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27-OCT-2007



<u>Acknowledgements</u>

- Thanks to Oracle for creating the First OLSA India conference and providing an opportunity to present.
- Thanks to the audience members for attending and participating



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- Overview of DBMS Consulting's qualifications for considerations of India-based OLS deployments
- Examine India Clinical Trials Market
- Examine India-specific OLS deployment challenges and solutions
 - New and Existing OLS customers
 - Measuring ROI suggestions
- Comments on OLS deployment resource considerations and OLS as a strategic solution

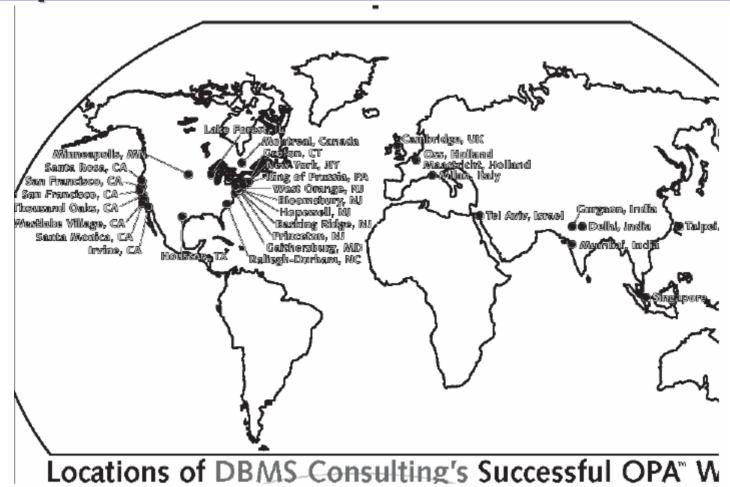


DBMS Consulting Qualifications for OLS Deployments

- EXPERIENCE:
- Collectively, the core DBMS Consulting team has over a century 100+ years of experience in the implementation, installation, configuration, support, customisation, training and validation of the basic Oracle Life Sciences components:
 - Oracle Clinical
 - Thesaurus Management System
 - Remote Data Capture
 - Adverse Events Reporting System
 - Siebel Clinical
- Deployed and Supported OLS to over 60 different customers over an 11 year period
- Validation work has passed both Sponsor and Regulatory audits



Locations of DBMS Consulting's OLS Implementations as of 2005





DBMS Consulting Qualifications for OLS Deployments in India

- EXPERIENCE:
- First On-Site Live demonstration of Oracle Clinical and TMS in India in September 2003
- Provide Pre-Sales support and/or Deployment and/or Support and/or training of OLS for approximately 20+ India-based OLS customers:
 - Large Pharma
 - Local CROs
 - Research and Development
 - Academic Institutes
 - Government Institutes
- DBMS Consulting does not support any other Life Sciences solution: Oracle specialised.



Attractiveness and Growth of the India Clinical Trials Market

- OPINION:
- Large talent pool of experienced resources:
 - Doctors/Investigators
 - Site Personnel
 - Data Managers
 - Statisticians
- Large English literate population
- Large Patient Population for many different indications
- Reduced cost to access Patients and Experienced Resources
- Awareness of ICH-GCP and 21 CFR Part 11 Requirements

Dynamics Driving India Clinical Trials Market

OPINION:

- Locally based Generic Drug manufacturers moving to Research-based medicines
 - Increased litigation pressure on pure Generic-only manufacturing strategy
- Greater presence of MNCs in both large Pharma and CROs
- Large number of locally based CROs competing with MNC CROs
 - Both for MNC Sponsors as well as India-based Sponsors
- Increased globalisation of the entire India Clinical Trials Market



Specific Challenges Unique to India in Clinical Trials

- EXPERIENCE/OPINION:
- Increased Regulatory Scrutiny for India-based clinical trials
 - Perception that India-based trial management may not be as compliant to international regulatory standards as compared to US/EU.
- Extremely competitive pricing market for CROs
 - Pricing pressure BOTH from MNC CROs and India-based CROs
- Litigation challenges for Generics and Researchbased medicines
- Resource turnover in a competitive employment market



