nVISION®
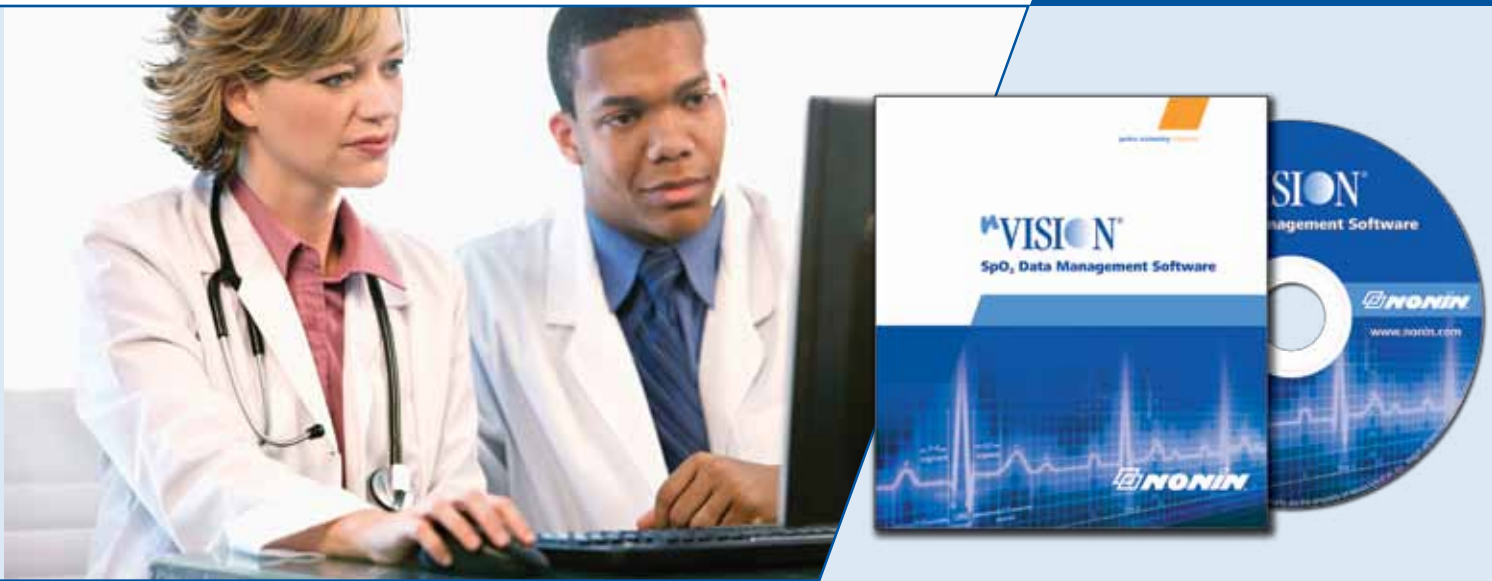## SpO$_2$ Data Management Software

nVISION SpO$_2$ data management software for sleep screening and 6MWT reporting is a powerful, easy-to-use oximetry data analysis tool designed to increase productivity and decrease administrative costs.

NONIN®

Comprehensive SpO₂ Data Reporting

Nonin's innovation in pulse oximetry has led to the development of an easy oximetry reporting solution – nVISION®. Designed to provide effortless viewing, professional analysis, report generation and reliable data storage – the powerful nVISION software package is a cost-effective solution for sleep screening and 6MWT applications.

