



Back To The Future With Dialyzer Reuse

“To reuse or not to reuse is no longer the question, especially for small chains and independent providers” according to an article in the April 2010 edition of Renal Business Today. The article titled *Surviving the Coming ESRD Bundled Payment: Should Facilities Who’ve Stopped Dialyzer Reprocessing Consider Returning To the Practice* goes on to ask, “The question now is, if you’re not reusing, how soon can you start?” and “If you are reusing, how can you make your program more efficient and profitable?”

Joe Atkins and Cheryl Harter, the authors of the article, are both practitioners in the dialysis field. Joe Atkins was CEO of the Shelby County Kidney Center in Sidney, Ohio, and is presently CEO of Medical Concepts & Innovations,

a dialysis consulting company based in Ohio. Cheryl Harter is the charge nurse at the VA Dialysis facility in Dayton, Ohio. The authors write that the “safety and efficacy of dialyzer reprocessing has been proven repeatedly by the way of unbiased research.” The authors continue by emphasizing that for those facilities that have moved away from reuse “the practice needs to be revisited, particularly in the light of new ESRD bundled payment, which, most likely, will be lower than what we are getting today, and for the fact that reuse continues to bring positive benefits to our patients.”

The authors discuss the current state of anti-coagulation therapy, quality of therapy delivered by multiple-use vs. single-use dialyzer models, economic effects of reprocessing, and the “green” aspects of reuse vs. disposable dialyzers.

Adequate anti-coagulation: how do you know?

Clotting studies are rarely, if ever, still carried out in most chronic dialysis facilities and, as a result, “providers have lost our measuring stick for heparin efficacy during hemodialysis.”

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NUMBER 111 Way to Go!

There is a false perception that reuse is routinely cited in CMS surveys. In an analysis of 1,268 ESRD Medicare surveys, 5 of the top 10 most common deficient practice citations were actually associated with infection control.*

Because of the care and pride you take in your work the first reuse citation did not appear until number 111 on the list.

WAY TO GO!!

*Glenda Payne RN, MS, CNN, ESRD Technical Advisor CMS, Dallas & Atlanta Regions, 2010 NANT Symposium: Medicare Conditions for Coverage CMS Update of Surveys, Retrieved 4/12/2010 from, <http://www.dialysistech.net/uploads/Medicare,%20Conditions%20or%20Coverage,%20CMS%20Update%20on%20Surveys.pdf>

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Heparin administration is now evaluated using empirical evidence, and “there is no way of knowing whether heparin doses are adequate enough to keep a patient’s blood therapeutically anti-coagulated.” A dialyzer that appears to have clear fibers after treatment does not mean that anti-coagulation is adequate. Many dialyzers that appear to have clear fibers have failed the 80% cut-off on the volume test when run on the Renatron® reprocessing station. Without reprocessing you will not be sure if your patient is or is not adequately heparinized until the results of their monthly Kt/V and URR drop and are reviewed.

Affording the best

The introduction of “inexpensive, but low-performance dialyzers” was one of the primary reasons that many facilities left reuse. The parameters that affect a dialyzer’s overall performance, such as surface area and membrane pore size, tend to decrease “in the case of cheap dialyzers.” According to the authors, to make up for poor dialyzer performance you may have to

increase treatment time resulting in increased staff operational costs. Saving money up front on “economy” dialyzers may end up increasing costs.

“Without dialyzer reprocessing, smaller facilities and chains would not be able to afford the “best” (larger) dialyzers.”

Profit center and/or means of survival?

With bundling for ESRD services beginning in 2011 and all the uncertainties bundling brings, the authors claim that dialyzer reprocessing can be looked at as “a silver lining to this dark cloud.” Reprocessing can help dialysis providers “position themselves so they can not only survive, but succeed, in the coming bundled-rate era.”

Opportunity to go green

Reprocessing reduces bio-hazard disposal costs and the quantity of raw materials required to manufacturer all of the disposable dialyzers.

“Dialyzer housings and membranes are created from petroleum and

natural gas,” and if the 40 – 45 percent of the facilities that reprocess dialyzers stopped reuse we would be contributing to “further pollution of the planet,” and we would be contributing to the increased consumption of “finite, non-renewable resources.”

If reprocessing were eliminated, we would need to dispose of “8.2 million additional pounds of bio-hazardous material annually.” The reprocessing of multiple-use dialyzers “clearly reduces bio-hazardous disposal costs by more than half.”

Patient and financial wellness

The authors dispel the claim by some that dialyzer reprocessing contributes to poor care. In fact, their experience shows just the opposite! They state that “in a facility which averaged 30 reprocessings per dialyzer, the average patient’s Kt/V was 1.76 with 100 percent of the patients exceeding the DOQI guidelines,” and “patient outcomes far exceeded CMS’ expectations in spite of the fact that there were a higher number of diabetic, cardiac and elderly patients.”

The upcoming ESRD payment bundling will include medication costs, laboratory costs and cost of disposables with limited adjustments to the rate. The authors state that an effective dialyzer reprocessing program “can provide patients with a higher level of wellness. It is good for your patients, good for your bottom line, and last, but not least, it’s definitely good for the environment.”

