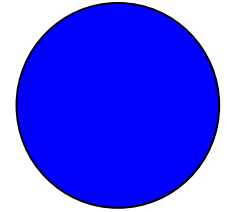
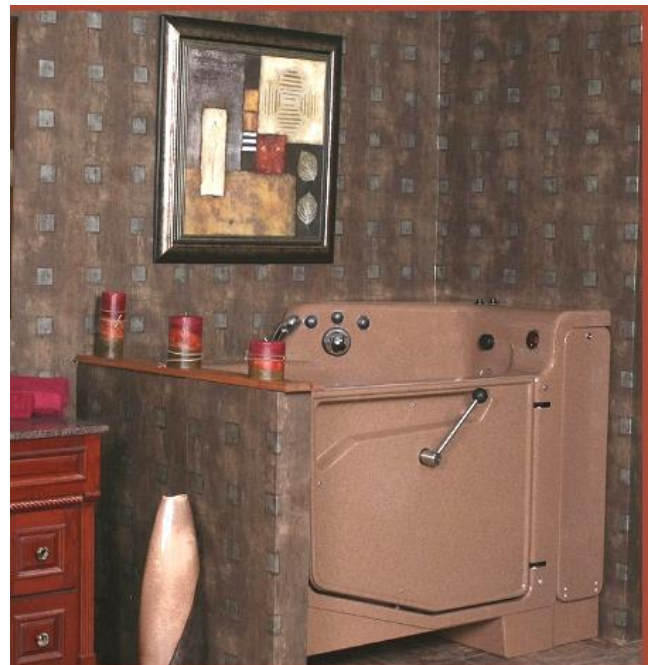


Alcove In-service video



***CASCADE ALCOVE***  
***With AQUA-AIRE***  
***SAFE OPERATION &***  
***DAILY MAINTENANCE***



**PENNER PATIENT CARE, INC**  
**Box 523 / 101 Grant St.**  
**Aurora, NE 68818**

**360750A Revision A- 8/31/07**

**1-866-PENNERS**

**1-866-736-6377**

**1-800-732-0717**

**E-mail Address: [pennersales@hamilton.net](mailto:pennersales@hamilton.net)**

**Web Site: [www.pennerbathingspas.com](http://www.pennerbathingspas.com)**


## Table of Contents

TABLE OF CONTENTS .....	2
INTRODUCTION .....	3
SYMBOLS AND TERMS .....	3
TECHNICAL DESCRIPTION.....	3
BASIC COMPONENTS .....	5
CASCADE DOOR .....	6
SYSTEM PREPARATION (BEFORE BATH).....	7
ENTERING THE BATH – ASSISTED LIVING RESIDENT .....	8
TRANSFER INTO BATH USING SIT-TO-STAND LIFT .....	8
BATHING PROCEDURE.....	9
BATHING PROCEDURE.....	9
EXITING THE BATH .....	11
SYSTEM CLEANING (AFTER EVERY BATH).....	12
DAILY MAINTENANCE .....	14
DAILY SAFETY CHECKLIST .....	15

## Introduction

The Cascade Alcove is designed to significantly improve the efficiency and environmental safety of the resident and your nursing care operation. However, the benefits designed into the Alcove System will be realized only if the system is operated and cared for properly. The purpose of this manual is to provide you with a recommended procedure to help you obtain the maximum efficiency and safety from your Alcove System.

## Symbols and Terms

-  WARNING** The warning symbol identifies important safety messages. Failure to obey a safety warning may result in injury to you or to others.
- CAUTION** The caution heading identifies important maintenance and operation information. Failure to obey a caution warning may result in damage to the Sit-Bath equipment and may void the warranty.
- Left or Right** When the terms “left” or “right” are used with reference to the tub, this means left or right as you look at the control panel from the seat end of the tub

## Technical Description

The Cascade Alcove Bath is an “Aqua-Aire” bathing system intended for use in nursing homes, hospitals, and assisted living facilities to bath residents under the direct supervision of trained staff. The Alcove System is mainly constructed of gel-coated fiberglass laminate on a steel frame. The tub has a Aqua-Aire system for bubbling the water with air. It has a disinfection system to aid in cleaning the tub. The tub has a locking door on one side for access to the tub by the resident. A thermostatic mixing valve controls incoming water temperature. Digital temperature read-out indicates incoming water temperature. A hand shower sprayer is also provided.

