

PARAS- Laboratory Information System

Srishti Software Applications Pvt. Ltd.,
Bangalore - 560102, India



Srishti Software
progress through creation...

- Began operations in 2005
 - Current Employee strength 150
- Product focused Company with global reach.
- Winner of eINDIA Health Summit Award 2012 in the category 'ICT initiative in Healthcare by the Private Sector'
- Awarded Top 10 Emerging companies from NASSCOM EMERGE Forum
- Honoree in the Technology Fast 500 Asia Pacific 2009 Program conducted by Deloitte.
- Honoree in the NASSCOM EMERGE 50 Software category for the year 2009.
- Honoree in the Technology Fast 50 India 2009 Program conducted by Deloitte.
- "Consistently among the top 100 IT innovators in India" - NASSCOM Survey, 2007.
- Rated SE 1A by ONICRA Performance and Credit rating.
- Visit us at: <http://www.srishtisoft.com/> for more details.

Global survey, involving more than 130 hospitals, including 73 in India. Following key areas of concern were discovered:

Key areas of concern

Non availability of an affordable single Product Suite, covering all healthcare provider 'Business' & 'Clinical' processes, in an optimally comprehensive way.

Available products lacking bi-directional integration and balance between 'Business' & 'Clinical' processes.

Inability to document payment claims as per the ever changing requirements of Corporate / Insurance / TPA payers.

No Clinical and Administrative Tracking possible of Healthcare Recipients.

Business/ Clinical Impact

- Forced to look at multiple products / vendors and manage inherent risks related to deployment, integration & maintenance emerging out of this scenario.
- Escalated Total Cost Of Ownership.

Not possible to Implement modern management techniques related to Healthcare Enterprise Management. Ex. Ineffective cash flow management.

High Rejection Ratio of Payment Claims by institutional payers leading to considerable revenue loss.

Poor Customer Relationship Management.

Key areas of concern

Recurring episodes of solution non-availability, lack of data security and virus threats.

Product performance degradation as business improved [requiring higher number of transactions at faster speed].

Difficult or impossible to get changes made to the solution. High vendor dependency. Longer waiting period.

Implementation failures/delays.

Business/ Clinical Impact

- Endangering patient care and safety.
- Risking privacy and confidentiality of patient.

- Low productivity.
- Bad customer experience.
- Forced to look for a new solution.

- Forced to use existing functionality.
- Denying on-time enablement of management vision.

Resulting in cost escalations and business disruptions.

“Enable health care providers deliver superior care to their customers by implementing best in class administrative, clinical and management practices”

- When you are running a hospital, last thing on your mind should be *running* the hospital.
- PARAS helps you achieve this by being optimally relevant to your needs.
- It also allows you to focus on your primary business - better patient care.

Differentiated Advantages - Solution



Differentiated Advantage

Comprehensive solution covering all needs of a modern healthcare provider.

Bilateral Integration of Administrative & Clinical workflow.

Functionality and Compliance-to-Standards measures head-to-head with global big brand products.

Multi Locational n Tier Hierarchical design.

User defined Abstract Role creation functionality to exactly map the institutional process flow and create entitlement.

High Configurability, using concepts of 'Service' & 'Station'.

Benefit to customer

Reduces need for multiple vendor / solutions thereby lowering costs, risk & effort.

Ability to plan & manage resources (Human, financial, material) based on real time data.

Global class functionality at affordable price.

Ability to manage / administer hospitals at multiple locations from enterprise headquarters.

Ease of administration by defining organization wide policy and mapping of users to user defined functionality grouping, rather than Modules or Sub-Modules.

Successful implementation -> simpler administration -> Quicker Rol.

Differentiated Advantages - Solution



Differentiated Advantage

Product is a **web application** engineered to Web 2.0 + standards.

Conforms to Standards of 'High Availability' and 'Fault Tolerance'. Third party standard lab certification.

Product conforms to international Privacy & Security standards.

Solution is fully scalable. Increase in load does not require any change in software, only hardware needs to be added.

Based on Open standards, using off the shelf hardware and software (OS / Database).

Adherence to global standards w.r.t. design, data and interface.

