

Peritoneal Dialysis Products and Services

PRODUCTS AND SUPPORT FOR YOU
AND YOUR PATIENTS



Fresenius Medical Care

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Fresenius Medical Care

Products*

Fresenius Medical Care is committed to quality patient care. As part of that commitment, we believe in providing high quality, cost effective clinical options to patients, their families, and clinicians.

Connectology

Our PD product line includes our hallmark innovation, Safe-Lock® Connectology and Snap® Disconnect. The features of this system include:

- Recessed cone to minimize the potential for accidental touch contamination of the inner fluid pathway
- Disinfectant chamber, which is a protective cavity for the addition of disinfectant which continuously bathes the internal parts of the connector, protecting against bacterial contamination
- “O” Ring to minimize the potential for entry of airborne contaminants while maintaining the patency of the disinfectant chamber
- Breaking cone and tricuspid valve, which maintains the integrity of the sterile solution container. The flow of solutions is initiated by breaking the internal cone and twist-lock connecting the Safe-Lock® line
- Locking threads which securely connect the solution container to the transfer set and the transfer set to the catheter adapter
- Gripping surfaces which provide a flat surface for ease of hand placement, and help to prevent accidental contamination

Introducing our newest technology the revolutionary stay•safe® connectology. This new generation offers easy handling with the benefit of one system opening per exchange. The heart of stay•safe® is the disc, which is a central control dial that walks the CAPD patient through each treatment step – Drain, Flush, Fill, & Close. The patient simply turns the dial to advance from one step to the next... no more need for clamps! The innovative PIN closure system for both CAPD and APD seals against bacteria prior to disconnect, minimizing the potential for airborne or touch contamination.

* See the full labeling containing a complete description of warnings, hazards, contraindications, side effects and precautions. Available at not cost upon request.

Solutions

Fresenius Medical Care offers a complete line of peritoneal dialysis solutions designed to meet the individualized needs of your patients. This line of solutions, combined with innovative technology in delivery systems, offers a wide variety of options to help patients have successful dialysis treatments.

CAPD Products

DELFLIX™

Peritoneal Dialysis Solution with Dextrose (1.5%, 2.5%, 4.25%) with stay•safe® Patient Connector

- Single opening of the system offers reduction in potential for airborne and touch contamination and elimination of the need to wash hands and mask during disconnect.
- Offers ease of training and use, with simple “turn-the-dial” steps.
- Avoids the need to remember a clamping sequence.
- The same easy-to-use PIN technology is offered on APD, so patients can easily transfer from one modality to the other.
- Convenience items, such as an organizer and a stay•safe® Handi-tool make this system easy to use for those with dexterity or vision impairment.
- Color-coded discs for easy identification of Dextrose concentration.
- A large medication port, as well as a sample port on the drain bag offers both the clinician and the patient additional convenience features.

Premier™ Plus Double Bag System

- Single opening of the system offers reduction in potential for airborne and

touch contamination and elimination of the need to wash hands and mask during disconnect.

- Color-coded caps for easy identification of Dextrose concentration.
- Offers flexibility – Safe-Lock® connectors on both CAPD and APD systems allow the patient to easily transfer from one modality to another.
- Delclamp™ disconnect procedure safely and quickly allows disconnection without opening the system.
- Sample port on drain bag provides a convenient option for obtaining effluent samples.

Disposable Freedom™ Set

- “Y” Set – Offers convenience in a single use disposable set, and utilizes ‘flush-before-fill’ technique, thereby reducing the potential for airborne or touch contamination.
- Color-coded clamps for ease in patient training.
- Offers flexibility – Safe-Lock® connectors on both CAPD and APD systems allow the patient to easily transfer from one modality to another.
- Delclamp™ disconnect procedure safely and quickly allows disconnection without opening the system.

APD Products

Newton™ IQ Cyclor System

- Gravity technology, for quiet treatment and unrestricted catheter flow.
- Offers the potential for fast, efficient treatment with the pump-to-drain feature. Saved transit time may be added to the dwell, thereby offering the potential for improving adequacy.
- Pump-to-drain eliminates the need to carry drain bags.
- Pole-mounted pump and cassette loading of the tubing offers easy access and a convenient, straightforward design.
- Easy effluent visualization, with a fluid sample in the drain bag at all times.



