## The Life Sciences Universe™:
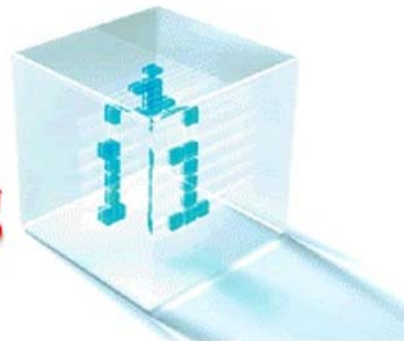## A Foundation for Integration in Healthcare & Life Sciences

understanding
information

# Wellness Program Design & Development

# Top Seven Illnesses By Total Cost
## Productivity Losses can be Four Times Treatment Cost

| 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.
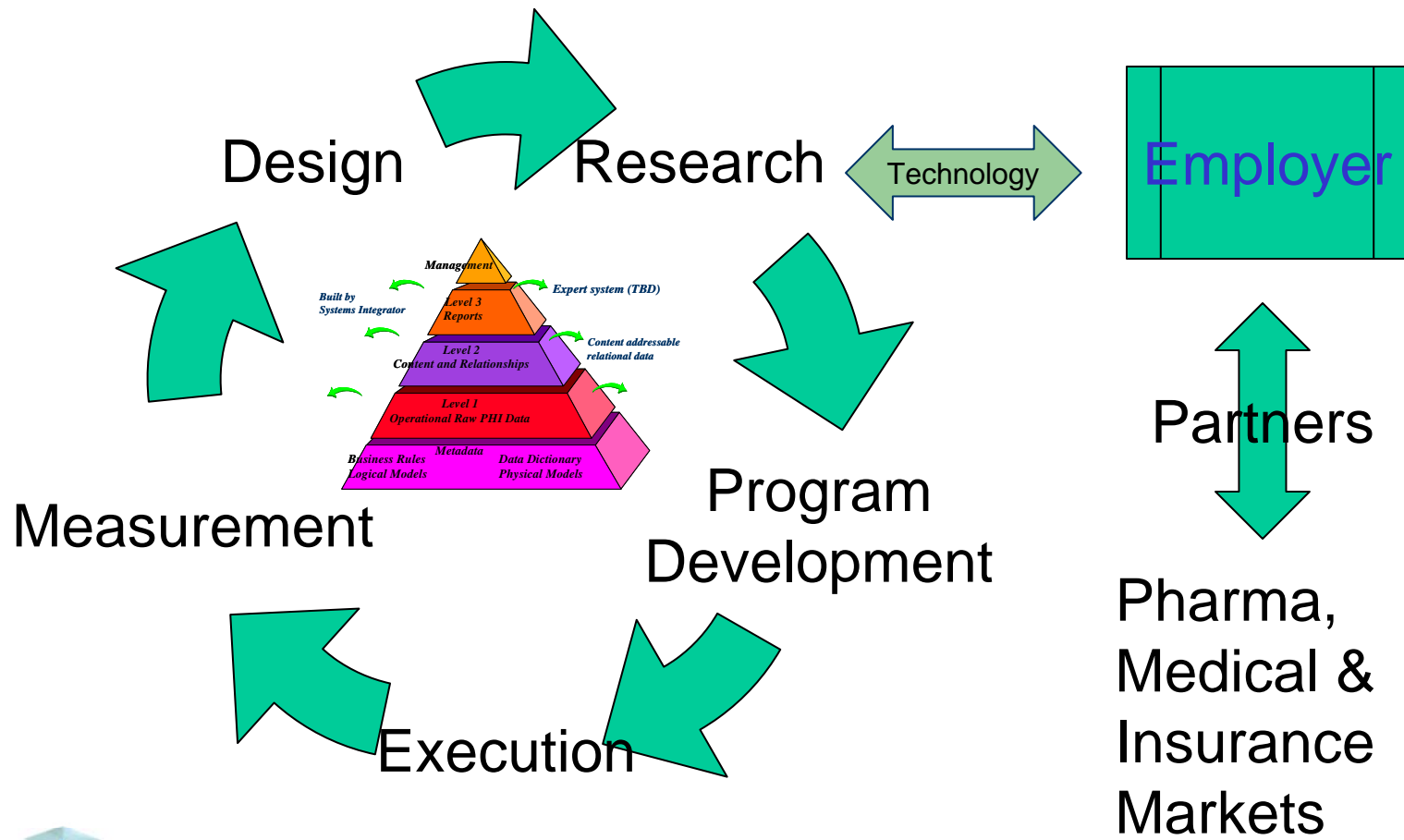
# What is a state-of-the-art Wellness Program?

- Defer the onset of chronic illness and death
    - Convert high risk illness to chronic illness from asthma to cancer
- Improve employee productivity
    - Integrated group health, disability, environmental and worker's compensation coordination by the employer
- Improve patient and employee safety
    - The right care at the right time at the right price at the right place
- Improve employee satisfaction
    - Integrated case and care management with all providers of care
- Creation of measurable value in healthcare, worker's compensation and disability

# Wellness
# Program Development Cycle



Design

Research

Technology

Employer

Measurement

Program
Development

Partners

Execution

Pharma,
Medical &
Insurance
Markets

Management

Built by
Systems Integrator

Expert system (TBD)

Level 3
Reports

Level 2
Content and Relationships

Content addressable
relational data

Level 1
Operational Raw PHI Data

Business Rules
Logical Models

Metadata

Data Dictionary
Physical Models

# Perseid Applications

- Wellness & Prevention

- Incident, Case & Care Management

- Patient Care / Patient and Provider Portal

- Online Forums / Clinical Trial Development and Questionnaires

- Online Insurance and Wellness Services and Order Entry

- Document Library with full text indexing and search

- Image Library Management

- Real-time medical sensor data capture (Harvard Code Blue)

- Research (Econometrics/Healthcare Statistics/Six Sigma)

- Claims and Encounters

- CDR/PHR

- Center of Excellence Management

# Perseid Applications

- Customer Relationship Management & Billing
  - Uses SaaS model for customers or unique Oracle Instance per client
- Research
  - Device/Pharmaceutical/Exposures/Occupational Health
  - Healthcare Programs & Services
- Integrated Care & 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

- Integrated Care and Case Management
  - Clinical Data 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 Related
  - Enrolled & Non-enrolled programs and services
  - 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

# Conclusion

- Combining employer data with the capabilities of Perseid and Partners using the Perseid Software Life Sciences Universe™ as the systems integration and information management platform enables state-of-the-art patient care and clinical improvement for employers and instantly launches the Partner into the next generation or "future state" of U.S. healthcare

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