Benefit to customer

Ease of deployment and maintenance.

No risk of service disruption and non availability of patient record during clinical care.

Hospital can participate in globalized healthcare delivery.

No solution obsolescence as business grows.
No large upfront investment at initial stage.

No lock-in to single vendor / technology for software / hardware.
Significant cost saving on database license.

Future proofing w.r.t. Business intelligence / Data Warehousing needs.



Differentiated Advantage

Comprehensive and seamlessly integrated Lab Information System [LIS]. Configurable for Internal / External Labs.

Benefit to customer

Achieves completeness to the offering. Also provides flexibility during implementation.

Differentiated Advantage

An ISO 9000:2001, focused product company, competing & delivering globally.

Has a product road map for over a decade.

100% successful product implementation record across geographies

ONICRA rating of SE AA+

Benefit to customer

THE CUSTOMER will benefit from Srishti's best practices regarding product development and implementation

THE CUSTOMER will be assured of receiving newer versions of the product conforming to standard developments in the field

Gains of successful and timely (early) implementation are in terms of cost savings and enablement of Management vision

THE CUSTOMER knows the Financial Health of the company from which is buying a product

Value Proposition

Predictability of Implementation and pro-active management of Roll Out risks

[Srishti has 100% implementation record]

Bi-directional integration between 'Business' & 'Clinical' processes

High configurability

Implementation of best practices tailored to local needs

Benefit

On-time implementation reduces costs and enables Management vision on time

- Leads to stoppage of revenue leakages and material/financial mismanagement.
- Brings in huge operational cost reduction and real-time management of resources

Leading to very low vendor dependency in effecting business changes

Ability to deliver improved patient care conforming to local clinical, administrative, accreditation & legislative requirements.

Value Proposition

Dynamic Role Creation that shifts from classical module wise access approach to functionality group based approach.