- Offers 2 connectology options – the new stay•safe® PIN technology, or Safe-Lock® connectology and Snap™ Disconnect. These offer the same safety benefits as with CAPD, and allow patients to transfer modalities with ease.
- Allows a patient to perform PD Plus™ Therapy – a “Pause” exchange from the cyclor, which may result in improved outcomes, allow the patient a personal time-out during therapy, and avoid the need to spend extra hours in bed.
- True “Flush-Before-Fill” capability, reducing the potential for touch contamination.
- Allows adjustment of volume and tone to meet the individualized patient needs.
- Offers portability, with pole mounting and wheels for moving the cyclor from room to room without interrupting the treatment.
- Fill volume of 4 liters, which offers more dialysis for those who need it.
- IQcard™ software program offers:
 - Prescription upload capability, so patients do not have to program the cyclor.
 - Full treatment history information, which may be downloaded to Clinic computer for review.
 - Offers ability to assess compliance with prescription and make adjustments to suit the patient’s lifestyle.
 - Graphics depicting treatment data may be used as a training tool for one patient or for CQI with multiple patients.
 - Data on fill, dwell, and drain time for every exchange, every day.
 - Data on inflow and drain volume, and net ultrafiltration volume is calculated and graphed.
 - Alarm data is offered for use in trouble shooting treatment problems.
 - Patient may enter BP, Wt, and Dextrose % data, eliminating the need to keep a logbook, and offering the clinician the convenience of one system for all the patient data.

Freedom™ Cyclor

- High volume and pediatric cycling options through use of standard tubing set.
- Programmable for all cycling modes, including PD Plus Therapy.

- Optional stand and equipment for hospital beds.

90/2 Cyclor

- Pediatric and adult cycling options.
- Programmable for all cycling regimens.
- Maximum accuracy for fill, drain, and measurement of ultrafiltration cycles (10 ml cycles)



Physician Support Services

PDServe™

PDServe offers a variety of educational resources for PD professionals to promote, develop and maintain optimal quality of care for our patients. The components of PDServe include:

Professional Resource Center –

1-888-557-3737. www.pdsolve.com. Staffed by experienced, certified nephrology nurses and supported by an extensive literature database and network of advisors, this toll-free line offers direct consultation for nephrologists and nurses.

Extensive Database – Premier collection of literature on PD-related topics.

PDServe Web Site – www.pdsolve.com

offers global educational information on peritoneal dialysis medical practices and research, as well as links to other helpful peritoneal dialysis-related sites.

PDConnection – Newsletter for PD

professionals, including article reviews, editorials, clinical papers, practical tips, new product info, and an international calendar of events.

Advanced Renal Education Program

The Advanced Renal Education Program is a PDServe™ professional offering, which is designed to provide PD education to medical personnel, and improve the standards of clinical care. The physician program is a comprehensive education program designed to educate novice nephrologists, and those who want to hone their skills. This program is non-promotional, and may include topics such as:

- Peritoneal Dialysis Access
- Management of the Geriatric Patient
- Modality Selection
- Management of the Diabetic Patient
- PD Connectology
- Management of Osteodystrophy
- APD – Cyclers and Disposables
- Management of the Pediatric Patient
- Peritonitis and Other Infectious Complications
- Practical Aspects of Managing a PD Program
- Health Care Systems
- Non-infectious Complications
- Management of Anemia
- Management of Cardiovascular Complications
- Nutritional Management of the PD Patient

Kidney Options® Program

Kidney Options® is a comprehensive Pre-ESRD education program, designed to educate pre-dialysis patients on their treatment options. The detailed components of this program are described in Patient Services section. Tools for the physician include a professional brochure, poster, patient seminar flyer, as well as slides for Grand Rounds presentation.



Clinical Staff Support Services

PDServe™

PDServe offers a variety of educational resources for PD professionals to promote, develop and maintain optimal quality of care for our patients. The key components, 1) Professional Resource Center, 2) Literature Database, 3) Web Site, and 4) PD Connection Newsletter are all available to nephrology nurses. (See Physician Support section for complete description).

PDServe™ Advanced Renal Education Program for RNs

The reputation of the Fresenius clinical workshops and skills seminars is unsurpassed, with over 1,700 PD clinicians educated every year in the U.S. alone! Contact hours for these courses are accepted by the American Nephrology Nurses' Association for CNN certification. Both Basic and Advanced Curriculums, including hands-on experience are available.

