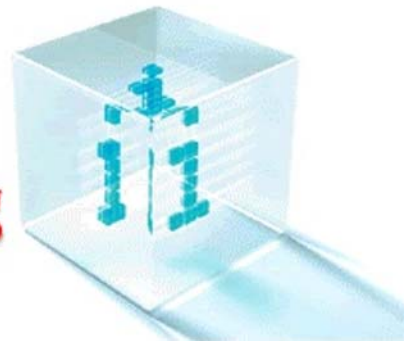


***The Life Sciences Universe™:
A Foundation for Product Development in Healthcare***

understanding
information



Solutions for Safety



PERSEID's Safety and Research Product

- The Life Sciences Research™ product is
 - An integrated set of care, case & safety and regulatory management software applications and libraries written entirely in Oracle
 - A foundation for building Centers of Excellence and Continuous Quality Improvement programs related to
 - Product Development
 - Safety
 - Occupational Health
 - Surveillance of Risk Management Systems
 - Clinical Information Systems for exposure
 - Facility and data acquisition and order entry
 - A software product for application development
 - A healthcare, occupational health and safety care management toolkit
 - A platform for clinical, administrative and financial data processing



Safety Matters – Top Seven Illnesses By Total Cost Productivity Losses Can Be Four Times Treatment Costs

Disease	Reported cases*	Treatment cost	Value of lost productivity	Total economic expense
Cancer	10.6 million	\$48.1 billion	\$271.2 billion	\$319.3 billion
Hypertension	36.8 million	32.5 billion	279.5 billion	312 billion
Mental disorders	30.3 million	45.8 billion	170.9 billion	216.7 billion
Heart disease	19.1 million	64.7 billion	104.6 billion	169.3 billion
Pulmonary conditions	49.2 million	45.2 billion	93.7 billion	138.9 billion
Diabetes	13.7 million	27.1 billion	104.7 billion	131.8 billion
Stroke	2.4 million	13.6 billion	22.1 billion	35.7 billion

Source: The Milken Institute's "Unhealthy America: The Economic Burden of Chronic Disease" relied on data from the Medical Expenditure Panel Survey (2003), U.S. Census Bureau, the Behavioral Risk Factor Surveillance System and the National Health Interview Survey.



Future State of Care and Insurance

- Surveillance of employees using new device technology
- The Internet has enabled fully integrated risk management
- Employees and Employer are going to engage in care management
- Clinics are rapidly expanding in self-insured companies
- Social networking can be used to detect adverse events
- Signal detection can be moved closer to the place of work, earlier
- More hospitalizations can be avoided with technology
- Software is well positioned as a tool to develop clinical, administrative, social and financial triggers and solutions
- Mobile technology and the Internet will influence the cost and quality of care and engage the patient