Specific Challenges Unique to India in OLS

- EXPERIENCE:
- Perceived need for initial reduction of study design times as compared to non-validated processes
- Need to handle non-study specific patients
- Incomplete understanding of validation process and compliance strategies
- Difficulty in determining Return On Investment (ROI) Metrics
 - Difficulty in measuring ROI
- Infrastructure issues
 - Power Supply
 - Continuous Internet Connectivity
 - Virus-free PC Desktops
- Cost management and Reduction of Operational Costs
- Correct use of WHODrug for coding in TMS

Solutions to India-specific OLS challenges: New OLS Customers

- OPINION:
- Deployment Cost Reduction
 - Pre-built turnkey solutions for OC, TMS and RDC which are prevalidated
 - Hosted Solutions which reduce the minimum license requirements
 - On-Demand solutions from Oracle for Siebel Clinical and entire Siebel platform
- ROI Recognition:
 - Commitment to building standards from the outset
 - Set correct expectations for validation, training and time to build standards
- Validation and Compliance:
 - Understand on-going cycle of maintenance required for large enterprise applications
 - Plan for separate Development, Validation and Production environments

Solutions to India-specific OLS challenges: Existing OLS Customers

- OPINION:
- Reduce Operational Costs: Development of standard libraries
 - Global Library in OC
 - Coding Standards in TMS
 - PL/SQL Standards in QC/RDC Procedures.
 - Document standards and Payment standards in Siebel
- Reduce Operational Costs: Utilise existing OLS functions for Data Management
 - Assign 1 Discrepancy per DCF
 - Synchronise Texts for Discrepancies and DCFs
 - Use Multi-selection capabilities in Discrepancy Management

Solutions to India-specific OLS challenges: Existing OLS Customers (2)

- Reduce Operational Costs: Simply Processes
 - For CTMS, standardise contracts, payments and trip reporting across trials where possible.
 - For OC/TMS, reduce number of DCF steps and number of times Conditional Actions can be used
 - For RDC, reduce number of User Groups where possible for site-based Discrepancy Management
- Reduce Operational Costs: Deploy RDC
 - Reduce Data Entry to single pass Data Entry
 - Eliminate DCFs
 - Reduce time to resolve discrepancies

Solutions to India-specific OLS challenges: Existing OLS Customers (3)

- Improve Validation Processes:
 - Create and Maintain separate environments for Development/Validation/Production
 - Deploy formal Change Control process for Validation and Production Environments
 - Provide overall training on the importance of validation and GCP compliance
- Understand and utilise Patient Transfer functionality for Screening and Replacement patients in OC
- Make appropriate infrastructure and resource investments as a prerequisite to deploy OLS



Evaluating ROI for OLS

- OPINION:
- Develop simple metrics for ROI: These can be simple queries which are executed periodically
 - Measure time for data entry from Received Date to Accessible Timestamp for RDCIs in OC
 - Measure percentage of auto-encoded terms for MedDRA and WHODrug in TMS
 - Measure time of Discrepancy creation to time of resolution for OC and RDC
 - Measure time of Site patient enrollment in Siebel Clinical
 - Measure time to pay investigators in Siebel Clinical
- As standards are developed, measure time to conduct a study over a longer time period
 - Shows that standards development improves ROI in the long term

Importance of Having the Strong Implementation and Support Resources

- OPINION:
- OLS is a complex application, having the most experience in OLS from the outset is a key factor in having successful deployments
- A partner with strategic relationships to WHO-UMC can understand the complexity of WHODrug and also make recommendations to the UMC to support India-specific herbal medications
- Training for initial deployment is also a key success factor, training should emphasis practical operational cost reductions as well as compliance issues
- Validation Support, not just at time of deployment, but on an on-going basis during sponsor/regulatory audits.



Why Oracle is a Strategic Choice for India-based Clinical Trials

- OPINION:
- Oracle has maintained a strong commitment to OLS and specifically the India-based OLS market
- Long Term strategic stability
- Required entry point for becoming a global player in either Research or CRO model for India-based companies
 - Provides immediate global credibility and indicates that seriousness about being a global competitor
 - Defensible in any regulatory review and scrutiny
 - Allows "compatible" business interactions with other OLS customers
- Regulatory protection, least likely to be heavily examined in a regulatory audit.



Additional Questions?

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