

ISSUE 1, 2006

Going Paperless at Baptist realises significant efficiency and productivity dividends



Recently we approached one of our valued customers in the USA to share their experiences concerning their unique implementation of our ProFusion NeXus Lab Management System. Through cooperation with their IT department and sheer determination, they were able to create a paperless lab with complete Electronic Medical Records in order to increase efficiency and improve lab productivity. Following are excerpts from our conversation.

The Experience of RUNNING PAPERLESS:
Comments from the Director of Sleep Services Mr. Massey Arrington when asked about setting up their lab.

"We went paperless with the Compumedics system in February 2005.

We include everything: Physician's notes, sleep questionnaires, history and physical, CPAP prescriptions, registration and consent forms – absolutely everything that you would find in a "normal" patient chart is in our "virtual" chart within ProFusion Nexus.

In our case, we actually save time with Compumedics and

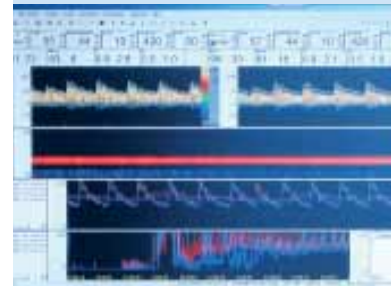
ProFusion Nexus over traditional chart filing by using high speed scanners; whereas low-end scanners can crash, eat important medical documents and consume too much time to make it efficient.

To my knowledge, no one in the Southeast has taken the full advantage of your software the way we have. We run 16 beds a night, 6-7 nights a week. We have a 72 hour turnaround time with Compumedics i.e. – our tracings are scored, reviewed and a report generated within 72 hours. Prior to adding the ProFusion PSG and ProFusion Nexus system, we were utilising outdated software that we had used for over 12 years. It often took us 3-5 weeks to complete the process that ProFusion Nexus now allows us to do in just a couple of days."

[MORE ABOUT BAPTIST SLEEP INSTITUTE ON PAGE 2 →](#)

INSIDE

- **BAPTIST SLEEP INSTITUTE** ②
 - Lab Background
- **INTERNATIONAL UPDATE** ③
 - Our Chinese partners
 - Client highlight – Dr. Zhang Xi-long
- **PRODUCT UPDATE** ④
 - FDA market clearance for the Compumedics DL Doppler Box



A screen shot of the Doppler Box software.

- **EVENTS DIARY** ⑤

Baptist Sleep Institute

Lab Background

Baptist Sleep Institute, Knoxville, Tennessee, USA

The lab was begun by Dr. Rosanne Barker in 1986. At that time it was a 1 bed program. The Sleep Institute has grown to 16 beds at 2 locations (8 beds each at East Baptist and West Baptist) over the past 20 years.

With two locations in Knoxville, each providing comprehensive care, the Baptist Sleep Institute is one of the largest sleep programs in the Southeast and is fully accredited by the American Academy of Sleep Medicine.



Background of Dr. Rosanne Barker

For more than 19 years, Dr. Rosanne Barker has served as the Medical Director for the Baptist Sleep Institute.

Dr. Barker is board certified by the American Board of Sleep Medicine and is a fellow in the American Academy of Sleep Medicine. She is a published author and editor, with articles appearing in USA Today, MD News, Sleep Talk and additional publications, and she has appeared on a variety of nationally syndicated television shows.

Dr. Barker maintains membership in the American Medical Association, the American Academy of Sleep Medicine, the American Academy of Neurology and the American EEG Society. She has been practicing sleep medicine full-time for more than 16 years in Knoxville, where she is an active member of the community, serving on various boards including the Baptist Health System Foundation Board of Directors, the Holston United Methodist Home for Children Board of Directors and many others.



Background of Massey Arrington

Massey Arrington, RPSGT MBA
Director Sleep Services
Sleep Institute BHET/BHW

Massey graduated from Tulane University in 1992 with a Bachelor's Degree in Business. He immediately started working in the field of Sleep Medicine and was Registered by the BRPT in 1993. In 2000 He received his masters degree in Business Administration from Vanderbilt University. He has worked as a Technical Director of Sleep Centers for over 11 years.

