



# *DanMedical Analysis System*





### **DanMedical Analysis System**

The DanMedical Analysis System, "D-MAS", uses the platform of a medical grade Laptop PC, uniquely designed by DanMedical, to visually display and electronically capture, interpret, and communicate patient monitoring results and digital imaging, from and to any on-line location in the world. This means that D-MAS is a new and unique class of medical diagnostic and patient monitoring technology that possesses outstanding Telemedicine capability, delivering significant benefits in any remote, rural and urban healthcare system.

The live data is automatically captured, displayed and saved. This means that if the link is lost or a live connection is not required all the data can be saved then sent to a data base server of choice, or via compressed and encrypted email to a chosen specialist anywhere in the world. Litigation, hospital acquired infections, data protection and carbon foot print targets are also managed within the process of using D-MAS.



### **Summary**

- Unique self contained Laptop PC based medical device
- Visually displays & electronically captures, interprets and remotely communicates physiological screening results such as Blood Pressure, Pulse, Pulse Oximetry, Spirometry, Resting ECG, and Extended Cardiac Care Heart Monitoring along with digital imaging for Dermatology, Wound Care, Tissue Viability and General Examination.
- Communicates to and from any on-line location in the world for immediate healthcare support
- 2 way video conference consultation capability during patient monitoring
- Multi discipline Telemedicine medical device solution
- Ability to customise and enhance functionality
- Integrates with an organisations existing infrastructures and electronic patient record systems
- Significantly improves management of healthcare emergencies, unscheduled care and the referral process
- Applications;
  - National & International Healthcare Systems
  - Private Healthcare
  - Repatriation services
  - Occupational Health, Health Surveillance and Health Promotion
  - Industry & Exploration
  - Airlines, Commercial and Passenger shipping
  - The Military
  - Hyperbaric & Saturation diving chambers
  - Remote & Rural Healthcare
  - Emergency Response & Unscheduled Care Assessment and Diagnosis
  - Remote Monitoring of Long Term Conditions
  - Prison healthcare
  - Telemedicine services

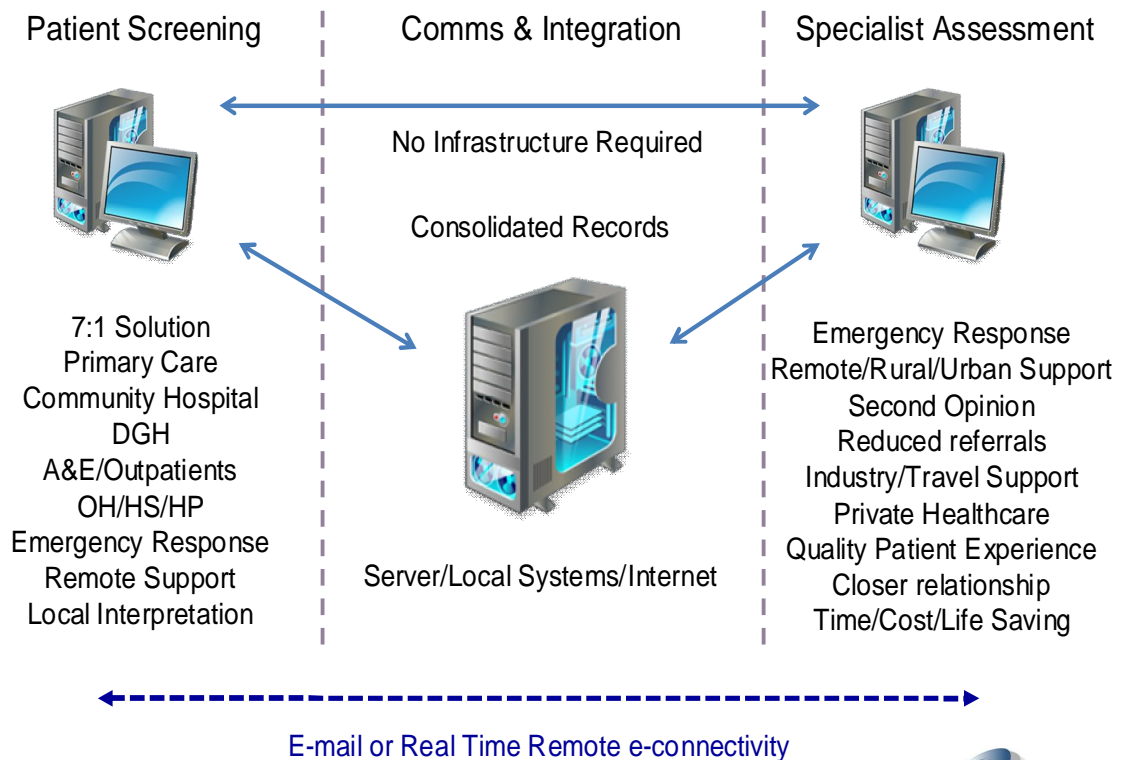
D-MAS delivers substantial efficiencies, whilst at the same time improving the patient experience, and importantly without the need to re-engineer existing communication links and infrastructures.