Providing real-time view of key organizational data

Engineered for future

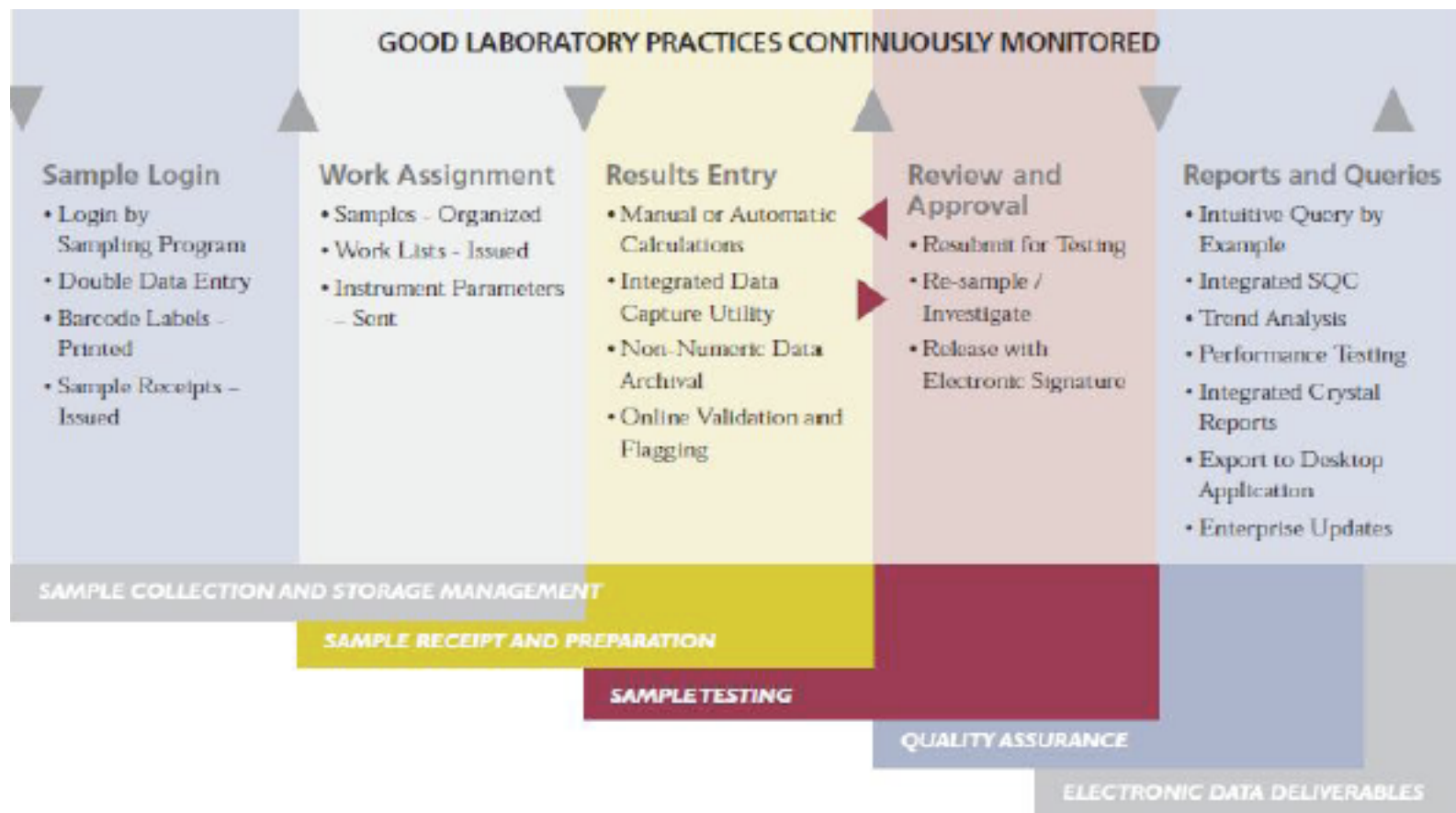
Benefit

- Increases efficiency and productivity
- Simplifies administration since administrator has to only map 'Users' to 'Roles', which is easy to create using job description/designation
- Reduced errors due to assigning wrong permissions
- Prevents ordinary users from accessing un-authorized data employing 'URL Replay'

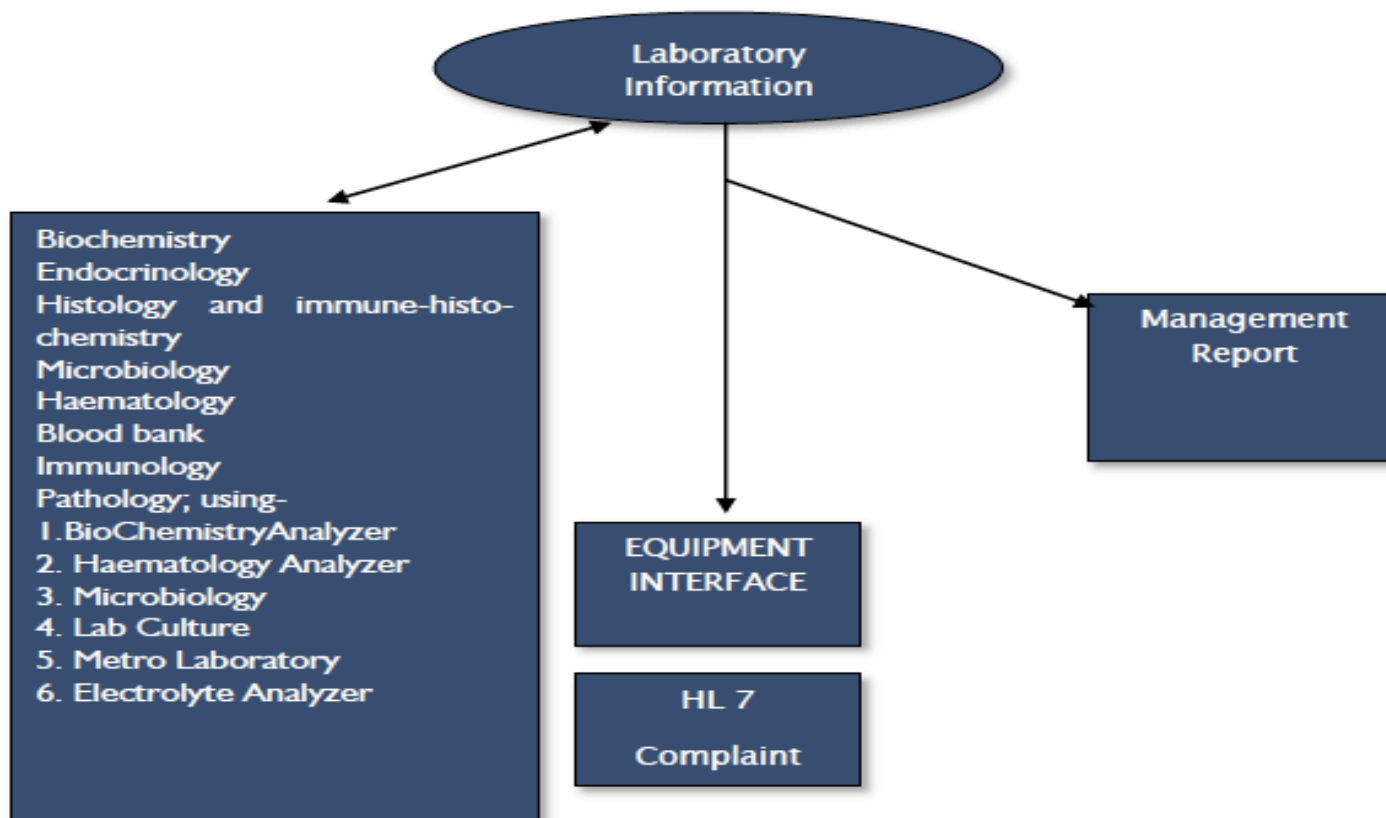
Enabling business owners in taking informed business decisions