Massey has been the driving force of implementing the Compumedics solution in the lab. He has worked closely with Compumedics personnel and the lab's own staff and IT people to make the paperless lab a possibility and to customise a solution that meets the needs of their practice.

THE CHINA CONNECTION

Compumedics promises complete coverage of the entire Chinese region, having recently split the important Chinese market into North and South.

Joining our existing agent **Bestmed** selling the Sleep product portfolio in the Northern region, **Celki Medical Company** was given the exclusive rights to sell Compumedics sleep diagnostic equipment in the Southern areas of China.

Executive Chairman and CEO of Compumedics, David Burton commented that Celki will provide Compumedics with stronger coverage of China in the South with our existing, long term and highly respected distributor, Bestmed already covering the North of the country.

"The China market is growing exponentially following the entrance of China into the World Trade Organisation. The major impact of this is that imports of foreign equipment and expertise have increased significantly.

Furthermore China has also recently changed its policy allowing physicians to train overseas, fuelling even stronger demand for quality and sophisticated medical diagnostic systems", he added.

Compumedics already has diagnostic equipment installations in some of China's leading hospitals including government hospitals, military hospitals and major teaching hospitals in cities such as Beijing, Nanjing, Shanghai and Xian.

This distribution agreement reinforces Compumedics position as a world leader in sleep diagnostics and strengthens our presence throughout China by enhancing our distribution capabilities in equally in both North and South China.



Staff from Celki Medical Company.

CLIENT PROFILE



Dr. Zhang Xi-long is the director of the Sleep Laboratory in the Department of Respiratory Medicine at The First Affiliated Hospital of Nanjing Medical University (Jiangsu Provincial People's Hospital). He has been with the Department for over five years. He started his career some 10 years ago and is today one of China's key opinion leaders in sleep medicine.

The sleep laboratory runs sleep studies four nights a week.

His areas of interest are geriatric sleep medicine. He also has interests in the sleep associated areas of cardiology.

Dr. Xi-long Zhang has been a client of Compumedics for more than five years.

Papers published by Dr. Zhang Xi-long

- Investigation on Risk Factor of Vascular Thrombotic Diseases in Patients with Obstructive Sleep Apnea Hypopnea Syndrome Pp. 15-17
Zhang Xilong, Yin Kaisheng, Jia Enzhi and Wang Hong
Vascular Disease Prevention, January 2006 Vol 3, No. 1: 15-17
- Vascular Endothelial Function Change in Elderly Chinese Patients with Obstructive Sleep Apnea and its Association with Coronary Heart Disease
Zhang Xilong, Yin Kaisheng, Jia Enzhi and Wang Hong
Vascular Disease Prevention, Vol. 2, No. 3, 2005 : 187 -189
- Serum adiponectin levels in adult male patients with obstructive sleep apnea hypopnea syndrome
Zhang Xilong, Yin Kaisheng, Wang Hong and Su Shicheng
Respiration, Sept 30, 2005 PMID: 16205042
- Effect of continuous positive airway pressure treatment on elderly Chinese patients with obstructive sleep apnea in the prethrombotic state.
Zhang Xilong, Yin Kaisheng, Wang Hong, Su Mei and Yang Yu
Chinese Medical Journal, Sept 2003, 116(9):1426-8.
- Relationship between sleep apnea hypopnea syndrome and cardiovascular events in elderly Chinese snorers
Wang Hong, Zhang Xilong, Yang Yu, Yin Kaisheng, and Huang Guiqin
Chinese Medical Journal, 2002:115(12): 1829-1832

Compumedics has been active in China since the 1990s.

We have invested in the market via numerous education activities for sleep, neuroscience and transcranial Doppler (TCD) in various locations in China. Of note were the Prof. Colin Sullivan sleep lectures in 2005 and the Prof. Jack Clausen's sleep courses in 2004. Compumedics continues to invest in educational activities which includes the annual Compumedics Neuroscan Scan Schools, Compumedics DWL TCD courses and Compumedics ProFusion PSG Proficiency sleep courses.