## Data Flow

### Flow of D-MAS Physiological Screening Results



Commercial in Confidence.  
Copyright DanMedical Ltd

[www.DanMedical.com](http://www.DanMedical.com)



DanMedical provides PC based medical devices and does not control, or attempt to control, any of the data produced from a procedure by a client. The data stays with the client at all times, and as such it is the decision of the client as to how, and where, the captured data is stored.





Is a unique medical grade laptop designed by DanMedical. It provides the healthcare professional with all the tools to electronically capture, interpret and communicate physiological screening and Digital Image results, as well as perform the usual day to day computing tasks in one easy to use complete solution. It has been developed for maximum flexibility and can be used in any location including away from the hospital/surgery or in the most inaccessible, remote settings and emergency situations.



All the functionality of the D-MAS Remote, adapted for use within Saturation Diving and Hyperbaric Chambers. The D-MAS HyperSat can communicate in real time from inside the harsh chamber environment to outside, and then on to shore based medical support if required, whilst automatically capturing the data.

The D-MAS HyperSat has been successfully tested for use in;

- Hyperbaric Chambers at 18msw of pressure within a 25% oxygen air mixture
- Saturation Diving Chambers to a depth of 450msw within a 98% Helium/2% oxygen atmosphere
- Saturation Diving Chambers to a depth of 450msw within a 98% Helium/2% oxygen atmosphere via immediate chamber hatch compression



#### **Core Features & Benefits**

- Removes the need to purchase separate equipment that performs individual tasks which do not link with each other or integrate with local systems
- No need to invest in new infrastructure and data management systems to accommodate
- Eliminates barriers to the flow of patient information
- Minimises system error and greatly improves the ability to hold consolidated, electronic patient records in one place and/or on a shared server
- Provides physiological screening results from, and to any on-line location in the world for immediate consideration by a specialist, in real time or via e-mail/server
- Delivers 2 way desktop Video Conference consultation capability whilst monitoring the patient
- Enhances the strategy of preventative healthcare and keeping the patient away from hospital
- Has a simple procurement method and implementation process
- Greatly improves emergency remote/rural response and diagnosis times

