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Medulla - Medico Legal Reporting Software

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Medulla User Manual



Medico Legal Software



<http://www.tharbionics.com>

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Introduction

Medico legal case reporting is an important function of the Health department. All the patients involving accident, assault, poisoning etc. are brought for Medical examination and reporting. The medico legal reports are sent to police for further investigation.

The current medico legal reporting is done on paper and is a manual process starting from creating the report to sending the MLR (medico legal report) to the police and court of law.

What is Medulla

Medulla is a medico legal reporting software solution. Medulla automates the medico legal case reporting across the state with an added advantage of collection of important medico legal data for reporting, future projections and improvement in health services.

Medulla software enables better coordination and communication between

medical and law enforcement departments, there by providing improved facilities to the patients and the general public.

Features

Medico Legal Case (MLC) reporting.

Accused Medical Examination Reports

Bone Age Estimation Report

Medical Post-mortem Reports

Medical Exam for Driving License

Police Information

Court Affidavit for MLR record.

Medulla Software Provides

Reports in clear and easy to understand language.

Clear understanding of Medico Legal case by all stakeholders including medical professionals, police, lawyers and courts.

Graphical depiction of injuries.
Permanent storage and retrieval of reports in a central database.

Instant Information to police of the new cases.

Doctors can protect themselves from Legal issues by Accurate, Effective and to the point Medico Legal case reports.

Tool provides easy to use graphical user interface.

Point and Click injury information.

Prevents critical errors in reporting.

Medulla First Time Installation and setup

I. Introduction

A) Overview

B) Minimum Requirements

C) Recommended Requirements

II. Installation

III. Technical Support

I. Introduction

A) Overview

Medulla software provides most functionality needed by Doctors to Create and report Medico Legal Cases. The software provides graphical Interface to record patient injuries and also captures the patients biometrics Information in digital format.

B) Minimum Requirements

Medulla runs on Microsoft windows platform. Below are the supported Operating systems

Windows XP service pack 2 and above

Windows Vista

Windows 7

Minimum Display setting is 1024*768.

C) Recommended Requirements

Windows XP service pack 3 and above
or
Windows Vista with latest updates
or
Windows 7

Note: Windows 64bit operating system
is supported by Medulla.

1. Digital camera which can act as webcam
2. Pen Tablet Hardware (Digital signature pad)
3. Display setting recommended for better results is 1200*800 and above
4. For capturing fingerprints, Digital persona fingerprint reader hardware is recommended.

II. Installation

Software installation is started by clicking on setup.exe file from the Medulla Software CD.

If the Medulla software file is downloaded

from the website
<http://www.tharbionics.com>

Unzip the file using WinZip or any other software.

Click on the setup.exe.

Setup program check the following dependencies on the system

.NET runtime version 3.5 SP1

Crystal reports runtime

windows installer 3.1

Microsoft Tablet PC SDK
(only for windows XP)

If any of the above are found on the system, the setup skips the Component Otherwise, setup automatically installs all the required software.

III. Technical Support

Please refer to the Medulla troubleshooting guide for resolving the technical problems.

For technical support , please contact
Thar Bionics (P) Ltd.
through the Website
<http://www.tharbionics.com>

Getting Started

After the Medulla is successfully installed,
run the application from desktop medulla
icon

First Time Login using

Login: root

Password: mlr

The Medulla Administrator profile is loaded

Create a user profile by clicking,
on Master Data -> Add User

Fill all the fields in the User profile
Close the application after adding
the user profile

Launch the application and login with
the user login id, default password
for new user is medulla, which can be

changed after login.

If you have problems installing or using Medulla, please contact sales@tharbionics.com

Create New User Login:

Login to Medulla as “root” user

Login Id and password are case-sensitive.

Go to Master Data menu by clicking it, open Add user.

Add user detail screen will appear.

Enter the information for user.

Click Add.

Message will appear Login Id added successfully with default password: medulla. Click OK.

New Name will be added into user list and will be displayed in list.

Press Close.

New user is added and can use his account for creating Medico Legal reports.

Note: If the user is not a doctor, Limited access is granted to create the Medico Legal Reports.

Create a new MLR

From MLR menu click new. Shortcut key CTL+N can also be used from the keyboard.

New MLR entry form will appear.

MLR form displays the tabs depending on the user profile.