Sleep School in China.

Other notable Compumedics clients in China

- Beijing Children's Hospital
- North District Hospital, Hong Kong
- Military University number 1
- Military University number 2
- Xian University Hospital
- GuangXhou Children's Hospital
- Shanghai People's Number 9 Hospital (Shanghai Fu Dan University)

Doppler Box



Compumedics DWL division is pleased to announce it has received US Food and Drug Administration (FDA) market clearance for our new Transcranial Doppler system: The Doppler Box.

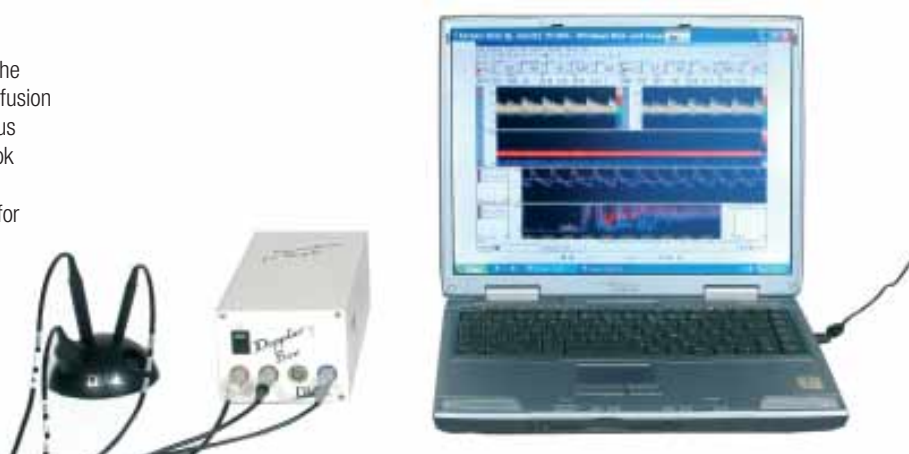
Transcranial Doppler (TCD) provides a painless, non-invasive method of evaluating the blood flow in intracranial vessels. An Ultrasound signal is used for checking the blood flow velocities within the intracranial vessels. Some of the vessels commonly interrogated include the terminal internal Carotid (ICA), Middle (MCA), anterior (ACA) and posterior cerebral arteries (PCA) from a temporal approach and the vertebral and basilar arteries from a posterior approach.

Indications for use: TCD has been recognised as of value in the following areas: Sickle Cell Disease to determine optimum transfusion points, evaluate the severity of Vasospasm (post SAH), continuous monitoring during Coronary Artery Bypass Surgery (CABG) to look for critical changes in cerebral circulation and allow timely intervention, and in Endarterectomy surgery to determine need for shunts and critical closing pressures. In addition TCD has been used for all phases of evaluation and treatment of ischemic Stroke and TIA including administration of TPa clot busting drugs, evaluation of cerebral circulatory arrest (Brain

death), and to monitor for the presence of embolic events during surgery and in the diagnosis of patent foramen ovale (PFO).

The Compumedics DWL Doppler Box is 100% digital technology and weighs less than 5 pounds. It is unique in that it interfaces directly with any laptop computer via an Ethernet connection. Doppler Box capabilities: runs 1, 2, 4, 8 and 16MHz, H.I.T.S. detection, 32 channels Dynamic M-Mode Doppler display, multiple spectral displays for all applications, dedicated CO₂ and vasomotor response software, custom reporting.

Contact us for a demonstration and to learn more about the Doppler Box.