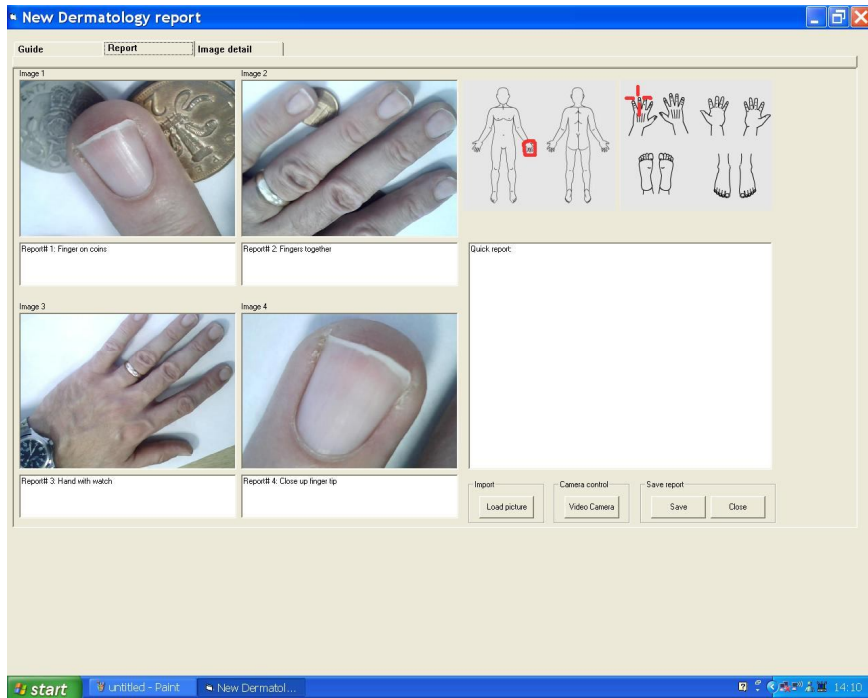
#### **Other Features**

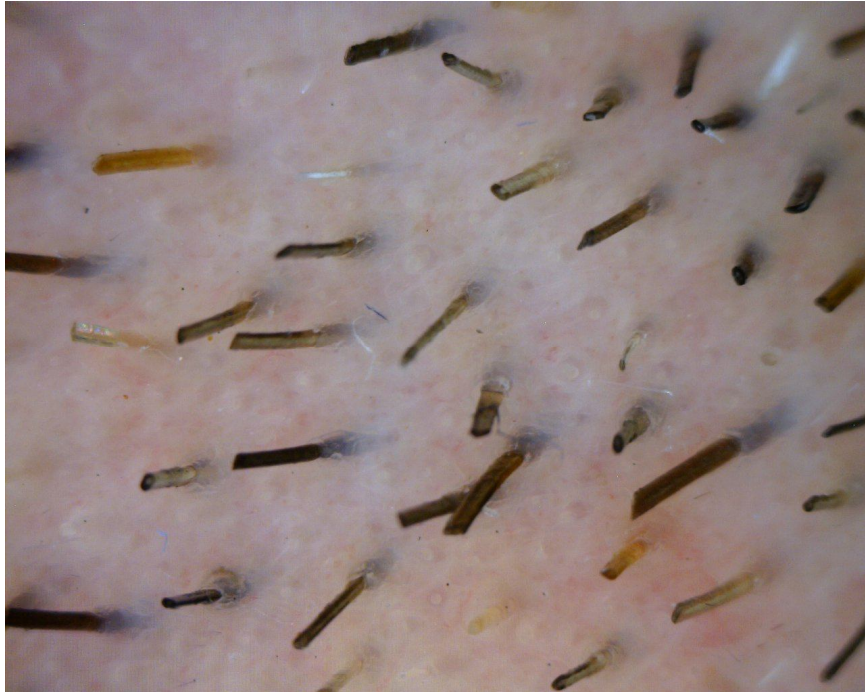
- Video conference consultation capability
- Real time remote connectivity, auto data capture and e-mail communication
- Secure viewing and encrypted patient information
- Full compatibility and integration with a clients existing infrastructures, data management systems and electronic patient records
- Ability to enhance D-MAS functionality with additional monitoring/diagnostic software
- Global wireless, satellite and hardwire connection from and to any on-line location