The simple functionality of nVISION makes it useful for nearly any screening situation where an accurate reading of blood oxygen saturation and pulse rate is needed.
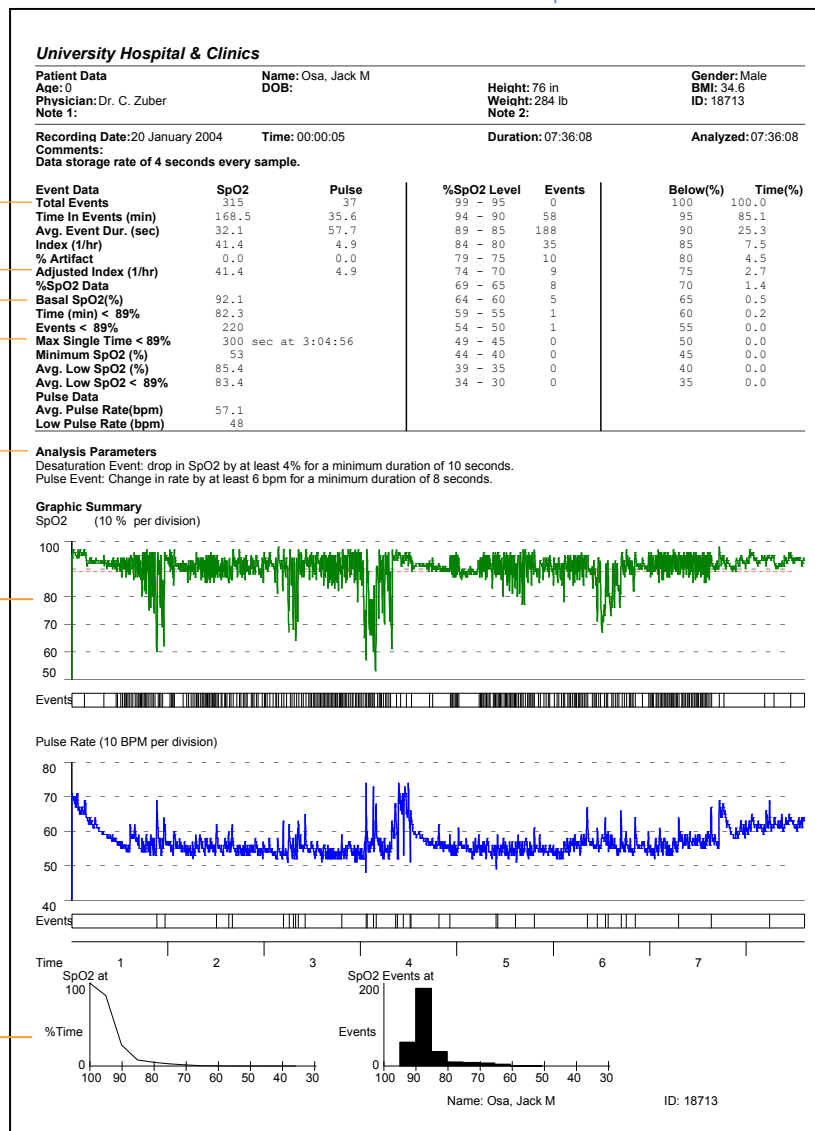
Sleep Lab

Nonin Knows Sleep. For more than a decade, Nonin has been the preferred technology in sleep lab systems worldwide. Designed to streamline the overnight sleep study process, our wide range of oximetry devices and software analysis tools are equally effective in lab or home environments. And with our proven superior accuracy and ease-of-use, you can rest easy knowing that your collected data results are correct – the first time.

Oximetry Report

Provides a concise one-page summary for fast interpretation of numeric data.

Total Events
Total desaturation events defined by user

Adjusted Index
Number of events per hour

Basal SpO₂
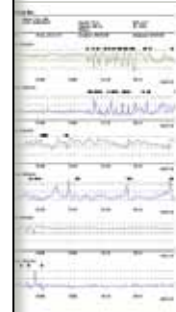Average SpO₂ not associated with events

Max Single Time < 89%
Longest continuous time below user-defined threshold

Analysis Parameters
User defined event criteria

Graphic Summary
Graphical representations for quick assessment

University Hospital & Clinics

Patient Data			
	Name: Osa, Jack M		Gender: Male
Age: 0	DOB:		BMI: 34.6
Physician: Dr. C. Zuber		Height: 76 in	ID: 18713
Note 1:		Weight: 284 lb	
		Note 2:	

Recording Date: 20 January 2004   Time: 00:00:05   Duration: 07:36:08   Analyzed: 07:36:08
Comments:
Data storage rate of 4 seconds every sample.