Reducing frequent re-investments in technology

Lab workflow



PARAS Flexible configuration tools allow Admin to easily maintain their Laboratory's unique workflow and business rules through pre defined or ad hoc system lifecycle



A unique flow diagram inside laboratory department maintained by PARAS LIMS

ARAS ENABLING HEALTHCARE ...

Name : Saniav Kumar
Corporate :CGHS
Patent Id :1 Age: 23
years

Home
Registration
Search Patients
Appointment Scheduling
Counter Collection
Taken Counter
Change Role
Logout
Current Patient
New Visit
General Billing
Lab Billing
Package Billing
Bills & Receipts:

TEST LIST

Report Required Date: 18-02-2008 [Date]
Select Referred doctor: Select

Haematology	Microbiology	Biochemistry	Histopathology
<input type="checkbox"/> Hemoglobin(Hb) and Haematocrit(PCV) <input type="checkbox"/> Total RBC count <input type="checkbox"/> Blood Indices <input type="checkbox"/> Total WBC count and Differential	<input type="checkbox"/> Non Treponema(RPR) and Treponemal(TPHA) Select <input type="checkbox"/> RA Factor(Latex) Select <input type="checkbox"/> CRP (Latex)	<input type="checkbox"/> HDL Cholesterol <input type="checkbox"/> Globulin <input type="checkbox"/> LDL Cholesterol <input type="checkbox"/> Albumin <input type="checkbox"/> VLDL Cholesterol <input type="checkbox"/> Blood Glucose(Bayer)	<input type="checkbox"/> Urine culture

The Request for the lab test is sent from either the front office or the doctors work bench

PARAS ENABLING HEALTHCARE ...

Name : Ravi sinha
Corporate : CGHS
Patent Id : 16 Age: 25 years

16

Home
Registration
Search Patients
Appointment
Scheduling
Counter Collection
Token Counter
Change Role
Logout
Current Patient
New Visit
General Billing
Lab Billing
Package Billing
Bills & Receipts:
View Visits
View Bills

Advance Amount

GENERAL LAB BILLING

Patient Details

Patient Id:16	Patient Name:Ravi sinha	Request id:28
Clinician Name: Dr.Rajesh Babu	Registration Date: 25-03-08	

Test Details

Test Name	Test Cost
Homoglobin(Hb) and Haematocrit(PCV)	70

Payment Details

Remarks <input type="text"/>	Total Amount <input type="text" value="70"/>
Bill Date <input type="text" value="14-04-2008"/> [Date]	Discount <input type="text" value="0.0"/>
Authorized <input type="text"/>	Final <input type="text" value="70"/>

Lab test can be done once the billing happens for the selected lab tests. The billing rates are maintained in the masters of the applications.