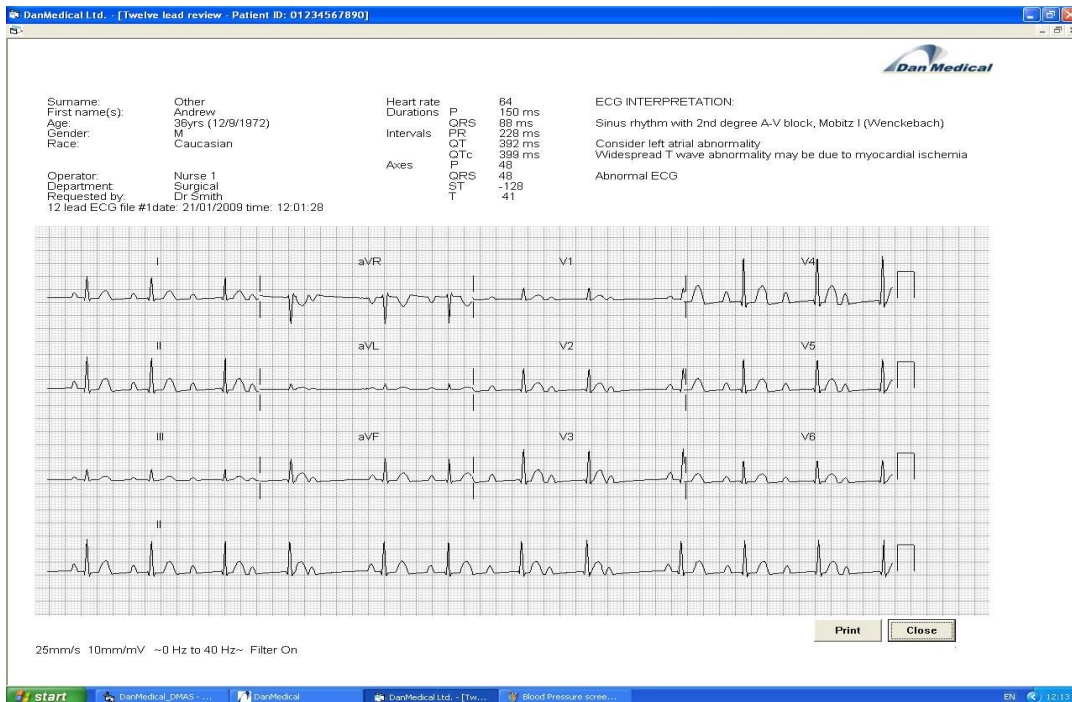


Imaging  
General Exam, Wound Care, Tissue Viability & Dermatology





**Resting ECG Report**

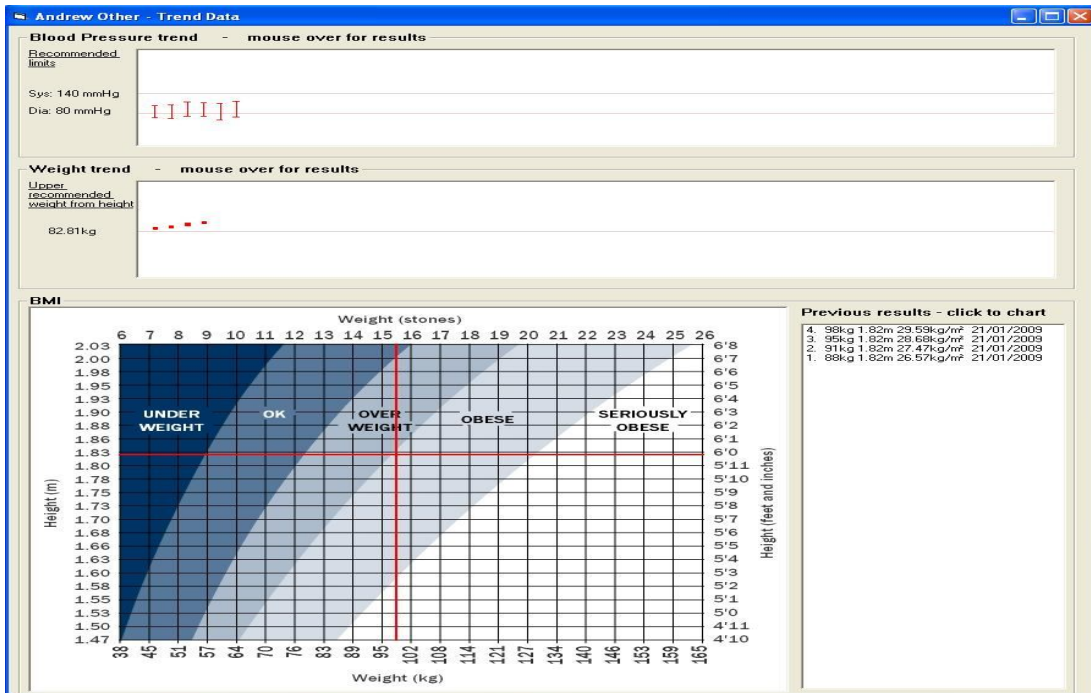




## Cardiac Care, Heart Monitoring & Extended ECG

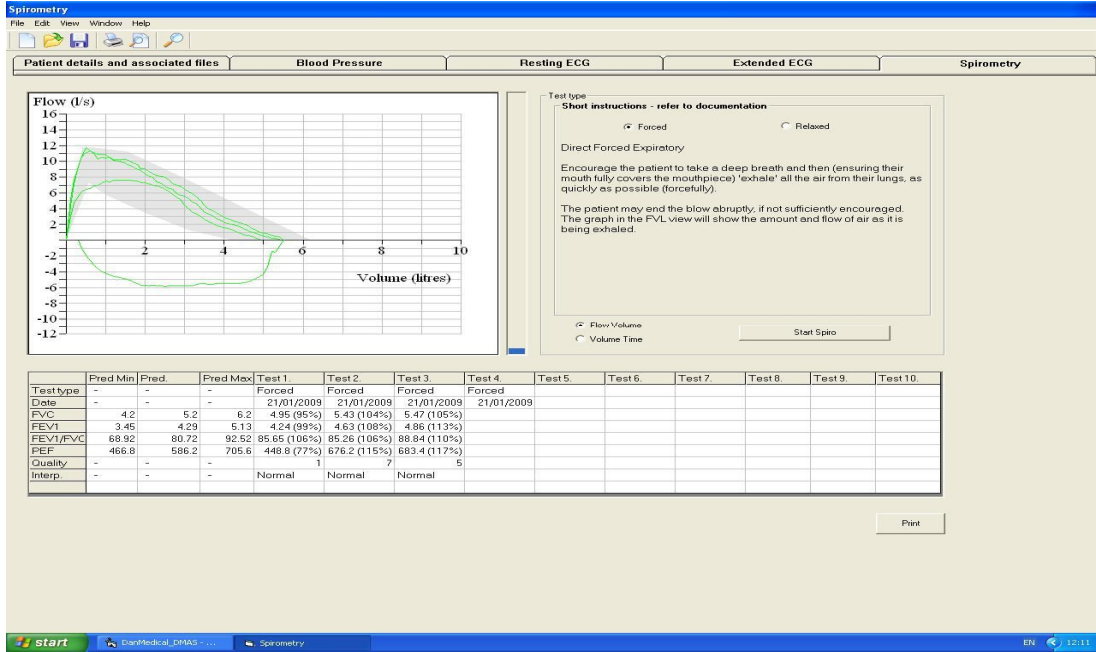


## Blood Pressure





## Spirometry & Lung Function



## Patient Data Screen

**Patient Details**

CHI / ID: 01234567890

First name(s): Andrew

Surname: Other

D.O.B.: 12/9/1972 Age now: 36 years

Gender: M Race: Caucasian

Height (m): Weight (kg):

Waist (cm): Hip (cm):

**Previous data:**

Height(m)	Weight(kg)	BM(kg/m <sup>2</sup> )	Waist(cm)	Hip(cm)	W/H ratio	Date
1.82	98	26.57	125	130	0.96	21/01
1.82	91	27.47	0	0	0	21/01
1.82	95	29.68	0	0	0	21/01
1.82	98	29.59	0	0	0	21/01

Operator: Nurse 1

Department: Surgical

Requested by: Dr Smith

Reason for test: Breathlessness

Notes: Breathlessness and chest pain.

Date/time: 21/01/2009 12:12:35

**Associated ECG files**

Resting ECG: 12 lead ECG file #1 date: 21/01/2009 time: 12:01:28  
12 lead ECG file #2 date: 21/01/2009 time: 12:03:44