The tabs shown on the new MLR form depends on the user profile.

If the user is a doctor, all the tabs are displayed.

If the user is not a doctor, only the “General” and “Patient Information” tabs are shown.

Medico Legal reports created by non doctor users are always saved in the Edit mode.

Enter the MLR details.

Navigate through the tabs displayed to fill in the case information

If all the required information is entered, click the Save button to save it to the database.

Click Cancel, if you want to cancel the task. The changes will not be saved in the database.

Important: The medico legal reports created in the system can only be finalized by the Doctors.

Printing Medico Legal Report:

Open MLR list by clicking Open in MLR menu or by pressing CTRL+O.

MLR list will appear, Recent MLR's (Last Ten

MLR's), Status of MLR's (finalized or edit) will be shown.

Select particular MLR and right click, Open MLR.

If the MLR is in finalized (saved) state, MLR report is opened in a report viewer Form,

Click Print Icon on Toolbar.

Report is printed to the printer attached to the computer

Selection of Paper Size for Medico Legal Reports

The printing options for Paper Size and Portrait, Landscape are controlled by user setting.

Click on settings menu item under tools.

Select the Medico Legal Reports tab.

Choose the Medico Legal Report Format by selecting the appropriate option from drop down box.

Portrait on A4 Size, Portrait on Legal Size Paper, Landscape A4 Size etc.

The default option will print Portrait on A4 size.

Note: These settings are not applicable to the printing of Post-mortem, Police Information and Court Affidavits. They are printed on A4 size portrait.

Printing Police Information:

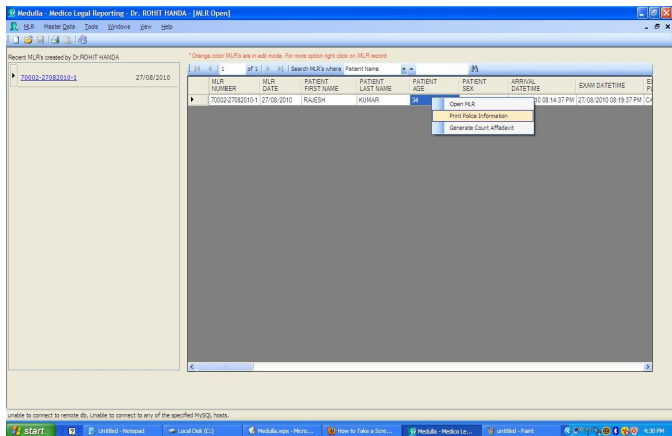
Open MLR list by clicking Open in MLR menu
or by pressing CTRL+O.

Recent MLR's (Last Ten MLR's), Status of MLR's (finalized or edit) will be shown.

Select particular MLR and right click.

In the context menu , click on "Print Police Information"

Police Information report is printed to the printer attached to the computer



Above screen is used to print existing MLRs, Police Information and to Generate Court Affidavit.

Court Affidavit:

Doctors can quickly generate the affidavit needed for court evidences from Medulla Software.

Select MLR record and right click. In the context menu , click on “Generate Court Affidavit”

A new form is shown , Enter all the information and click “Generate Affidavit”

Select the folder where the Affidavit

file will be stored and click “Save” Affidavit for the selected MLR will be generated.

Note:

- 1. The Affidavit is generated based on the information stored in the database and the information provided by the user.*
- 2. The output affidavit file format can be selected as RTF (rich text format) or DOC (word) document.*
- 3. Carefully review and edit the affidavit information as needed.*

Entering Injuries in the Medico Legal Report:

1. In the MLR form, Click Injury Tab.
2. In Left Side of Screen, Legends are shown with different types of injury types.
3. Select an injury type which is to be included in report by clicking on button next to it.