Reference:

Atkins J, Harter C. Surviving the Coming ESRD Bundled Payment: Should Facilities Who’ve Stopped Dialyzer Reprocessing Consider Returning To the Practice. *Renal Business Today*. 2010; April: 24-26



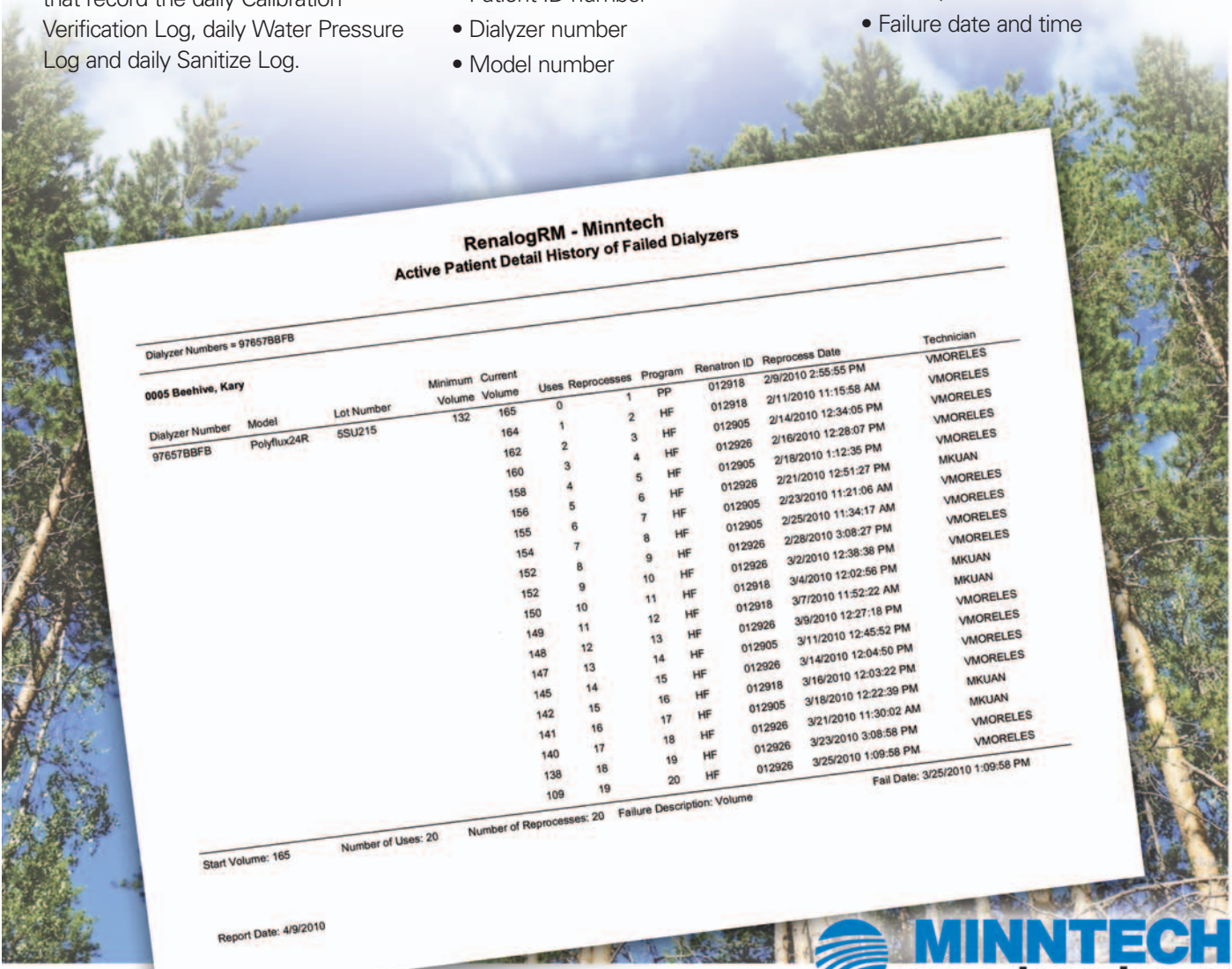
Paper Reduction With RM

Renalog® RM reports give you options to reduce the number of logs, binders and folders you may now be accumulating. Renalog RM will electronically retain information and allow you to track and print reports for a variety of activities that are currently recorded in manual hard copy logs and forms. Much of this information is retained in Renalog RM and can be printed out in paper copy on a weekly or monthly basis, or any time period you choose. In the Audit section of Advanced Reports you can print out reports that record the daily Calibration Verification Log, daily Water Pressure Log and daily Sanitize Log.

The Active Patient Detail History of Failed Dialyzers in the Patients section of Advanced Reports (in Renalog RM 6.04 or greater) contains a complete history of any failed dialyzer and duplicates the information collected in the "dialyzer sticker book." An added benefit of replacing the "dialyzer sticker book" is the cost savings realized by printing fewer labels.