Manufacturer: Penner Manufacturing Inc  
101 Grant St / PO Box 503  
Aurora, NE 68818  
(402) 694-5003

Models: Cascade - Bath  
Model 361910-1A (Aqua-Aire – Hi - seat - Alcove White)  
Model 361910-1I (Aqua-Aire – Hi - seat - Island White)  
Model 361910-XA (Aqua-Aire – Hi - seat - Alcove color)  
Model 361910-XI (Aqua-Aire – Hi - seat - Island color)

Tub Ratings: 120 Volts AC  
Aqua-Aire: 6.5  
60 Hz  
1 Phase

UL Classification: Class I; Type B; Ordinary EQUIPMENT

Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.



**MEDICAL EQUIPMENT  
WITH RESPECT TO ELECTRIC SHOCK  
FIRE AND MECHANICAL HAZARDS ONLY  
IN ACCORDANCE WITH UL2601-1, AND  
CAN/CSA C22.2 NO. 601.1 IEC 60601**

Temperature read-out value is accurate to +/- 2°F (per NSF C-2). The read-out range is -40/199°F. The resolution is 1°.

An electrical circuit diagram can be found on the inside of the lid of the electrical box located inside the larger service access door on the left side of the tub.

Service parts and technical information are available by contacting your distributor or by calling one of the telephone numbers located on the front or back cover of this manual.

Environmental conditions for transport and storage for up to 15 weeks (as packaged from the manufacturer) are as follows:

Temperature range	-40° F (-40° C) to 120° F (49° C)
Relative Humidity	10% to 90%
Atmospheric Pressure	7.5 PSI to 15.5 PSI

## Basic Components

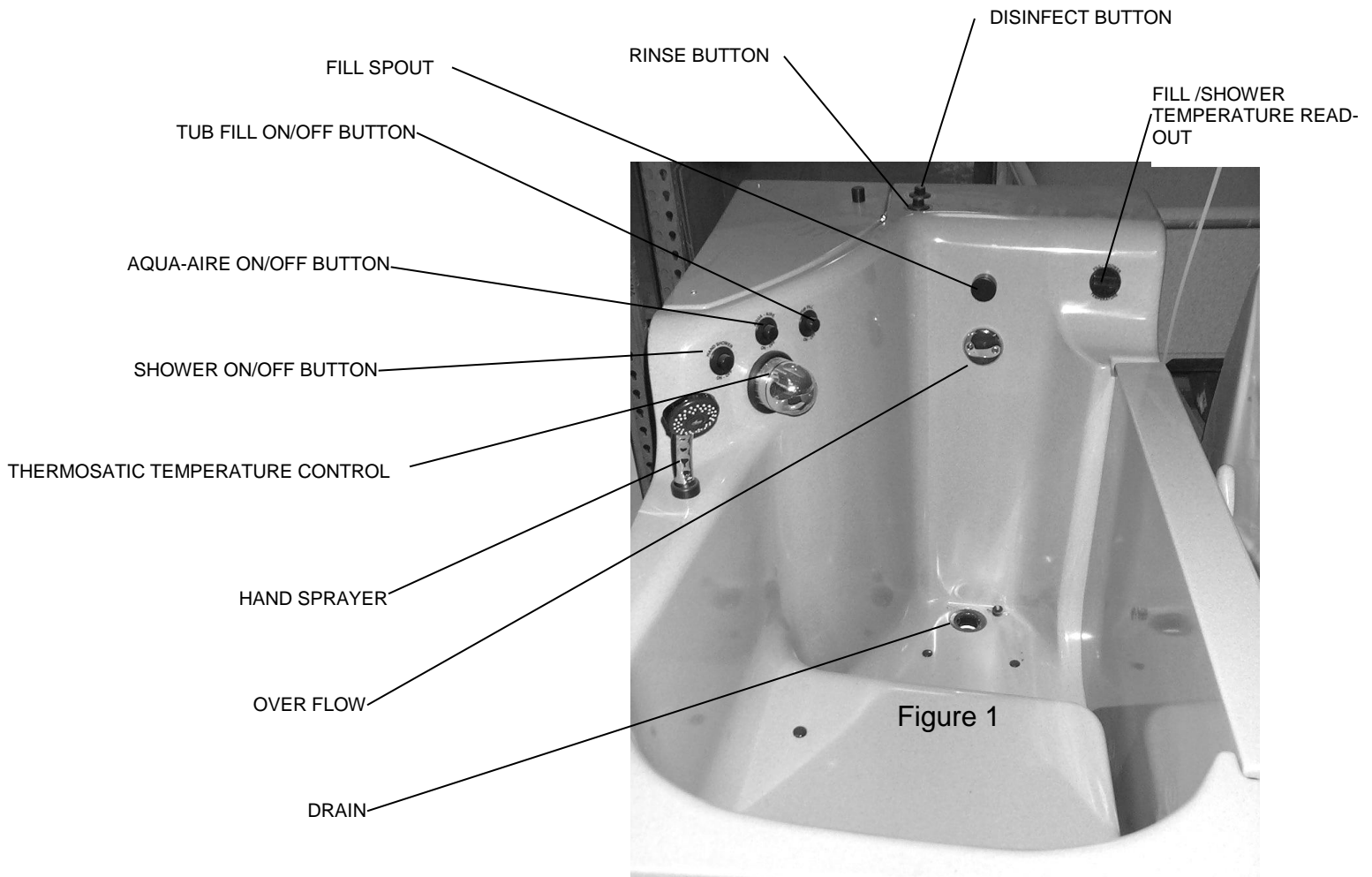
The Cascade Alcove Sit-Bath System is composed of the following components:

- Cascade Tub
- Cascade Door

The remainder of this section describes the components and their relationship to each other.

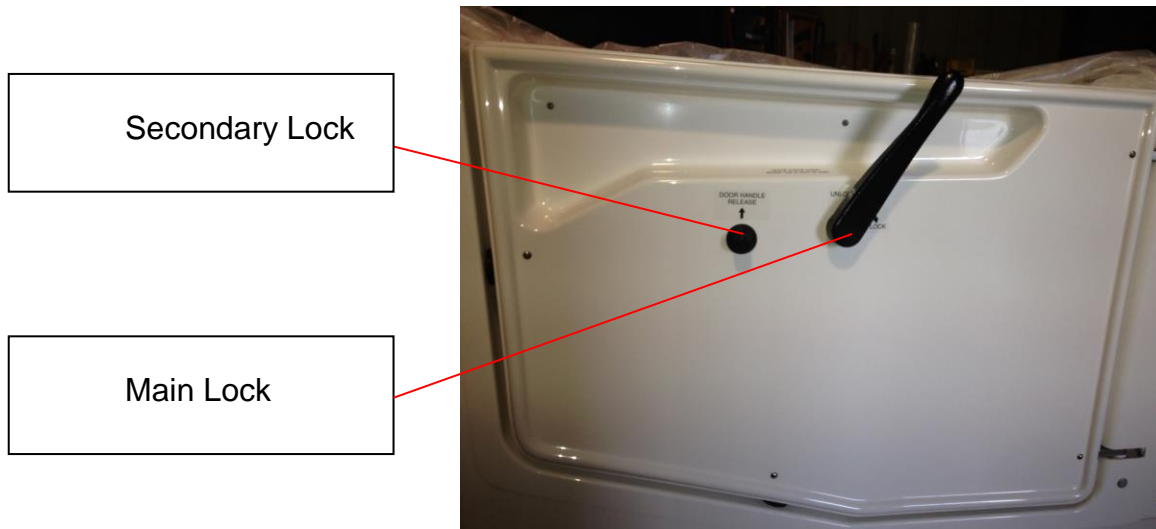
### Cascade Tub

The Cascade Alcove Tub is a specialized tub with jets (Aqua-Aire). It has been designed for assisted living patients and to help bathe your patients automatically. The tub has a built-in control panel, which provides controls for all the functions of the tub, as shown below.