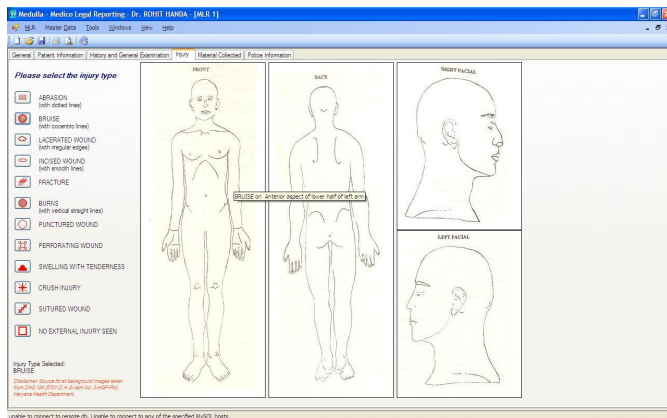
4. After injury type selection, when cursor is moved over the body sketch, the location is displayed with cursor movement.
5. Click on body part where injury is to be placed. A confirmation Message will appear
Press OK to continue or Cancel to abort.
6. After Clicking OK, Injury Details form is shown to enter the injury nature, type, duration etc..
7. Enter information in respective fields, Press OK.
8. Now Symbol of Particular injury can be seen on the body image.
9. To edit injury again, Click on the symbol.
Injury Detail Screen will be opened again.
Now all the fields can be edited again.
10. Press OK to save or Cancel to abort without

changes.

11.To delete the injury, right click on the injury and select delete option.

12.Injury can also be deleted by pressing delete key after the injury is selected.

Injury tab screen for selection and marking of Injuries.



Export Medico Legal Reports in PDF

Medulla software allows doctors to export the copy of saved MLR's in PDF format. The exported MLR's can be retained by Doctors for later use and reference.

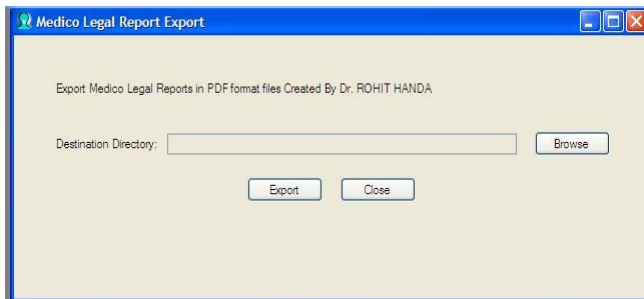
The MLR export function provides backup function to individual user.

Go to MLR main menu and click “Export”
Select Destination Directory by pressing
Browse.

Click Export, All MLR's created by logged
in user will be Exported in PDF Format
and will be
saved on the selected destination.

Specific user can Export MLR's created
by his account only.

Root user can export all medico legal
reports in the system.



Medulla screen to export reports in PDF

Accused Examination Reports

Doctors can quickly examine and report on the persons brought by police for medical exam. The biometric information of the patient can be captured and stored in the database.

The user interface for accused medical examination is the similar to the MLR. To create a new medical examination report. Click on the Medical Examination -> Accused

The screenshot displays a web application window titled "Medulla Medical Legal Reporting - Dr. Brian S. Smith - [MLR Accused Examination Report]". The interface includes a navigation menu with "General", "Patient Information", "History and General Examination", and "Notes". The main form is divided into several sections:

- Examination Date and Time:** Includes fields for MLR NUMBER (0001 Medical Examination Report), MLR DATE (03/09/2010), MLR ARRIVAL DATETIME (03/09/2010 03:15AM), MLR EXAM DATETIME (03/09/2010 03:15AM), and MLR EXAM PLACE (CASUALTY).
- Hospital Information:** Includes fields for HOSPITAL OPS NUMBER, HOSPITAL SOPS NUMBER, and a dropdown for REFER TO HOSPITAL/WARD.
- Patient Brought By Police:** Radio buttons for Yes (selected) and No.
- MLR Fee:** Radio buttons for Paid (selected) and Free.
- Patient Abandoned:** Radio buttons for Yes (selected) and No.
- Police Officer Detail:** Includes fields for POLICE NAME, POLICE DESIGNATION, POLICE BELL NUMBER (with a Search button), POLICE STATION, POLICE DISTRICT (POLYGLA), and POLICE COCKET NUMBER.
- Fee:** Includes fields for MLR FEE RECEIPT NUMBER, MLR FEE AMOUNT (100.00), and MLR FEE RECEIPT DATE (03/09/2010).

Medulla Accused Examination screen

Following Biometric information of the patient can be captured in the "Patient Information" tab in the form.

Photograph
Thumb Impressions
Signature

Important: The printed medical examination report prints the injury (if any) in the final report and does not print the graphic injury page.

Additional Functions.

