



**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 Homefill 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 (Homefill), the patient was in acceptable ranges during rest, but desaturated in the second minute of ADL's to 88% SpO<sub>2</sub>. The unit was adjusted upward to 3, then 4, at which point, the unit appeared to properly saturate the patient.

The patient was then rested and placed on SmartDose at a 2 setting. The patient exerted through 6 ADL tests without desaturation, and had SpO<sub>2</sub> averages greater than 95% SpO<sub>2</sub>. Note that after the 2<sup>nd</sup> ADL, the SmartDose unit was turned down to a 1 setting and still maintained patient saturations over the remainder of testing.

**Conclusions:**

This patient was not adequately treated with her current device. In theory, if the patient could manually titrate well enough, the device could maintain SpO<sub>2</sub>, but would require constant monitoring and adjusting. The patient was able to maintain saturations with the SmartDose unit at a 1 setting. SmartDose adjusted the dose to maintain saturations over rest and exertion periods. 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 #: [redacted]  
 Address: [redacted] City/State: [redacted]  
 Phone: [redacted] Physician: [redacted]

Conserved Device  
 Conserved Device Type:  Helios  Homefill  Salter Labs  Other

Prescription Setting: 2

*If SpO<sub>2</sub> is ≤ 90%, increase flow by one setting*

	Rest	ADL 1	ADL 2	ADL 3	ADL 4	ADL 5	ADL 6	Recovery
RR	21	21	34	41	38	40	38	29
SpO <sub>2</sub>	98	95	88	89	92	92	90	97
HR	85	86	120	123	119	118	120	85
SETTING	AA	2	3	3 → 4	4	4	4	4

*Exercise @ 4 ipm Sats ↓ HR ↑*

**Smart Dose™**  
 Prescription Setting: 2  
*If SpO<sub>2</sub> is ≤ 90%, increase flow by one setting*  
*If SpO<sub>2</sub> is ≥ 95%, decrease flow by one setting*

	Rest	ADL 1	ADL 2	ADL 3	ADL 4	ADL 5	ADL 6	Recovery
RR	21	28	39	34	35	33	41	26
SpO <sub>2</sub>	98	98	95	94	93	94	93	98
HR	85	106	102	99	94	66	76	85
SETTING	AA	2	2	1	1	1	1	1

**COMMENTS:**  
 SmartDose higher Sats @ 1  
 ↳ Add 2 hrs to Duration/fill

**RESULTS:** Optimal Device- smart Dose      Optimal Setting at Rest- AA  
 Optimal Setting with Activity- 1

Respiratory Care Practitioner: [redacted]      Date: 10/12/09

FORM codr pt 7109

*Handwritten notes:*  
 Recovery HR ↓ down  
 Homefill = 95  
 SmartDose = 85  
 Wow!  
 Homefill @ 4 → 92-89  
 SmartDose @ 1 → 94-93  
 Sats HR  
 Homefill 4 → 92-89 123-118  
 SmartDose 1 → 94-93 79-66