## Cascade Door

The Cascade Door is a specially designed reinforced door with locking lever to open and close the door by the assisted living patient or supervised operator.



### Locking Cascade Door

1. With lever in the upright or back position, close the door tight against the tub.
2. When the door is against the tub, push the lever forward so the lever is the LOCK position.
3. The door is now locked in place.
4. (Note) To extend the life of the Water Door Seal, leave the door open when not in use.

### Unlocking Cascade Door

#### **WARNING**

**NEVER ATTEMPT TO UNLOCK THE DOOR WHILE THERE IS ANY WATER IN THE TUB. FAILURE TO HEED THIS WARNING MAY RESULT IN INJURY TO A RESIDENT AND OR OPERATOR.**

1. To unlock, move the lever to the upright or “unlock” position.
2. If door is equipped with secondary lock lift up on it first then main lock to open door.
3. The door is now unlocked and able to be opened.

## System Preparation (Before Bath)

### **WARNING**

**Only personnel who have been thoroughly trained in the operation of the Cascade Alcove System should operate this equipment. Operation of this equipment by untrained personnel could result in injury to the operator or patient. Your Penner Patient Care distributor is available at your request to provide complete in-service training on the equipment’s proper operation.**

Prior to the bath, perform the following preparation steps.

Make sure you have all of the bathing aids ready for the resident such bath oil, shampoo, washcloth, and towels.

**Note.** Check the level of Penner Disinfectant concentrate in the supply bottle daily to ensure that adequate amounts are available for the day’s bathing requirements. This bottle is located behind the access door on the right side of the tub beside the water door. Replace a bottle before it runs out to avoid re-priming the system.

## Entering the Bath – Assisted Living Resident

The resident is now ready to enter the bath. To do so:

1. Make sure bathing area is clear of all unneeded equipment.
2. Open door to widest position.
3. The resident should sit on seat first then swing his/her legs into the bath.



### **WARNING**

**Stepping into the tub first and then sitting on the seat may put the resident in danger of slipping and cause harm to the resident and/or staff.**

4. Close the door and lock.
5. The tub is now sealed and you are ready to fill the tub with water.

## Transfer into Bath Using Sit-to-Stand Lift

1. Make sure the bathing area is clear of all unneeded equipment.
2. Open door to widest position.
3. The Cascade Alcove was designed with an opening under the tub to allow the use of sit-to-stand lifts.
4. Using your sit-to-stand lift according to manufacturers instructions, transfer the resident onto the Cascade Seat.
5. Remove the sit-to-stand lift.
6. Swing resident's legs into tub.
7. Close and lock the door.
8. The tub is now sealed and you are ready to fill the tub with water.



## Bathing Procedure

1. Place the drain plug in the drain.
2. Press the Tub Fill Button to begin filling the tub. (Reference Figure 1).
3. Monitor the water temperature by watching the Water Temperature Readout.(Reference Figure 1) Adjust the water temperature by turning the Temperature Control Knob to a normal bathing temperature, 95 to 105 degrees Fahrenheit.

### **WARNING**

**In addition to monitoring the temperature readout, always check the water temperature by allowing it to run over your wrist. Failure to do this could result in a hot-water burn to the resident.**

4. When filled, press the Fill Button (reference Figure 1) again to stop the water flow.

## Bathing Procedure

The resident is now ready to begin bathing. The suggested bathing time is 5 to 10 minutes. Bathing a patient more than 10 minutes is not required.