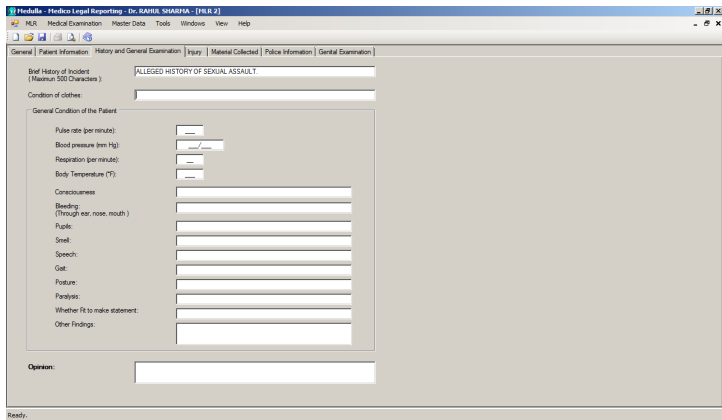
Medulla software provides additional functionality for the following type of medico legal cases.

Sexual Assault Examination

Information about Dying declaration (if needed)

Sexual Assault Additional Examination.

An additional tab in the MLR form is displayed when the incident history contains "SEXUAL ASSAULT".



Selection of Sexual Assault option in MLR

Depending on the sex of the patient, different set of fields are shown in Genital Examination tab.

Dying Declaration.

An additional tab is displayed when the option to record the dying declaration is selected in the General tab of the MLR form.

In cases, where the dying declaration needs to be recorded. The below information can be recorded in the MLR.

Magistrate Informed

Name and Designation of Duty Magistrate
Time Magistrate informed
Name and Designation of person who
recorded the dying declaration.

Medulla - Medico Legal Reporting - Dr. RAHUL SHARMA - [MLR 2]

MLR Medical Examination Master Data Tools Windows View Help

General Patient Information History and General Examination Injury Material Collected Police Information Dying Declaration

WHETHER DUTY MAGISTRATE INFORMED: Yes No

NAME AND ADDRESS OF THE DUTY MAGISTRATE:

TIME AT WHICH DUTY MAGISTRATE ARRIVED ON THE SPOT: 03/09/2010 10:26:52 AM

IF NOT, THE DUTY MAGISTRATE NAME AND DESIGNATION OF THE PERSON WHO RECORDED DYING DECLARATION:

Ready...

Screen to record the dying declaration information

Backup Medulla database.

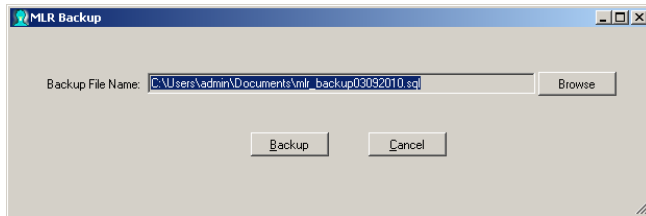
Medulla software uses the MYSQL database to store all the data. To protect any loss of information, it is recommended to take the backup of the database regularly.

By default, the backup file is stored in the Users document folder.

Important: Database backup must be taken before performing any software upgrades.

Click on the tools -> “Backup MLR Database”

Below form is shown



Database Backup screen

Click Browse button to change the folder location for the backup file.

Click on Backup to start the database backup.

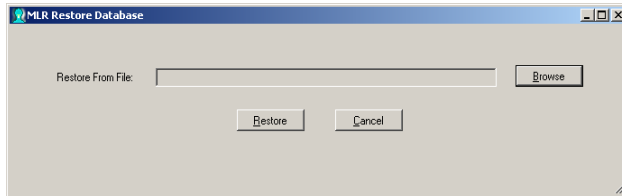
Restore Medulla database.

The database restore function is only available only to the Administrator (root) user.

This option to restore the medulla database from the backup file should be used with extreme caution. The restore overwrites the existing data in

the medulla database.

Click on Tools -> “Restore MLR Database”



Database Restore Screen

Click on Browse to select the Backup file.

Click on restore button to start the database restore from the file.

Medulla User Settings.

Below screen shows the Application settings

User Settings:

To reduce the data entry and speed up the MLR process, Following settings can be defined by individual user.