The Products of Compumedics DWL:



EZ-Dop®/
Smart-Dop®



Multi-Dop® X



Embo-Dop®



Multi-Dop® T



Hemo-Dop®/
Hämo-Dop®

OUTSTANDING FEATURES AND BENEFITS:

- Latest digital technology
- Outstanding signal quality
- Unilateral or bilateral monitoring (optional)
- Special Function Tests: CO₂ reactivity/Vasomotor/ Evoke Flow/Autoregulation (optional)
- Emboli Detection (optional/later release)
- Unique Emboli Differentiation using special patented multi-frequency probes (2/2.5 MHz) (optional/later release)
- Probe frequencies 1, 2, 4, 8 and 16 MHz
- CW and PW modes for 4 and 8 MHz probes
- Audio playback
- Records patient database
- Report generator capabilities
- Universally used Microsoft™ Windows* platform
- Ethernet connection
- CE 0123, FDA

For more information on this product, please contact your local representative or email marketing@compumedics.com.au

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DATE	AREA	PLACE	WEBSITE
Feb-06			
ASA – American Stroke Association International Stroke Conference 2006	16 – 17 February	D Florida, USA	www.strokeconference.org
Mar-06			
ASN – American Society of Neuro imaging	2 – 5 March	N California, USA	www.asnweb.org
Diagnosing & Treating Sleep Disorders in Children & Adults	3 March	S Maine, USA	www.mmc.org
Conference on the Slopes	8 – 10 March	S Pennsylvania, USA	www.cscouncil.com
Washington Regional Medical Centre Spring Sleep Seminar 2006	11 March	S Arizona, USA	www.wregional.com
Regional Scan School – Los Angeles	13 – 14 March	N California, USA	www.neuroscan.com
NESS – North East Sleep Society	17 – 18 March	S Rhode Island, USA	www.northeastsleep.org
Spain Scan School	21 – 23 March	N Granada, Spain	www.neuroscan.com
Nexus ProFusion Training	22 – 24 March	S Texas, USA	N/A
4th Compumedics Neuroscan China School	20-24 March	N Beijing, China	www.neuroscan.com
Theoracic Society of Aus & NZ, Annual Scientific Meeting (TSANZ)	24 – 29 March	S Canberra, Australia	www.thoracic.org.au/asm2006.html
DGKN Giessen	22 – 26 March	N Bad Nauheim, Germany	http://dgkn2006.conventus.de/
Sleep Medicine Course	27 March – 1 April	S Edinburgh, Scotland	www.show.scot.nhs.uk/sleep/education.html
Apr-06			
AAN – American Academy of Neurology	1 – 8 April	NS California, USA	www.aan.com
CNS – Cognitive Neuroscience Society	8 – 11 April	NS California, USA	www.taramillerevents.com/cns2006/index.html
MMN 2006 – International Conference on Mismatch Negativity	22 – 26 April	N Cambridge, England	www.mrc-cbu.cam.ac.uk/EEG/MMN2006/index.html
Southern Sleep Society	27 – 30 April	S Florida, USA	www.southernsleepsociety.org
MagLink Presentation	28 April	N Hamburg, Germany	N/A
May-06			
Australian Association of Neurologists Annual Scientific Meeting	1 – 5 May	NS Canberra, Australia	www.icms.com.au/aan2006
fMRI MagLink Boot Camp	TBA	N Tennessee, USA	www.neuroscan.com
ISMRRM	6 – 12 May	N Washington, USA	www.ismrm.org/06/tech
Regional Scan School – Chicago	22 – 23 May	N Illinois, USA	www.neuroscan.com
APS – American Psychological Society	25 – 26 May	N New York, USA	www.psychologicalscience.org/convention
DWL Doppler End User Training	30 May – 1 June	D Singen, Germany	N/A
European Neurological Society (ENS)	27 – 31 May	N Lausanne, Switzerland	www.ersnet.org/

THE COMPUMEDICS DIVISIONS

Defining Life's Signals

Compumedics' operations consist of five divisions – each with its own product focus:



Compumedics Sleep
Clinical Diagnostic Systems
for Sleep Disorders



Compumedics Neuroscience
Clinical Diagnostic Systems
for Neurophysiology



Compumedics Neuroscan
World-leading Research
EEG/ERP systems



Compumedics NeuroMedical Supplies
Electrodes, sensors
and supplies for Neurology
and Sleep laboratories



Compumedics DWL
Ultrasound Doppler Systems

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SUGGESTION BOX

The Compumedics Vista Update is for you – our valued customers. Any comments, suggestions or feedback you may have on Compumedics Vista would be greatly appreciated.

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