Fundamentals of Peritoneal Dialysis:

A basic workshop designed to provide new PD staff with the essential information needed for patient care. Program includes hands-on experience. Course topics include:

- Principles of Peritoneal Dialysis
- Patient Teaching Plans
- Peritoneal Dialysis Access
- Working with the PD Prescription
- Complications Related to Therapy
- Clearance and Transport Testing Procedures

Contemporary Issues in Peritoneal Dialysis:

Evaluation of Ultrafiltration Failure

A review of basic concepts related to water transfer across the peritoneal membrane. Evaluation and management strategies for loss or decline of ultrafiltration during peritoneal dialysis.

Peritoneal Dialysis Adequacy Update

Discussion of the elements that contribute to peritoneal dialysis clearance and the strategies for achieving target Kt/V and Creatinine Clearance.

Evaluation of Serum Albumin in the Dialysis Patient

A review of the processes affecting serum albumin levels. Focus on a CQI approach to evaluating and reversing hypoalbuminemia.

Peritoneal Catheter Exit Site Classification

Instruction in a comprehensive, organized method for evaluating and classifying PD catheter exit sites. Discussion of various treatments for infected or equivocal exit sites.

Tracking the Source: Investigating Episodes of Peritonitis – Part 1

Overview of common organisms responsible for peritonitis in the chronic PD patient.

Tracking the Source: Utilizing Knowledge and CQI to Improve Outcomes – Part 2

This class uses an integrated approach to educate the nurse on reducing infections in a PD program.

Strategies for PD Program Growth

This interactive program contains guidelines and tips for growing and maintaining a successful PD program.

Working Towards Compliance with the Dialysis Prescription

A CQI approach to non-compliance. Specific focus on peritoneal dialysis patient adherence to prescription and compliance with clearance and transport testing procedures.

Peritoneal Dialysis: Patient Training and Education

This course covers the essentials of what to teach your PD patient about his/ her treatment. A detailed core curriculum for both CAPD and APD will be reviewed.

Care of the Hospitalized Patient

Basic concepts for care of the hospitalized PD patient. This class is offered to RNs working in an acute care hospital setting.

Clinical Support Teams

Collectively, our team of regional Clinical Sales Support Specialists offers over 450 years of dedicated experience in peritoneal dialysis. They have a thorough understanding of the latest techniques in PD therapy, as well as the newest product innovations. Their role is to partner with the PD Clinic staff to offer product in-services and transition support, and assist in the development of strategies to improve patient outcomes and program growth. Utilizing their vast clinical experience, our team provides consultation in a variety of areas including clinical problem solving, infection management and continuous quality improvement.



Continuous Quality Improvement

Fresenius Clinical Sales Support Specialists offer assistance in CQI projects. For example, they may evaluate areas that may impact program growth, such as market related factors, nephrologist impact, or patient, staff, and technical issues.

In addition, tools and support are offered for assessment of facility trends and evaluation of:

- Infectious complications
- Catheter-related complications
- Adequacy

Hospital Support

The Fresenius Clinical Sales Support Specialists offer assistance in educating hospital staff on the basic care of the peritoneal dialysis patient on a routine basis.

Kidney Options® Program

Kidney Options® is a comprehensive Pre-ESRD education program, designed to educate pre-dialysis patients on their treatment options. The detailed components of this program are described under Patient Services. Tools for the PD nurse include a staff training manual with CD-rom, presentation materials (flip chart and CD-rom formats), business cards and appointment cards, marketing and seminar tools, as well as 866-kidney1, the Resource line staffed by experienced nephrology nurses.

Transition Support Teams

A specialized multidisciplinary team works with the Clinic staff to develop a transition plan to make the switch to Fresenius products and services seamless



and pleasant. Through our vast experience, we have developed simple tools and systems to assist you and your patients every step of the way.

Software Programs

The following software programs are offered:

- **FITtness™** Fresenius Infection Tracking Tool: A simple data collection and tracking tool for PD related infections, including:
 - Peritonitis
 - Exit Site Infections
 - Tunnel Infections

This program offers sorting capabilities, and analysis of data in both graphic and text formats, to assist the clinician in identifying areas for quality improvement.