Event Data	SpO2	Pulse		%SpO2 Level	Events		Below(%)	Time(%)
Total Events	315	37		99 – 95	0		100	100.0
Time In Events (min)	168.5	35.6		94 – 90	58		95	85.1
Avg. Event Dur. (sec)	32.1	57.7		89 – 85	188		90	25.3
Index (1/hr)	41.4	4.9		84 – 80	35		85	7.5
% Artifact	0.0	0.0		79 – 75	10		80	4.5
Adjusted Index (1/hr)	41.4	4.9		74 – 70	9		75	2.7
%SpO2 Data				69 – 65	8		70	1.4
Basal SpO2(%)	92.1			64 – 60	5		65	0.5
Time (min) < 89%	82.3			59 – 55	1		60	0.2
Events < 89%	220			54 – 50	1		55	0.0
Max Single Time < 89%	300 sec at 3:04:56			49 – 45	0		50	0.0
Minimum SpO2 (%)	53			44 – 40	0		45	0.0
Avg. Low SpO2 (%)	85.4			39 – 35	0		40	0.0
Avg. Low SpO2 < 89%	83.4			34 – 30	0		35	0.0
Pulse Data								
Avg. Pulse Rate(bpm)	57.1							
Low Pulse Rate (bpm)	48							

Analysis Parameters
Desaturation Event: drop in SpO2 by at least 4% for a minimum duration of 10 seconds.
Pulse Event: Change in rate by at least 6 bpm for a minimum duration of 8 seconds.

Graphic Summary
SpO2   (10 % per division)

Pulse Rate (10 BPM per division)
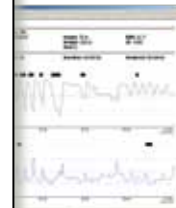
Name: Osa, Jack M   ID: 18713

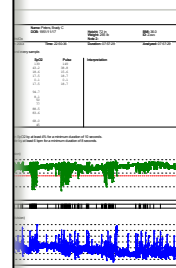## Featured Standard Reports

Full Study Report

Full Study Report
Gives you the ability to print a complete graphical representation of the entire recording.

Strip Chart Report

Strip Chart Report
Allows a quick review of the data and allows you to modify the analysis parameters/perform edit functions.

Summary Report

Summary Report
Similar to the Oximetry Report, with space provided for electronic study annotations.

6MWT Report

University Hospital & Clinics

Patient Data		
Age: 56	**Name:** Thompson, John W	**Gender:** Male
Physician: Smith	**DOB:** 1951/11/21	**Height:** 72 in / **BMI:** 37.4
Note 1:		**Weight:** 275 lb / **ID:** 123456
		Note 2:

Recording Date: 29 September 2008	**Time:** 14:02:22	**Duration:** 00:08:12	**Analyzed:** 00:08:12
Comments:			

Test Location: Indoors
Walking Aids Used: None **Supplemental Oxygen:** None
Reason for Testing: Exertional Dyspnea

Electronic Data Entry Fields

Testing

Time	O2 (l/min)	SpO2	PR	BP	Dyspnea	Rest (sec)	Comment
Baseline		98	70	118 / 80	1		No pain
0:30		99	70				
1:00		99	66		3		
1:30		96	74				
2:00		98	81		5		
2:30		98	76				
3:00		99	78		5	25	3:25-3:50
3:30		98	80				
4:00		98	77				
4:30		98	79				
5:00		99	77		4	20	5:10-5:30
5:30		97	82				
6:00		98	84		4		

Recovery

Time	O2 (l/min)	SpO2	PR	BP	Dyspnea	Rest (sec)	Comment
0:30		98	84				
1:00		99	75	138 / 92	3		Slight pain R rib under R breat 3-4 "like a cramp"
1:30		98	76				
2:00		97	82				

Distance per Lap: 100.00 feet   **Number of Laps:** 2.50   **Total Distance Walked** 250.00 feet

Number of Stops: 2   **Total Time Stopped (seconds):** 45
Reason for Stops: Fatigue

Medications:

Comments:
Will begin exercise and supplemental O2 based on walk test results. Reassess the program to maintain required distance and should not need O2.
Will begin on all modalities, including bike and treadmill as tolerated. Will do 5 min on each & increase to 20 min as able.