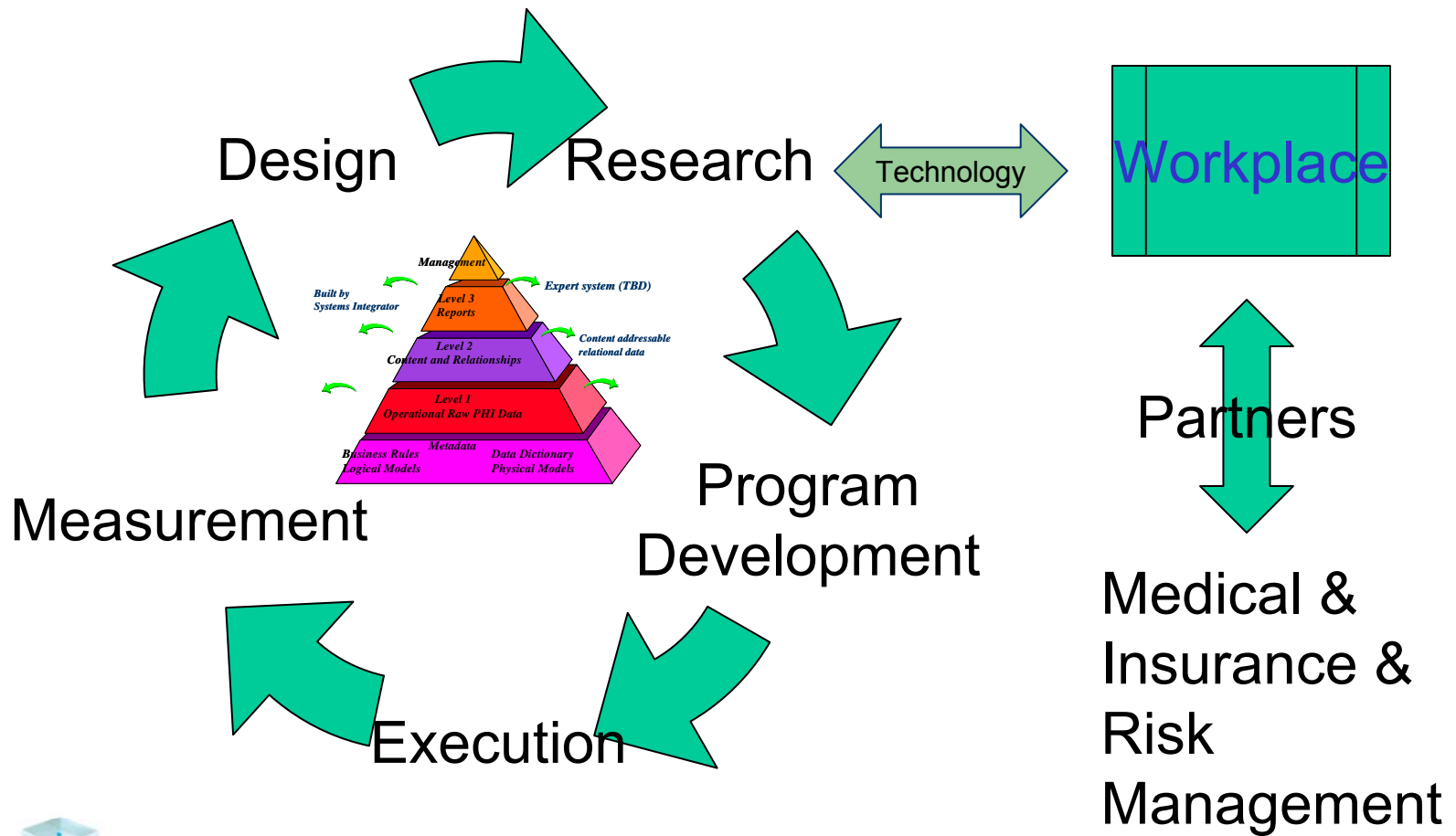


Goals of State-of-the-art Clinical R&D Programs

- Improve compliance and early signal detection of risk
 - Stay in touch with places and employees and providers in real-time
- Integrate quality control and outcomes
 - Integrate group health, disability, environmental and social coordination with employees and providers and follow patients
- Improve workplace safety and risk management
 - Get early indication of positive and negative events through technology
- Improve patient satisfaction and collaboration after events
 - Integrated case and care management with providers & users
- Creation of measurable economic and clinical value
 - Integrate clinical, administrative, regulatory and financial metrics in R&D



Risk Management Program Development Cycle



Opportunities for Self-insured

- Move focus of adverse events to prevention
- Improve real-time management and regulatory reporting
- Create secure forums for rapid real-time documented communication
- Build disease management and wellness programs to prove value
- Avoid hospitalizations and risk management events
- Create integrated company-wide safety and financial reporting
- Create a core base of research data on employees and families
- Communicate with employees and providers through secure systems
- Build Safety and Care management systems
- Allow for real-time device and data capture in offices and homes
- Take control of safety & disease management programs to prove value
- Build predictive tools and applications for prevention and reporting
- Decrease costs using the web for service delivery