- **Pack-PD™** Kinetic Modeling Program: A comprehensive program offering calculation of patient renal and peritoneal clearance, prediction of solute transport, evaluation of current therapy levels, and identification of prescription options to meet adequacy targets.

- **IQcard™** Software Program: Offers full treatment history of cycling patients to the prescribing physician, for use in troubleshooting, prescription optimization, and patient education. In addition, this program offers the ability to upload the patient's prescription to the Newton™ IQ cycler, and record and track patient data (i.e. BP, Wt, % Dex)

Professional Resources

Over 30 Professional Resources are offered to clinicians for their use in training and education. Examples of such resources include posters, brochures, pocket guides, videos, workbooks, manuals, procedure cards. (See Appendix for complete listing)

• Key Concepts & Procedure Tools

Tools such as wall charts, flyers, and videos are available to use as teaching tools for PD staff and patients on a variety of topics, including anatomy of the peritoneum, overview of kidney function and dialysis principles, CAPD and APD procedures, & the utilization of adapters for patients being hospitalized.

• Professional Manuals

A variety of Staff Manuals are available to assist you and your staff in starting, managing, or growing your home peritoneal dialysis program. Examples of Manuals include: Starting a Home Peritoneal Dialysis Program, and Policy and Procedure Manuals

• Prescription Management Tools

Manuals such as the Therapy Support Program Guide, the Guide to Enhancing Peritoneal Therapy, as well as tools such as the Therapy Matrix Workbook are designed to assist you with developing an appropriate prescription to meet the clinical and lifestyle needs of your patient.

• Exit Site Classification Program

This comprehensive program offers the tools you need to classify and manage your patient's exit site – Posters, Brochures, CD's, Worksheets, and a Pocket Guide.

• Kt/V Chart Your Course Program

This program is a motivational program to assist you in educating and improving your patient's dialysis outcomes. The package includes a Clinic Wall Poster, with Stickers and Report Cards to provide to individual patients.

Patient Services

Customer Support Teams

A dedicated Home Patient Team is assigned to work with the dialysis clinic staff and patients to manage product supplies. At Fresenius Medical Care, we understand the importance of providing prompt answers to your patients' questions. The latest communication technology and our comprehensive staff training allow us to service your patients more efficiently. Customer Service data show that nearly 98% of all telephone calls are answered in less than 20 seconds! In addition, we have recently established the New Patient Team, which offers your new patients the extra support they need. Other specialized services include a dedicated vacation specialist and an international travel specialist, offering patients assistance they need to enjoy their time away from home.

Delivery Services

Fresenius has over 15 warehouse locations throughout the country, offering the advantages of both a local service and a national network. Fresenius Delivery Specialists deliver supplies to patient homes and other locations. Supplies are placed in a convenient location in the patient's home, and the stock is rotated to ensure access to the product with the soonest expiration date. State-of-the-art routing and bar coding systems assure efficient and accurate deliveries, with over 99% of deliveries made by Fresenius trucks and drivers, with over 98% of deliveries arriving on-time with all items ordered. (CS:800-323-5188)

Pharmacy Representatives

Fresenius Medical Care has full time pharmacists and consultant pharmacists located throughout the U.S. These registered pharmacists are available to answer patient questions on medications. They may also take verbal orders when a physician is not immediately available to review and sign a prescription. A follow-up written prescription is required.