MLR Fees Amount

Default duration (in minutes) between Patient Arrival and Examination time

Patient Police Station

MLR Report Format (Portrait or Landscape)

The values defined for above settings are pre-populated when a new MLR form is opened. This settings can be changed by the user for the individual Medico Legal Report.

Additionally, Color Charts used for Vision Testing can be uploaded by the users.

The screenshot shows a web-based application window titled "Medulla Settings". The window has a blue header bar with the title and standard window controls. Below the header is a navigation menu with tabs for "Database", "Medico Legal Reports", "Post-Mortem Reports", "Common Settings", "Camera Settings", and "SMTP". The "Medico Legal Reports" tab is selected. The main content area contains the following text and form elements:

The following values are default setting for the application and will be set in the new MLR form loads.
(these values are overridden by the user-entered values in the MLR form.)

Medico Legal Fees Amount:

Default duration (in minutes) Between Arrival and Examination Time:

Default Police Station:

Medico Legal Report Format:

Add New Color Vision Charts/Images:

At the bottom of the window are two buttons: "Save" and "Cancel".

User Settings for Medico Legal Reports

Post-Mortem Report Settings:

Autopsy Report Format

Combine injury details

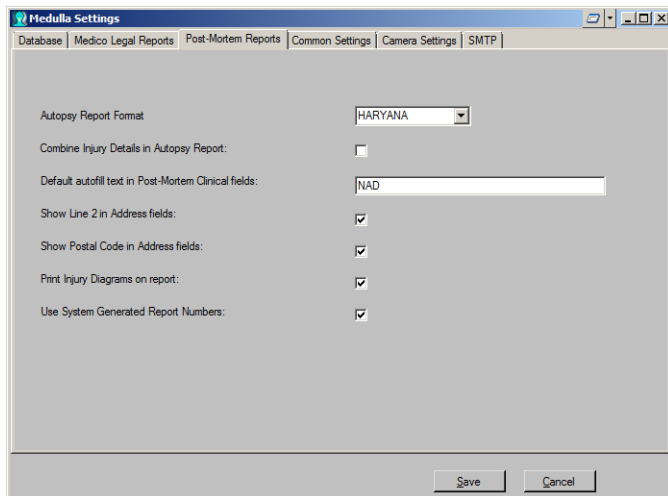
Default Text for clinical findings

Address Line 2

Postal Code

Injury diagrams

System Generated Report Number



User Settings for Post-Mortem Reports

The values defined for above settings are pre-populated when a new Post-mortem report form is opened. This settings can be changed by the user for the individual Post-mortem Report.

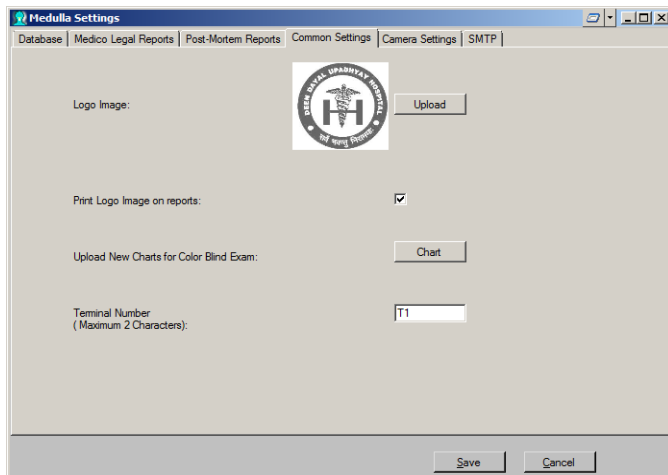
Important: If the users want to assign their own number to the post-mortem reports, uncheck the system generated report number checkbox.

Common Settings

Logo Image

Print Logo on reports

Terminal Number



The logo image can be uploaded from the settings page, if the checkbox to print the logo on the reports is checked. Logo image will be printed on all Medico Legal and Post-mortem reports.