The Active Patient Detail History of Failed Dialyzers report includes:

- Patient name
- Patient ID number
- Dialyzer number
- Model number
- Dialyzer Lot number
- Start volume
- Minimum volume
- Renatron ID number
- Program cycle
- Current volume after each reprocessing
- Number of dialyzer uses and reprocessings
- Date and time of each reprocessing
- Technician who processed dialyzer
- Failure description
- Total number of uses and reprocesses
- Failure date and time



RenalogRM - Minntech
Active Patient Detail History of Failed Dialyzers

Dialyzer Numbers = 97657BBFB

0005 Beehive, Kary			Minimum Volume	Current Volume	Uses	Reprocesses	Program	Renatron ID	Reprocess Date	Technician
Dialyzer Number	Model	Lot Number	132	165	0	1	PP	012918	2/9/2010 2:55:55 PM	VMORELES
97657BBFB	Polyflux24R	5SU215	164	165	1	2	HF	012918	2/11/2010 11:15:58 AM	VMORELES
			162	165	2	3	HF	012905	2/14/2010 12:34:05 PM	VMORELES
			160	165	3	4	HF	012926	2/16/2010 12:28:07 PM	VMORELES
			158	165	4	5	HF	012905	2/18/2010 1:12:35 PM	MKUAN
			156	165	5	6	HF	012926	2/21/2010 12:51:27 PM	VMORELES
			155	165	6	7	HF	012905	2/23/2010 11:21:06 AM	VMORELES
			154	165	7	8	HF	012905	2/25/2010 11:34:17 AM	VMORELES
			152	165	8	9	HF	012926	2/28/2010 3:08:27 PM	VMORELES
			152	165	9	10	HF	012926	3/2/2010 12:38:38 PM	MKUAN
			150	165	10	11	HF	012918	3/4/2010 12:02:56 PM	MKUAN
			149	165	11	12	HF	012918	3/7/2010 11:52:22 AM	VMORELES
			148	165	12	13	HF	012926	3/9/2010 12:27:18 PM	VMORELES
			147	165	13	14	HF	012905	3/11/2010 12:45:52 PM	VMORELES
			145	165	14	15	HF	012926	3/14/2010 12:04:50 PM	VMORELES
			142	165	15	16	HF	012918	3/16/2010 12:03:22 PM	MKUAN
			141	165	16	17	HF	012905	3/18/2010 12:22:39 PM	MKUAN
			140	165	17	18	HF	012926	3/21/2010 11:30:02 AM	VMORELES
			138	165	18	19	HF	012926	3/23/2010 3:08:58 PM	VMORELES
			109	165	19	20	HF	012926	3/25/2010 1:09:58 PM	VMORELES

Start Volume: 165 Number of Uses: 20 Number of Reprocesses: 20 Failure Description: Volume

Report Date: 4/9/2010 Fail Date: 3/25/2010 1:09:58 PM



DIALYZERS: By The Numbers 2010

400,000	Approximate number of chronic hemodialysis patients in the U.S.
153	Number of treatments per year for the average chronic hemodialysis patient.
61 Million	Number of single-use dialyzers that would be needed to treat all chronic hemodialysis patients in the U.S. for one year.
\$581 Million	Approximate dollar amount of sales, this year alone, which would be generated by hemodialyzer manufacturers if all patients in the U.S. were treated using single-use dialyzers at \$9.50/dialyzer.
\$73 Million	Approximate dollar amount of sales, this year alone, which would be generated by hemodialyzer manufacturers if all patients in the U.S. were treated using multiple-use dialyzers at \$18.00/dialyzer. (Re-use average 15)
\$508 Million	Approximate dollar savings in dialyzer purchases, this year alone, if all patients in the U.S. were treated using multiple-use dialyzers.
1.25	Approximate weight, in pounds, of a single-use hemodialyzer before it is thrown away as medical waste.
76 Million	Amount of medical waste, in pounds, that single-use would generate in the U.S. in one year.
3.1 Billion	The approximate number of dialyzers (at a 5% annual growth rate) sitting in the ground, or being incinerated, in the U.S. by the year 2035 if we eliminated reuse.
1/2 of FOREVER	The half-life of a synthetic fiber single-use dialyzer discarded in a landfill.
100%	Percentage of a synthetic fiber hemodialyzer's components that come from oil.
\$27.46	2002 average annual crude oil price/barrel, in 2010 dollars.
\$53.92	2009 average annual crude oil price/barrel, in 2010 dollars.
\$86.52	April 7, 2010 crude oil price/barrel, in dollars.
?	Future price of an oil-based single-use hemodialyzer, taking into account an unknown increase in the price of a barrel of oil.

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- Calibration and maintenance lab
- Performing calibration and maintenance procedures
- Hydraulic schematic and program outlines
- Hands-on troubleshooting using hydraulic schematics
- Troubleshooting techniques and repair lab

Dates

Locations

Sept. 14-15, 2010	Chicago, IL
Sept. 16-17, 2010	Chicago, IL
Nov. 2-3, 2010	Orlando, FL
Nov. 4-5, 2010	Orlando, FL

To request registration for seminars, email: gpielow@minntech.com



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