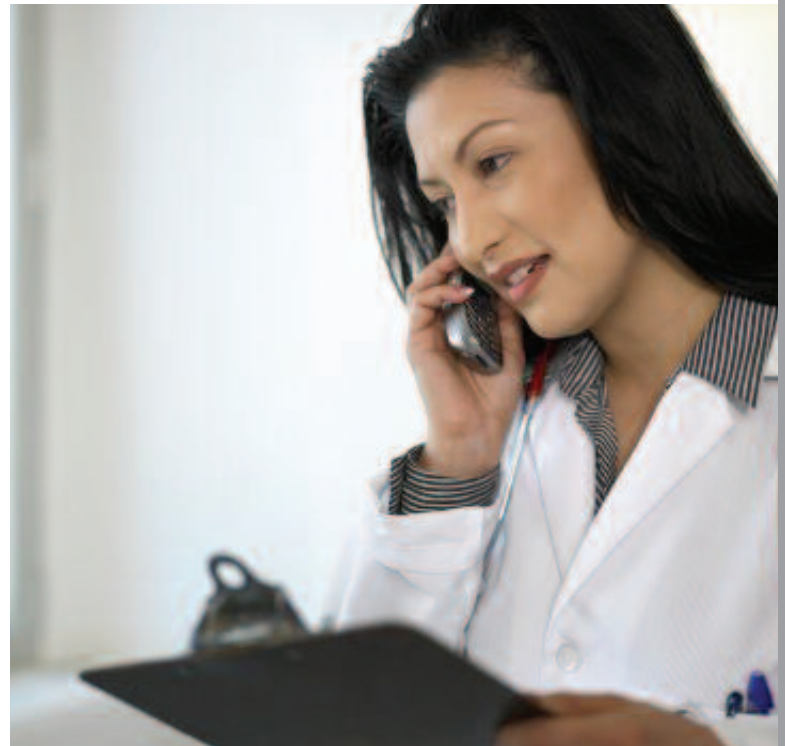
Technical Support Teams

Trained professionals offer technical support to all patients utilizing our cyclor 24 hours a day, 7 days a week. If necessary, the Fresenius Technician can send new equipment, to avoid any possible treatment interruption. (800-227-2572).

Kidney Options® Program

Empowering patients with the knowledge they need to live well with kidney disease is the motto of the Kidney Options Program. The Program is a comprehensive Pre-ESRD education program, designed to educate pre-dialysis patients on their treatment options. The Kidney Options Seminars offer patients and caregivers an opportunity to share the experiences of others who are successfully coping with their diagnosis. The components of the program include:

- Train-the-Trainer workshop for Clinic staff
- Kidney Options Staff Training Manual
- Treatment Options patient education booklet, and video
- Using the Kidney You Never Thought You Had patient education flip chart
- Web Site – www.kidneyoptions.com offers detailed information regarding treatment options, nutritional and lifestyle tips, as well as a glossary of medical terms to facilitate the learning process.
- Kidney Options Recipe cards
- Kidney Options Newsletter – offers articles on renal disease and various treatment options, as well as diet and lifestyle tips
- Kidney Options Resource Line – 866-kidney1, staffed by an experienced nephrology nurse, this resource offers support and information for clinicians and Pre-ESRD patients.



Peritoneal Dialysis Patient Awareness Days

PD Awareness Days are typically offered to Hemodialysis patients to educate them on their therapy options.

success@home™ Program

success@home™ is an educational program directed to patients who are initiating peritoneal dialysis. These tools are offered in a comprehensive Tool Kit to all of our Peritoneal Dialysis partners. The Kit is packaged in a convenient and attractive box so that your materials will be easily accessible for your on-the-spot training needs.

The **success@home™** Tool Kit includes the following items, which may be replenished at no charge when necessary:

- **PD Patient Directory** – Designed for the patient being introduced to peritoneal dialysis, this Manual reviews kidney function, the basic principles of peritoneal dialysis, the exchange procedures for CAPD and APD, as well as important procedures for safety and prevention of complications. This introductory item is sent to all new US PD patients, as a tool to help the Home Training RN educate patients on PD fundamentals, as well as to introduce patients to their supplies from Fresenius Medical Care. The Directory includes contact information, order/delivery information, and also allows for customization of the individual patient's treatment, and the addition of other pertinent information specific to your clinic.
- **PD Patient Guide Flip Chart** – This training tool is designed to educate patients of all educational abilities. It includes colorful graphics and easy-to-understand pictorials of the basic elements of peritoneal dialysis, with very simple and short text explanations. This item is ideal for one-on-one education sessions between the PD RN and the patient and is especially useful for training patients from a broad spectrum of educational levels.
- **PD Patient Guide DVD** – This tool is designed to assist the clinician in reinforcing basic PD education principles with their patients. It offers the same content of the Flip Chart with verbal explanation of the concepts via auditory narration. This item is ideal to reinforce the one-on-one education sessions.

- **PD Patient Guide Video** – This tool offers the same content as above, in VHS format.