User: sut Role: Lab Sample Collection Station: OPD Clinic 1 [Change Role](#) [My Account](#) [Log Out](#)

Sample Collection

[Home](#)

[Lab Tests Report](#)

[View Lab Report](#)

If you know the CareRecipientId, enter it in the text box. If you don't know CareRecipientId use [Search CareRecipient](#)

CareRecipient Id [Goto LAB](#)

From Date To Date

Request list

<u>Order ID</u>	<u>CR Id, Name</u>	<u>Request Status</u>	<u>Status</u>	<u>Test Name</u>
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Once the billing happens, the requisition goes automatically to the sample collector screen under “Request list”. The collector performs further action of collecting the sample for requested test.

User: sut Role: Lab Technician Station: OPD Clinic 1 Change Role My Account Log Out

Lab Technician

Home

Sample Rejection

Dispatch Samples

Dispatched Samples List

Lab Tests Report

Search Lab Report

From Date To Date

Specimen To Receive

Sample Ref Number	CR ID/Name	Test Name	Sample Name	Received
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Test List

Sample Ref Number	CR ID/Name	Test Name	Test Status
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Rejected Lab Results List

Sample Ref Number	CR ID/Name	Test	Reject Reason	Accept
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After sample is been collected it goes to the respective department for further result recording and undergoing various stages of billed,reported, recorded, approved, and rejected.

User: sut Role: Lab Incharge Station: OPD Clinic 1 Change Role My Account Log Out

Lab Consultant

Home/Result Approval

Search Lab Report

Lab Tests Report

Rejected Lab Results

Search Report By ICD Code

IP-Consolidated Lab Report

If you know the CareRecipientId, enter it in the text box. If you don't know CareRecipientId use [Search CareRecipient](#)

CareRecipient Id [Goto LAB](#)

From Date

To Date


Lab Results for Approval

<u>Request ID</u>	<u>Request Date</u>	<u>CareRecipient ID/Name</u>	<u>Request Status</u>	<u>Sample Ref No</u>	<u>Reported Time</u>
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Once the result is reported it comes to the “Lab In charge” screen which is reviewed by the incharge and accordingly a flag is generated whether it is correct or liable for rejection.

Test result screen





ENABLING HEALTHCARE ...



- View Test Req
- Record Result
- Show Dispatch Specimen
- Change Role
- Logout

RECORD TEST RESULTS

ID	Test Name	Specimen	Test Field Name	Result Value	Reference Value	Unit	Method
<input type="text" value="45"/>	Hemoglobin(Hb) and Haematocrit(PCV)	Blood	Hemoglobin	<input type="text" value="13"/>	13.5-18.0	g%	<input type="text" value="Cyanm"/>
<input type="text" value="46"/>		Blood	Haematocrit	<input type="text" value="45"/>	40-54	%	<input type="text" value="Cyanm"/>

Screen to demonstrate how a test result looks and how it is captured in the system