Extended ECG: Extended ECG file #1 date: 21/01/2009 time: 12:12:27

**Associated Spirometry files**

Spirometry file: Spirometry data available

**Previous BP measurements**

Sys	Dia	(HR)	MAP	Date / Time
109	78	79	91	21/01/2009 11:48:41
111	76	74	90	21/01/2009 11:48:41
118	82	74	95	21/01/2009 11:50:50
117	83	78	95	21/01/2009 11:52:01
116	74	80	87	21/01/2009 11:53:04
120	81	85	87	21/01/2009 11:54:16

**Medication and Conditions**

Medication 1: undefined

Medication 2: undefined

Clinical Cond. 1: undefined

Clinical Cond. 2: undefined

**Risk Calculator**

BP Sys mmHg: 120 (mmHg)  Anti-Hypertensive Therapy

HDL Cholesterol: (mg/dml)  Smoker

Total Cholesterol: (mg/dml)

CHD: 5 Years

CHD: 10 Years (MI and Coronary Death) risk prediction







**DanMedical Ltd  
8 Castle Street  
Fortrose  
Inverness  
IV10 8TH  
Scotland  
United Kingdom**

**[www.DanMedical.com](http://www.DanMedical.com)**

**Tel 01463 210425**



**CE Mark - CE0120**

**ISO 13485 Certification**

**Medical Device Directive 93/42/EEC**

**SGS Authorised Body Approval and Certification**

**FDA 510K Approval**