Benefits To Partners

- One integrated set of applications and software tools to learn and deploy for consultants, safety, regulatory affairs and R&D
- Leverage one product for product areas: Research, Safety, Occupational Health , Payers and Patients
- Enhance leadership position with product technology ahead of the market
- Aid in rapid deployment of solutions in wellness, disease management, coordinated care, social networking, research and center of excellence design
- All applications, code, documentation, data, documents, security and Internet access integrated in one database environment
- Consultants need learn only Oracle to deploy all solutions
- Integration of CPT, WHO, ICD, MedDRA and MEDCIN coding



Integrated Perseid Applications Sharing One Repository

- R&D, Wellness & Prevention & Outcomes Management
- Incident, Case & Care Management, Surveillance
- Patient Care / Patient / Family / Employer and Provider Portals
- Real-time Data Capture and Algorithms for Risk Management
- Clinic and Facility Management and Operations
- Real-time medical sensor data capture (Harvard Code Blue)
- Research (Econometrics/Healthcare Statistics/Six Sigma)
- Claims and Encounters/CDR/PHR/EHR
- Center of Excellence Design & Management for new technology
- Integrated Customized Vocabularies (ICD, MedDRA, WHO, CPT)
- Disease Management and Wellness programs and protocols
- Cost control to provide value for effectiveness research



Perseid Applications

- Customer Relationship Management & Billing
 - Uses SaaS model for accounts or unique Oracle Instance per client
- Research
 - Device/Pharmaceutical/Exposures/Occupational Health
 - Prevention, Registries, Healthcare Programs & Services
- Safety & Wellness
 - Clinical Improvement Programs
 - Personal Health & Group Health
 - Clinical & Social Services
 - Integrated Case and Incident Management
 - Occupational Health, Safety & Surveillance
 - Disability and Workers Compensation
 - Group Health Insurance and Reinsurance



Perseid Applications

- Safety and Case Management
 - Clinical Data Repository & Personal Health Repository
 - Self-reporting and Personal Health Record
 - Enrolled and non-enrolled service and program creation
 - Order Entry (structured, unstructured)
 - QA/QC/QI Programs, Protocols and clinical sets
 - Metrics, Goals, Objectives and Hypotheses
 - Documents and DICOM Image management
 - Facility management, scheduling and services
 - Center of Excellence Design and Development
 - Remote personal and home data collection
 - Web service interface for device communications
 - Research and Clinical Trial protocol development



Perseid Applications

- Insurance & Provider Related
 - Enrolled & Non-enrolled programs and services for Health and Safety
 - Inpatient & Outpatient Care
 - Group Health Programs & Personal Health
 - Workers Compensation / Disability
 - Self Insured, Insured and Reinsured Healthcare & Disability
- Sites and Portals
 - Clinical forums
 - Patient forums
 - Full text indexing and searching
 - Remote provider and patient tracking and order entry
 - Patient / Hotel / Facility / Long-term stay family portal



Where Did The Requirements Come From?

- PricewaterhouseCoopers
- CIGNA
- P&G
- SAP
- Deloitte
- Department of Defense



State-Of-The-Art Technology

- All applications share same security, access and control and compliance code designed by PwC and databases
- Single-sign on for all applications, extendable for client
- All applications share same code library and all functions
- Integrates care management, research, CDR, prediction and reporting into one partitionable Oracle environment
- Has military-grade security and audit functions if required
- One Oracle repository partitionable into RAC or one instance
- Base of 800 reports and forms, ten applications, 6,000 objects
- All code is written in Oracle — Latest 11G R2 release Apex 4.0.1
- Product is delivered in one EMC VMWARE virtual machine
- 32-bit and 64-bit Linux and Windows Server 2008 versions
- Globalized for international deployment and security laws



Conclusion

- Combining Occupational Health, Risk Management, Clinical and financial goals and objectives with the capabilities of Perseid using the Perseid Software Life Sciences Universe™ as the information management platform enables state-of-the-art safety, patient care and value-driven clinical improvement and instantly launches clients into the next generation or “future state” of occupational health and safety today



Contact

Contact: Bernard P. Wess, Jr.

(617)517-6314

www.perseidsoftware.com

Needham, MA, USA