Sample Test report



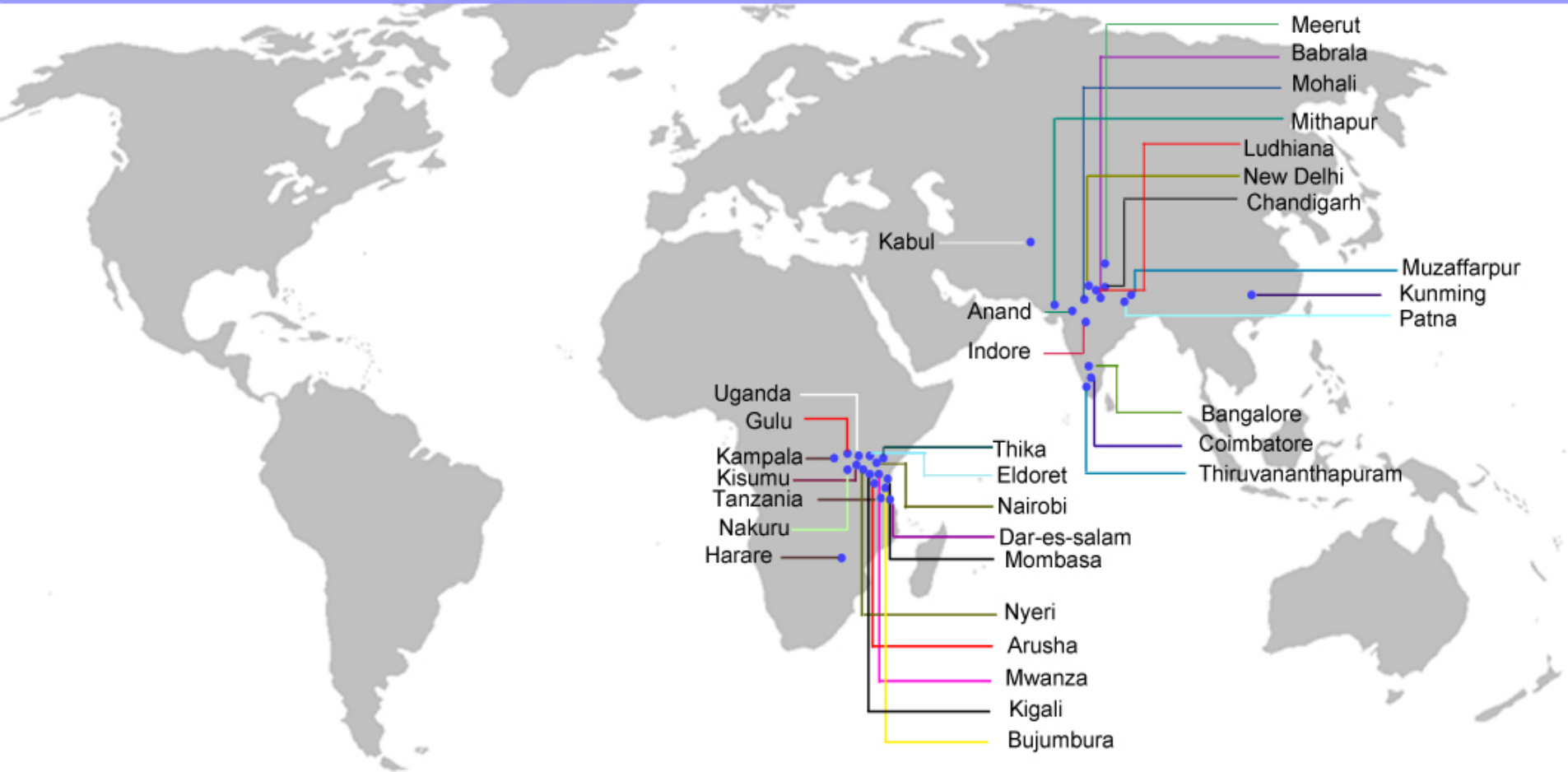
Patient Name	: Ran sinha	Age/Sex	: 25/Male	
OPD/IPD	: IPD	BH NO.	: 16	
Referred Doctor	:Dr.Rajesh Babu	I.P. NO.	:33	
Clinical Haematology Test Report				
Specimen : Blood	Collected On : 14-04-2008 02:37	Result Date : 14-04-2008 02:39		
I. Test : 1-Hemoglobin(Hb) and Haematocrit(PCV)				
Name	Results	Unit	Ref.Range	Remarks
Hemoglobin	13	g%	13.5-18.0	
Name	Results	Unit	Ref.Range	Remarks
Haematocrit	45	%	40-54	
--End of Report--				
Verified:	Results to be correlated clinically			

Sample clinical Haematology Test report

Sample Clientele - PARAS HMIS



PARAS HEALTHCARE MANAGEMENT SOFTWARE CUSTOMER FOOT PRINT



Thank you

Feedback / Questions?



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