Database and SMTP

Database connections and the SMTP (simple mail transfer Protocol) settings can only be changed by the Admin (root) user only. These tabs are disabled for users other than the administrator

Local Database Connection
Central Record Database Connection

The screenshot shows the 'Medulla Settings' dialog box with the following fields and options:

- Medulla Database Connection:**
 - Host Name or IP Address: localhost
 - Port Number: 3309
 - Username: root
 - Password: ***
 - Connect Using Secure Socket Layer (SSL)
 - Test button
- Send MLR's to Central Record:** Yes (selected) / No
- Central Record Database Connection:**
 - Host Name or IP Address: [empty]
 - Port Number: [empty]
 - Username: [empty]
 - Password: [empty]
 - Connect Using Secured Socket Layer (SSL)
 - Test button
- Buttons:** Save, Cancel

Medulla database connection settings Screen

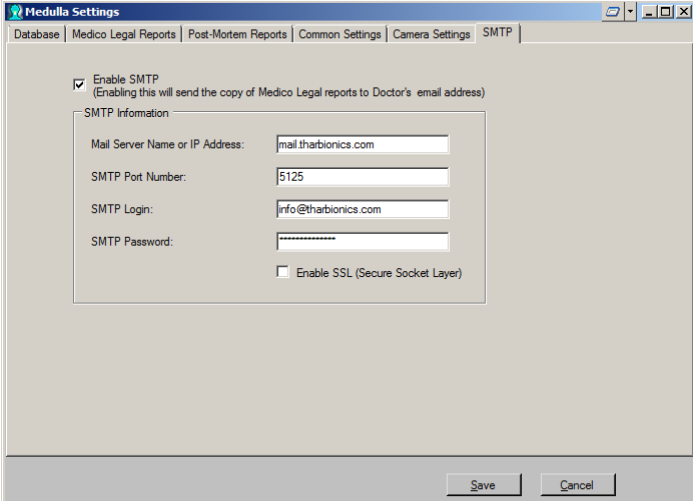
Medulla software also supports the SSL (Secured Socket Layer) connection to Databases for security and encryption of data transferred over computer network.

Multiple Medulla client applications can connect to a single database server in the networked environment.

For more information on SSL settings, Please

contact your system administrator.

MLR/Post-mortem reports can be sent to individual Users email by enabling the SMTP server settings.



The screenshot shows the 'Medulla Settings' application window with the 'SMTP' tab selected. The window title bar includes 'Medulla Settings' and standard window controls. The main content area has a tabbed interface with 'Database', 'Medico Legal Reports', 'Post-Mortem Reports', 'Common Settings', 'Camera Settings', and 'SMTP'. The 'SMTP' tab is active, showing a checked checkbox for 'Enable SMTP' with the subtext '(Enabling this will send the copy of Medico Legal reports to Doctor's email address)'. Below this is a section titled 'SMTP Information' containing four text input fields: 'Mail Server Name or IP Address' (filled with 'mail.tharbionics.com'), 'SMTP Port Number' (filled with '5125'), 'SMTP Login' (filled with 'info@tharbionics.com'), and 'SMTP Password' (filled with asterisks). There is also an unchecked checkbox for 'Enable SSL (Secure Socket Layer)'. At the bottom right of the window are 'Save' and 'Cancel' buttons.

When a user saves a report in Medulla, the generated report is sent to the doctors email address automatically using the SMTP server.

Important: Since the emails are sent using the SMTP server over internet, the delivery of emails is not guaranteed. Proper care and testing

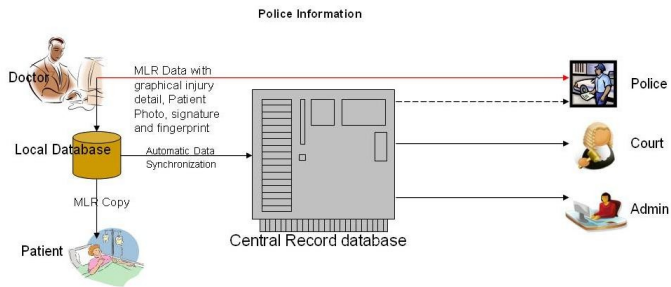
should be performed before enabling this option. Users may also experience the slow response of the application when these settings are enabled.

Central Record Server.

The central record server is a separate component in the Medulla Solution. This feature provides the functionality of the central record room to store the Medical Records.

Central Record Server consists of a central database and the web server running on a separate computer.

Medulla applications running in the different Hospital locations automatically send the Medico Legal Reports to the central server.



Dataflow using Central Record Server

The MLR's stored in the central record server can be accessed over the internet anytime, anywhere by Doctors, Police and courts.