

INSPIRED TECHNOLOGIES, INC.

Clinical Case Study – 10/14/09



Overview:

Testing was conducted on a patient (female) using activities of daily living (ADL) for exertion. The patient was tested on their existing device, was allowed to rest, and then was placed on SmartDose™. The patient was using a Precision Medical EasyPulse 5 as their prior oxygen conserving device, and had been prescribed a setting of 2 on that unit.

Monitoring:

Both tests were monitored using the Inspired Technologies, Inc. Clinical Oxygen Dose Recorder (CODR) which takes readings at every breath and then plots them over time. A summary sheet is attached of the overall test as well as summary reports from each of the two tests. These summary reports are standard output data from the CODR device and give general statistics of the study period.

Results:

On the existing device (EasyPulse 5), the patient was in acceptable ranges during rest, but desaturated in the first minute of ADL's to 85% SpO₂. The unit was adjusted upward to 3, then 4, then 5 settings, but saturations continued to be below 90%. The patient could not complete the testing.

The patient was then rested and placed on SmartDose at a 2 setting. The patient exerted through 4 ADL tests without desaturation, and had SpO₂ averages greater than 95% SpO₂. Note that the unit setting was not changed, and the auto-adjusting feature of the SmartDose was relied upon to maintain proper patient saturation.

Conclusions:

This patient was not adequately treated with her current device and in fact, could not maintain saturation, even with manual titration of the unit to its maximum setting. The patient was able to maintain saturations with the SmartDose unit at a 2 setting. The patient was switched to SmartDose.

Test report:

Oxygen Titration based on Activities of Daily Living
Activities of Daily Living is 6 minutes of walking throughout the patient's home environment

Patient Name: [Redacted] ID #67831
Address: [Redacted] City/State: [Redacted]
Phone: [Redacted] Physician: [Redacted]

Conservor Device
Conservor Device Type: Helios Homefill Salter Labs Other Precision Medical Easy Pulse 5
Prescription Setting 2
If SpO₂ is ≤ 90%, increase flow by one setting

	Rest	ADL 1	ADL 2	ADL 3	ADL 4	ADL 5	ADL 6	Recovery
RR	22	28	34	26	27	30		25
SpO ₂	92	85	90	88	87	84		94
HR	77	95	96	95	100	98		86
SETTING	2	2	3	4	5	5		

Smart Dose™
Prescription Setting 2
If SpO₂ is ≤ 90%, increase flow by one setting
If SpO₂ is ≥ 95%, decrease flow by one setting

	Rest	ADL 1	ADL 2	ADL 3	ADL 4	ADL 5	ADL 6	Recovery
RR	23	37	32	34	36			29
SpO ₂	98	94	93	95	93			98
HR	84	94	104	105	107			88
SETTING	2	2	2	2	2			2

COMMENTS-Both test stopped prior to completion of 6 min walk, pt stated she was too tired to continue.

RESULTS: Optimal Device-Smart Dose
Optimal Setting at Rest-2
Optimal Setting with Activity-2

Respiratory Care Practitioner: [Redacted] Date:10/14/2009