Resident bathing procedures:

(Reference Figure 1 for the location of the controls listed in this section)

1. Start the air blower by pressing the Aqua-Aire ON/OFF button.
2. Apply desired amount of bath oil and shampoo.

**⚠ WARNING**

**In the following bathing instructions the resident is required to rinse themselves with the shower sprayer. Before doing so each time, make sure the temperature is between 95 and 105 degrees Fahrenheit by viewing the temperature readout. As a further precaution, always test the water on the inside of your wrist before turning on the shower sprayer. Failure to follow the precautions in this warning could result in a burn injury to the resident.**

3. The resident Bathes the upper body as follows:
  - a) Apply bathing oil or shampoo to the body.
  - b) Begin gently washing the upper body. Pay special attention to folds or creases in the skin and under the arms. If the scalp is flaky, apply a small amount of bath oil to the problem area and let it soak in until time for shampoo.
4. Rinse the upper body with the shower sprayer as follows.
  - a) Pick up the Hand-Held Shower Sprayer located on the side of the tub rail as shown in (figure 1)
  - b) Press the Shower Button to activate the Shower Sprayer.
  - c) While pointing the sprayer into the tub, **not onto the body**, press the Shower Trigger, located on the sprayer.
  - d) Adjust the water temperature by turning the Temperature Control Knob to the normal bathing range of 95 to 105 degrees Fahrenheit as shown below. Monitor the temperature by viewing the Fill/Shower Temperature Readout. As a further precaution, always test the water on the inside of your wrist before turning the sprayer toward the resident.
  - e) Repeat the washing and rinsing steps for the upper body a second time.
5. Resident Bathing of the perineal area as follows:

- a) The resident lifts right leg and lets the Aqua-Aire bubbling action wash the perineal area. This technique protects the resident's dignity and removes any residual waste or fecal matter.
  - b) The Aqua-Aire bubbling action at the bottom of the tub, will clean the resident's feet.
6. The resident will shampoo hair, using the following procedure:
- a) Wet hair with the shower sprayer.
  - b) Apply a small amount of Body Wash and Shampoo to the wet hair.
  - c) Massage the head to create lather. Continue the massage to fully clean the hair and scalp.
  - d) Rinse with the shower sprayer.
  - e) Shampoo and rinse a second time if required.

## Exiting the Bath

After the bath is complete, you are now ready to exit the tub.

1. **Drain the tub** by pulling the drain plug from the drain. Allow the tub to be drained completely.



### **WARNING**

**Failure to have the tub completely drained before unlocking the door could cause injury.**

2. Unlock door by pulling the door handle back or towards you.
3. Open door to widest position.
4. Dry off.

5. Swing legs around and place on the floor.
6. If transferring manually, use proper nursing techniques to transfer to a wheelchair or other chair to finish hair, nail, shaving, etc.
7. If using a sit-to-stand lift or total lift, follow the manufacturers' instructions on the use of that particular lift.
8. After finishing your bath routine, leave the bathing room.
9. The Cascade tub is now ready to disinfect.

## System Cleaning (After Every Bath)

Clean and disinfect the tub after every bath with Penner Cleaner/Disinfectant as follows:

**Note.** Penner Cleaner/Disinfectant is a special non-abrasive cleaning and disinfecting solution that will not harm the tub's fiberglass surface. Penner Cleaner/Disinfectant is the only cleaning solution designed and recommended for use with your CascadeTub.

### **CAUTION**

**Some cleaners, disinfectants, and floor strippers contain ingredients that are corrosive or abrasive. These solutions or compounds may contain chlorine, acid, basic ingredients or abrasives. DO NOT allow such solutions or compounds to come in contact with your Penner equipment. Failure to heed this caution could result in damage to the equipment and void the warranty.**

**Cleaning of this equipment by untrained personnel could result in injury to the operator or patient**

1. Close and lock the door.
2. Press the Tub Fill Button and turn the Temperature Control Knob all the way to the left to its warmest level to heat the disinfectant solution and maximize its effectiveness.
3. Remove any visible tissue, residue, or fluids from the tub by pressing the Shower Button and rinsing the inside tub surfaces with the shower sprayer.
4. Press the Fill Button again to turn off the water. Allow the tub to drain, and place the drain plug over the drain.
5. Press and hold the Disinfect Button located on the top of the tub shown in (figure 1). As the button is held down, the properly mixed cleaning solution is running through the air injection system and out all of the air jets. Release the button after you see solution coming out of all the air jets and you have 1 to 1 1/2 gallons of disinfectant solution in the foot well of the tub.