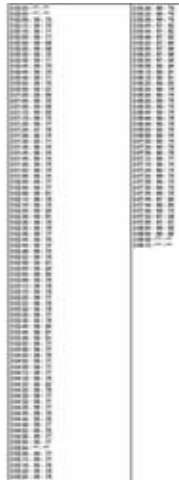Physician Signature

Date

Performed By

Patient Sticker

Name: Thompson, John W   ID: 123456

Automatically populates SpO₂ and pulse data

User selectable 30 sec./1 min. reporting

Automatic Distance Calculator (ft./m)

Raw Data Log

Cardiopulmonary Rehab

Six-Minute Walk Report (6MWT)

Say goodbye to the tedious task of manually logging a patient's SpO₂ at the 30 second/one minute intervals during the 6MWT.

nVISION's convenient new 6MWT report saves you time by automatically populating a formal report with the necessary SpO₂ data — allowing you to focus on observation and recording comments. Also included in the report is a complete record of all four second data samples taken during the study.

Data Management Made Simple

▶ **Record:** nVISION is compatible with all Nonin brand handheld and tabletop pulse oximeters with memory (excluding PulseSense™ and LifeSense®).

▶ **Transfer:** nVISION allows a seamless transfer of data from the pulse oximeter to your computer.

▶ **Analyze:** Analyzing patient information has never been this easy. nVISION's comprehensive tools allow you to take oximetry analysis as far as you need to go.

▶ **Report:** The reports are easy to customize and user-selectable scaling makes it convenient to zoom in on specific data segments.

▶ **Archive:** Upon completion of printing the reports, you can store all the data in the patient data folder, export to an ASCII file for further analysis, or save as a PDF to file in your Electronic Medical Records (EMR).

Powerful Editing Capabilities

▶ **Detailed Data Assessment:** Automatically calculates and displays statistical summary results for selected areas of interest.

▶ **Adjustable Analysis Parameters:** This feature provides the flexibility to perform case-specific data analysis and is especially useful when additional sensitivity is desired during data review.

▶ **Separate Analysis:** Independently adjust the criteria for pulse and desaturation events.

▶ **Universal Units of Measure:** Recognizable standards expands this tool for worldwide clinical use.

▶ **User-Defined Field:** Add case-specific information for documentation.

▶ **Default Settings:** Convenient reset function for analysis parameters.

nVISION®

A Cost-Effective Solution

Customize Your Views

Exclude Data
- Mark the artifact or suspect data and focus on specific events critical for analysis.

Adjustable Display Parameters
- Easily adjust the X and Y scaling to customize your analysis. This feature allows you to see the entire study at once or view the expanded data minute-by-minute.

Software Highlights

Based on the Windows® platform, this intuitive tool offers customized settings/parameters and quick access for efficient and immediate data interpretation.

Oximetry
- Automatically calculates the results for comprehensive analysis
- Easy graphical correlation between saturation and pulse events

"What If" Scenarios
- User-selectable analysis parameters: SpO_2, Pulse, Respiratory Rate (9840 only)
- Immediate re-analysis and feedback
- Flexibility to perform case-specific data analysis
- Useful for data requiring additional sensitivity

Editing
- Events are marked and color-coded for easy reference
- Assess specific segments through statistical summary function
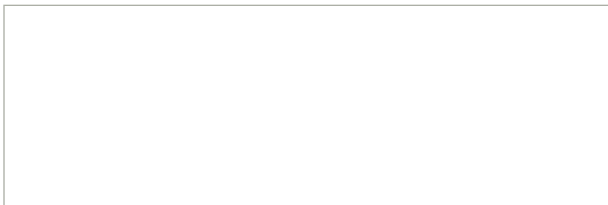- Case-specific information can be added for documentation

Reporting Options
- Convenient pre-set report categories
- Six-Minute Walk Test (6MWT)
- Adjustable time scaling
- Print entire recording and/or specified segments for documentation

Archival
- Simple search function provides quick retrieval of patient records
- Store multiple patient records
- Save as PDF in EMR

Product Highlights

- **Powerful**
  Comprehensive data analysis

- **User-Friendly**
  Intuitive Windows®-based application with online help

- **Flexible Reporting**
  Choose from several pre-set report categories

- **Improved Productivity**
  Simple and fast editing

- **Convenient**
  Customized views and instant data access

Authorized Distributor:

System Requirements:
PC compatible
Windows® 2000, NT 4.0, XP, Vista
One serial communications port
16MB memory
10MB free space on hard drive

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