Bodies in Motion

Dear Editor:

I would like to address some inaccuracies published in the recent *JRRD* article "Bodies in motion: Monitoring daily activity and exercise with motion sensors in people with chronic pulmonary disease" (Vol. 40, No. 5, Sep/Oct 2003, Supplement 2, pages 45–58).

On page 47, the authors list the StepWatch activity monitor (SAM). The following corrections should be noted:

1. The StepWatch is available from Cyma, not Prosthetics Research Study.
2. Software and hardware are available for both PC and Macintosh platforms. The software handles programming and downloading of the StepWatch, and also data filtering, analysis, and reporting. It also provides a database that allows longitudinal tracking and individual/group comparisons.
3. The current costs of the system are $525 per monitor and $1,600 for the docking station/software/technical support. One docking station is needed per site.
4. Validation studies have been performed on many additional groups. Populations for which results have been published in full manuscript or abstract form include adults with dementia, adults with diabetes, adults with total hip replacement, adults who have sustained hip fractures, adults wearing total contact casts, men with diabetes and peripheral neuropathy, adults and children with no disease or disability, children with Duchenne's muscular dystrophy, children who are obese, and horses. Unpublished validation studies have been performed with various additional populations.

Additionally, the authors failed to note that the StepWatch is 98% accurate for monitoring virtually any type of gait, which Cyma considers to be its greatest strength. The accuracy has been confirmed by numerous independent studies.

I was disappointed that the authors did not cite any literature pertinent to the StepWatch. It is worth mentioning that the original descriptive paper on the instrument was published in *JRRD* (Vol. 36, No. 1, 1999, pages 8–18). The technology has since been further refined and improved under funding from the National Institutes of Health.

I appreciate the authors' cooperation in this matter and thank you for your attention to these corrections.

Sincerely,

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Bodies in Motion

Dear Editor:

I would like to bring to your attention errors that were made in the September/October 2003, Supplement 2 (Vol. 40, No. 5, pages 45–58) issue of *JRRD*. These errors were in the article "Bodies in motion: Monitoring daily activity and exercise with motion sensors in people with chronic pulmonary disease" in reference to the pricing and data collection days of the Actigraph (formerly CSA Actigraph), MTI Health Services, Fort Walton Beach, Florida.

In the article, the first error is that the price is listed as $1,500 for monitor, interface unit, and software. This published price is almost twice the actual cost of $800 for monitor, interface unit, and software. I am unaware of where the submitted references to this price came from, but MIT Health Services has always maintained the price for its systems in this price range. Furthermore, this error has most undoubtly been the cause of listing "Higher Cost" as one of the Actigraph's "limitations" when, in fact, we are the most cost-effective Actigraph on the market.

The second error is located in the same table under "Characteristics and Features." Here, the Actigraph is listed as having "Data collection up to 22 days" when, in fact, the Actigraph has "data collection up to 91 days." I would appreciate any assistance/

retraction you can provide in this matter.

Thank you for your time and please feel free to contact me should you have any further questions or need any other information.

Craig Karlin
MTI Health Services, manufacturer of the Actigraph®

RESPONSE

Dr. Kim Coleman of Cyma, the manufacturer of the Stepwatch®, and Craig Karlin of MTI Health Services, the manufacturer of the Actigraph®, have made several corrections about their products described in the table titled "Comparison of activity monitors available in United States." With regard to both letters, it should be emphasized that the table was based on information obtained from selected peer-reviewed research journals rather than abstracts and unpublished research and was intended to provide an overview of products available, not an exhaustive comparison of features and costs. Likewise, although Web sites might have provided more current information about product costs and features in this rapidly changing and competitive field, we avoided this source because of the possibility that proprietary interests might bias the information provided. We regret that some of the information provided was inaccurate, including the correct source of the Stepwatch (Cyma, not VA Prosthetics Research) and the specifics about data collection duration of the Actigraph (91 days, not 22). We were not aware of these changes at the time our manuscript was submitted. We would maintain, however, that although the costs of both instruments were outdated, they are both still relatively costly at $800 per monitor, interface unit, and software for the Actigraph and $2,125 for the Cyma StepWatch monitor, docking station, software, and technical support. We thank Dr. Coleman and Mr. Karlin for their letters.

Bonnie G. Steele, PhD, ARNP; Basia Belza, PhD, RN; Kevin Cain, PhD; Catherine Warms, PhD, ARNP, CRRN; Jeff Coppersmith, MS, CSCS; JoEllen Howard, BS, GCS