 **WARNING**

**Housekeeping personnel should wear protective glasses and gloves to prevent disinfectant from damaging their eyes or skin. If disinfectant gets on the skin or in the eyes, rinse thoroughly with plenty of water. Seek medical advice if irritation occurs.**

6. Using the long-handled brush, available from your Penner distributor, thoroughly scrub all interior surfaces of the tub with the solution that remains in the foot well of the tub. Let disinfectant stay on surface for 10 minutes. (Or, as recommended by the instructions on the disinfectant concentrate container.)
7. Remove the plug from the drain.
8. Rinse most of the soapy water away with the shower sprayer
9. Press and hold the Rinse button located on the control panel shown in (figure 1) until clear water runs from all the air jets. Then release the Rinse button.

10. Finish rinsing the interior surfaces of the tub with the shower sprayer.
11. Start the air blower by pushing the Aqua-Aire Button. Allow it to run for 30 seconds. This pushes the rinse water out of the air injection system. If this was the last bath of the day, allow the blower to run for 2 minutes to dry out the system.
12. Stop the Aqua-Aire blower by again pushing the Aqua-Aire button on the control panel shown in (figure 1).
13. Visibly check that the tub was effectively cleaned during the disinfecting procedure. If not, repeat the procedure.
14. If there is a delay of one or more hours before the next bath, we recommend using a towel to wipe off all excess water. This will keep your Cascade Alcove tub looking great for years to come.

## Daily Maintenance

To properly maintain the Cascade Alcove System, perform the following daily maintenance procedures.

1. Check that there is an adequate supply of disinfectant concentrate in the supply bottle located behind the access door on the right side of the tub. Replace the bottle before it is empty to avoid re-priming the system. Be sure each bottle label matches the label found on the hose to which the bottle is attached.

### **WARNING**

**While replacing system liquids, housekeeping personnel should wear protective glasses and gloves to prevent disinfectant concentrate from damaging their eyes or skin. If disinfectant gets on the skin or in the eyes, rinse thoroughly with plenty of water. Seek medical advice if irritation occurs.**

2. Perform the Daily Safety Checklist described in the following section before using the system.

** WARNING**

**Failure to perform the daily safety checks and take corrective action, when required, prior to the operation of the equipment each day could result in injury to the resident or operator.**

** WARNING**

**If any part of the system is not functioning properly, cease all bathing activities until the problem is corrected by maintenance. The system must be maintained on a scheduled basis to ensure it is functioning properly. Failure to heed these precautions could result in injury to the operator or resident.**

## Daily Safety Checklist

**CHECK THE FOLLOWING ITEMS EACH DAY BEFORE USING YOUR CASCADE ALCOVE SYSTEM.**

### **Cascade Tub**

Perform the following safety checks for the Cascade Alcove Tub:

1. High temperature limit – Press the Fill Button and turn the Temperature Control Knob all the way to the left to the highest setting. Test the fill and shower water temperature to ensure that it reaches no more than 115 degrees Fahrenheit (lower if required by local regulations).
2. Seal Wear - Open the door and check to see that the seal is not cracked or peeling away from the door.
3. Self- Draining Trap - If water is draining regularly from the self draining trap, the black 1-1/2 check valve may need to be replaced.

**⚠ WARNING**

If during the safety checks you find parts are missing, are excessively worn, do not function properly, or do not meet the recommended safe operating levels, do not operate the equipment until the maintenance department has taken the appropriate corrective action.

Your Penner Distributor and his personnel are trained to provide in-service instruction and maintenance on your Cascade Alcove System. If you have any questions about the operation or maintenance of your Cascade Alcove System, please contact your Penner Distributor. For your nearest Penner distributor, contact Penner Patient Care, Inc at 1-866-736-6377 OR 1-800-732-0717.

For your nearest distributor, contact:

***PENNER PATIENT CARE, INC.  
Box 523 / 101 Grant St.  
Aurora, NE 68818***

**1-866-PENNERS**

**1-866-736-6377**

**1-800-732-0717**

***E-mail Address: [pennersales@hamilton.net](mailto:pennersales@hamilton.net)  
Web Site: [www.pennerpatientcare.com](http://www.pennerpatientcare.com)***