- **stay•safe® Training Video** – This is an instructional video designed to reinforce training on the proper steps in using the US stay•safe® product. This tool may also be helpful in orienting new staff to this innovative technology.

- **Basic Training Flyers** – These simple training tools assist the clinician in educating PD patients on basic topics using simple terminology.

- Understanding PD
- Getting Ready to Do Your Exchange
- Your Daily Routine
- Managing Your Fluid Balance
- Catheter and Exit Site Care
- Trouble-shooting Exchange Problems





Additional Patient Education Materials

In addition to the success@home and Kidney Options components, a variety of patient education materials are available for use in educating patients on Pre-ESRD, CAPD, and APD treatments. Over 30 tools are available, including flip charts, training manuals, brochures, procedure cards, and videos. (See Appendix for complete listing)

- **Infection Control Guidelines**

This program offers tools designed to educate the patient on proper techniques for minimizing the risk of infection. Includes videos and brochures, both in English and Spanish.

- **CAPD Training Tools**

Several Procedure Cards and videos are available for training patients step-by-step on the specific procedures for their CAPD treatment.

- **Cycler Training Tools**

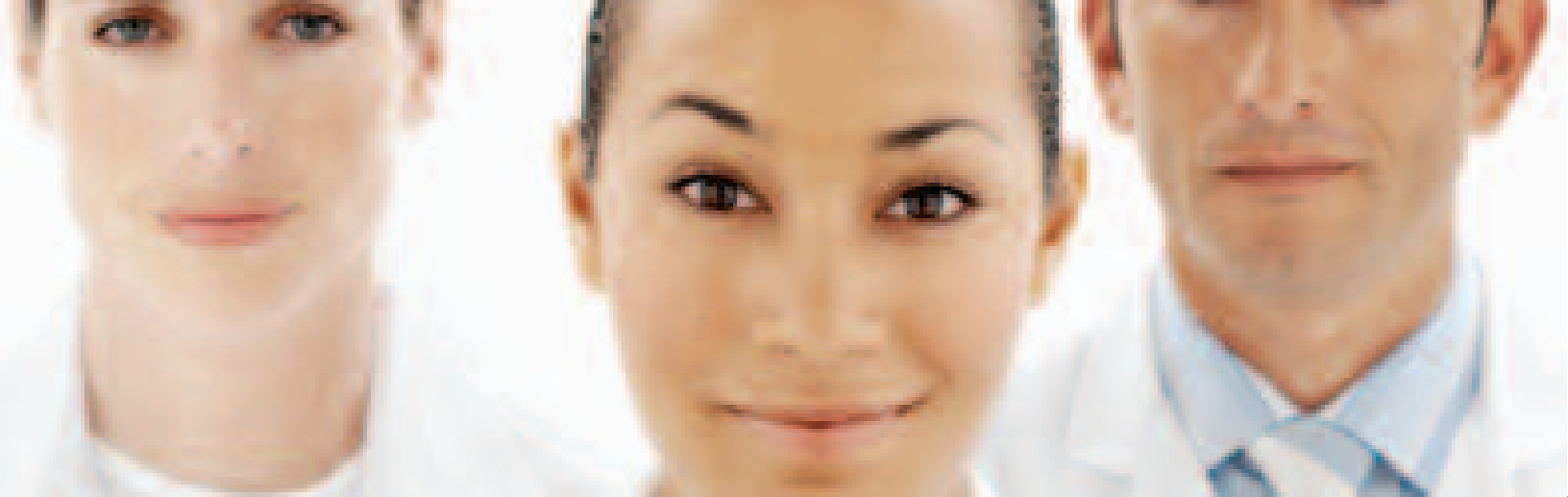
Several training tools are available to educate your patients utilizing the Fresenius Medical Care peritoneal dialysis cyclers. Available in both English and Spanish, these include Flip Charts, Videos, Operations Manuals, Handi-Guides, as well as Procedure Cards.



