD therapy in the stabilization period or the ones who were in therapy for a period of one to three years. Future research could further examine the three stages of CAPD patients to complete the engagement activities during each stage. Case study research is suggested to be conducted to explore and explain more on how brand engagement happens between the patients and health care professionals from before or pre until the ongoing CAPD therapy phase. Yin (2014) mentioned that "Case study research is preferably used in answering 'how' or 'why' questions, and when there is little knowledge on the study and the questions it is more explanatory."

## References

- Bitner, M.J. and Brown, S.W. (2008), "The service imperative", *Business Horizons*, Vol . 51 No.1, pp. 39-46.
- Bogner, A., Littig, B., and Menz,W. (2009), *Interviewing Experts*, Palgrave Macmillan, London.
- Fontana, A. and Frey, J.H. (1994), "The art of science", *The Handbook of Qualitative Research*, Sage, Thousand Oaks, CA.
- Jacob, S.A. and Furgerson S. P. (2012), "Writing interview protocols and conducting interviews: tips for students new to the field of qualitative research", *The Qualitative Report*, Vol. 17 No. 6, pp. 1-10.
- Joiner, K.A. and Lusch, R.F (2016), "Evolving to a new service-dominant logic for health care", *Innovation and Entrepreneurship in Health*, Vol. 3, pp. 25-33.
- McCull-Kennedy, J.R., Vargo, S.L. Dagger, T.S., Sweeney, J.C., and van Kasteren, Y. (2012) "Health care customer value cocreation practice styles", *Journal of Service Research*, Vol. 15 No. 4, pp. 370-389.
- Patton, M.Q. (2002), *Qualitative Research & Evaluation Methods 3rd Edition*, Sage, Thousand Oaks, CA.
- Payne, A.F., Storbacka, K. and Frow, P. (2008), "Managing the co-creation of value", *Journal of the Academic of Marketing Science*, Vol. 36, pp. 83-96.
- Prahalad, C.K. and Ramaswamy, V. (2004), "Co-Creating unique value with customers", *Strategy & Leadership*, Vol.32 No. 3, pp. 4-9.
- Prescott, P. and Soeken, K.L. (1989), "The potential uses of pilot work", *Nursing Research*, Vol. 38 No. 1, pp 60-62.
- Wahyuni, S. (2012), *Qualitative research method, rheory and practice*, Penerbit Salemba Empat, Jakarta.
- Sweeney, J.C., Danaher, T.C. and McCull-Kennedy, J.R. (2015), "Customer effort in value cocreation activities: improving quality of life and behavioral intentions of health care customers", *Journal of Service Research*, Vol. 18 No. 3, pp. 318-335.
- vanTeijlingen, E. And Hundley, V. (2002), "The importance of pilot studies", *Nursing Standard*, Vol. 16 No. 40, pp. 33-36.
- Vargo, S.L. and Lusch, R.F. (2004), "Evolving to a New Dominant Logic for Marketing", *Journal of Marketing*, Vol. 68 No. 1, pp. 1-17.
- Wearne, N., Kilonzo, K., Effa, E., Davidson, B., Nourse, P., Ekrikpo, U. And Okpechi I.G. (2017), "Continuous ambulatory peritoneal dialysis: perspectives on patient selection in low-to-middle-income countries", *International Journal of Nephrology and Renovascular Disease*, Vol.10, pp 1-9.
- Webster, A.C., Nagler, E.V., Morton, R. L. and Philip, M. (2016), "Chronic Kidney Disease", *CrossMark*, pp 1-15.
- Yin, R. K. (2014), *Case Study Research Design And Methods*, Sage, London..

## Appendix

### *Before or Pre -CAPD Therapy*

<b>Experiences</b>	<b>Activities</b>	<b>First Patient</b>	<b>Second Patient</b>
Cognition	Searching for information	The patient searched for information from existing CAPD patients and HP 1. HP 1 asked about the patient's condition.	The patient searched for information from the internet and health care professional from the hospital (nephrologist and HP2). However, the information from the health care professional was still limited.
Emotion	Relationship establishment	He connected with HP 1, and with other CAPD patients.	He connected with a nephrologist only and a CAPD mobile digital group.
Behavior	Accepting information from a health care professional	HP 1 explained the advantages and disadvantages of CAPD as well as the effects of CAPD.	The nephrologist explained about CAPD therapy, but the information was still limited.

### *The Training Phase*

<b>Experiences</b>	<b>Activities</b>	<b>First Patient</b>	<b>Second Patient</b>
Cognition	Actively seeking and completing the information	A CAPD book was given. HP 1 taught the patient how to change the solution, take care of exit site, and provided more information on the solution.	A CAPD book was given. HP2 came to visit the patient at every therapy time and showed how to change the solution. The patient and his caregiver watched how to change the solution. The patient asked nutritionist to explain the diet.
	Accepting	The patient had to try to change the solution by himself.	The patient had to try to change the solution by himself.
Emotion	Establishment and enhancement relationship	During the CAPD operation, HP 1 waited for the duration of the operation. After the operation, HP1 taught the patient how to change the solution, the type, and the exit site.	The patient had not known the HP 2 yet. The HP2 visited the patient during the changing solution time but had less engagement.
Behavior	Accepting information	The patient accepted the information that was explained by HP 1.	The patient accepted the information that was explained by HP 2.
	Following and practicing the guidance	The patient followed and practiced the information and guidelines from HP 1.	The patient followed and practiced the information and guidelines from HP 2.

*The Day-to-Day Phase*

<b>Experiences</b>	<b>Activities</b>	<b>First Patient</b>	<b>Second Patient</b>
Cognition	Enhancing and exchanging information  Sharing informal event	The patient searched for information from HP1, a doctor, and existing CAPD patients.  The patient joined a digital mobile community and exchanged his experiences  The patient shared his experiences to other CAPD patients in a formal event. He became a guest speaker and was involved in a CAPD educational video	The patient still searched for information from the Internet health care professional and from digital mobile community forums.  The patient shared his experiences to other CAPD patients through a digital mobile community forum.
Emotion	Trusting Caring	He had trust in HP1 and care for other CAPD patients.	He cared for other CAPD patients.
Behavior	Keep on following and practicing CAPD therapy	The patient followed and practiced the information and guidelines from HP 1.	The patient followed and practiced the information and guidelines from HP 2.