Appendix A

Professional Resources for Staff

	Order Number	Description
Anatomy of the Kidney Poster	100163-01	Poster
Anatomy of the Peritoneum in Peritoneal Dialysis	66-0075-3	Color Card
Anatomy of the Peritoneum in Peritoneal Dialysis Poster	66-0039-9	Poster
CAPD Procedure Poster	100164-01	Poster
Exit Site Classification Poster	100240-01	Poster
Exit Site Classification Brochure	100241-01	Booklet/Brochure
Exit Site Classification Pocket Guide	100266-01	Guide
Exit Site Classification Worksheet	100265-01	Worksheet
Fitness – Fresenius Infection Tracking Tool (contact your Fresenius Sales Representative)		Software
Fluid Balance Poster	100314-01	Poster
Infection Control Guidelines for Peritoneal Dialysis Patients (English)	100076-01	Video
Infection Control Guidelines for Peritoneal Dialysis Patients (Spanish)	100086-01	Video
Infection Control Guidelines for Disposal of Peritoneal Waste	100079-01	Brochure
Kidney Options Program for pre-ESRD (contact your Fresenius Sales Representative)		Program
Kt/V Chart Your Course Poster	100075-01	Poster
Kt/V Chart Your Course Report Cards (contact Customer Service for numbers)		Pad of Reports
Kt/V Chart Your Course Stickers	100075-03	Stickers
Kt/V Motivational Stickers	100075-04	Stickers
Making the Right Connection	100069-01	Procedure Card
Making the stay•safe® Connection	100322-01	Procedure Card
PD Training Apron (available from your Fresenius Sales Representative)		Demonstration Tool
Policies and Procedures for Peritoneal Dialysis	66-0118-1	Manual
Starting a Home Peritoneal Dialysis Program	66-0122-3	Manual
Summary of NKF-DOQI Clinical Practice Guidelines for PD Adequacy	100070-01	Card
Therapy Matrix Workbook	66-0139-7	Calculation Tool



Resources for Patients

Pre ESRD Information

www.kidneyoptions.com		Website
Treatment Options	100066-01	Video
Treatment Options for End Stage Renal Disease	66-0121-5	Flipchart
Treatment Options for End Stage Renal Disease (Spanish)	100172-01	Flipchart
Using the Kidney You Never Thought You Had (English)	66-0022-5	Booklet
Using the Kidney You Never Thought You Had (Spanish)	100043-01	Booklet

success@home™ Training Materials

PD Patient Directory	100335-00	Binder
PD Patient Guide Flipchart	100337-01	Flipchart
Understanding Peritoneal Dialysis	100338-01	Flyer
Getting Ready to Do Your Exchange	100339-01	Flyer
Your Daily Routine	100340-01	Flyer
Catheter and Exit Site Care	100341-01	Flyer
Managing Your Fluid Balance	100342-01	Flyer
Troubleshooting Exchange Problems	100343-01	Flyer
success@home™ Patient Guide	100368-01	DVD
success@home™ Patient Guide	100367-01	Video

CAPD and APD Patient Training Materials

stay•safe® CAPD Procedure Card	100290-01	Procedure Card
stay•safe® CAPD Training Video	100354-01	Video
Premier™ Plus Exchange Procedure	100113-01	Procedure Card
Premier™ Plus Exchange Procedure (Spanish)	100149-01	Procedure Card
Safe-Lock® Prefilled Disposable Freedom Set with Snap Disconnect (English)	66-0017-5	Procedure Card
Safe-Lock® Prefilled Disposable Freedom Set with Snap Disconnect (Spanish)	66-0020-9	Procedure Card
CAPD Patient Training Manual (Spanish)	66-0001-9	Manual
stay•safe® APD Procedure Card	100291-01	Procedure Card
Newton Cyclor Handi-Guide	470214	Booklet
Newton Cyclor Assembly Procedure (English)	470211	Procedure Card
Newton Cyclor Assembly Procedure (Spanish)	470211-01	Procedure Card
Newton Cyclor Assembly Procedure (French)	470211-02	Procedure Card
Newton Initiation of Treatment Procedure (English)	470210	Procedure Card
Newton Initiation of Treatment Procedure (Spanish)	470210-01	Procedure Card
Newton Initiation of Treatment Procedure (French)	470210-02	Procedure Card
Freedom Cyclor PD+ Procedure (English)	470121	Procedure Card
Freedom Cyclor PD+ Procedure (Spanish)	100152-01	Procedure Card
Freedom Cyclor Procedure	66-0023-3	Procedure Card
Learning to Use the Fresenius Freedom Cyclor PD+	100064-01	Video
Universal Cone Breaker Procedure	66-0138-9	Procedure Card