

The Health Sciences Universe™

An New Model for Healthcare Delivery

Using Real-time Family- and Patient-Centered Care

perseid software
limited



Solutions for Precision Healthcare™

Perseid Software Ltd. Company Overview

- **Bernie Wess (Founder)**
 - Founder, Perseid Software
 - Wellpoint, P&G, Ford, Tufts, EDS, ACS & Re-insurance Experiences
 - U.S. Patent: Clinical, Administrative & Financial Database Objects
 - Founder and CEO, InfoMedtrics
- **Darin LeGrange (Executive Advisor)**
 - Advisor
 - Operating Partner, Silver Stream Capital
 - Former President ACS Healthcare
 - Former CEO XactiMed
- **Clif Gaus (Industry Analysis)**
 - Former EVP & CAO, Wellpoint
 - Founder, Agency for Healthcare Policy and Research (Analytics)
- **Frank Sossi (Finance & Legal)**
 - CFO and General Counsel, Perseid Software
 - Healthcare Finance
 - Medicare & Medicaid
 - Medical Centers

Business focus	Supporting Real-Time Healthcare & Insurance Focusing on New Insurance & Risk Management Opportunities
Target markets	Healthcare, Federal and State Government, (Re)Insurance
Partners	ORACLE/EMC/CISCO SAS Systems Integrators
Employees	Founder – Bernie Wess + 15 Developers & Analysts
Investors	Wess Family 1999 GRAT
Development	August 2008-June 2013
Headquarters	Massachusetts



What *Primary* Solutions Do We Provide

- Strategic and Operational Consulting and Planning
- Systems Integration and Development Solutions
 - Enterprise Platform for Integrated Care Application R&D
 - Healthcare and Insurance Health Information Exchange
 - High-speed, real-time, secure transaction processing
 - Internet “Cloud” insurance company automation platform
- Primary Application Solutions
 - High Risk Family and Patient Management
 - Integrated Community and Patient-Centered Care
 - Integrated Behavioral and Physical Health
 - *Revolutionary* Cost Control and Quality Improvements
 - Mobile and Home Health Episode of Care Management
- “Big Data” Analytics and Econometrics

Health Sciences Universe™ Healthcare Solutions

- A software product for creating and managing integrated lifetime care for high risk populations using real-time Family- and Patient-Centered Care to reduce risk and improve care
- The Health Sciences Universe allows healthcare enterprises to keep or transfer healthcare, social services and insurance risk and to give risk transfer partners the tools and techniques to succeed while monitoring the overall risk in episodes of care in real-time
- A systems integration platform for development of HIE, (re)insurance and healthcare products with rapid application development
 - Mobile, Home and Community Care
 - An enterprise-scale “Big Data” solution for creating and managing healthcare programs using the “Center of Excellence”, Integrated Care and “Medical Home” concepts from the Institute of Medicine

PERSEID's Integrated Care Solution for Episodes of Care

- **The Health Sciences Universe™ product is:**

- An set of social, care, case and family/patient management software products operating as an integrated enterprise-wide solution for total risk management using the Internet and a central repository to create and monitor multiple healthcare and disability management programs with central supervision by a enterprise implementing episode-based precision healthcare solutions
- A foundation for building and integrating Centers of Excellence and Continuous Quality Improvement programs using a family- and patient-centered care systems integration Internet platform supporting:
 - Healthcare and Telehealth
 - Behavioral Healthcare
 - Social Services
 - Skilled Nursing Care & Disability
 - Medical Home, Hospital at Home, Early Discharge Programs
- A solution for an Enterprise to ensure that standards of care are uniformly and continuously applied through the use of real-time family-centered rules
- An analytical system for cost and quality of care measurement, prediction and control

Current State of Care



Current Problem Leads to Missed Opportunities, Waste & Cost

“The critical flaw in our health care system ... is that it was never designed for the kind of patients who incur the highest costs. Medicine’s primary mechanism of service is the doctor visit and the emergency room visit. It’s like arriving at a major construction project with nothing but a screwdriver and a crane.”

Source: Dr. Atul Gawande, MD,
The New Yorker (Jan 24, 2011)

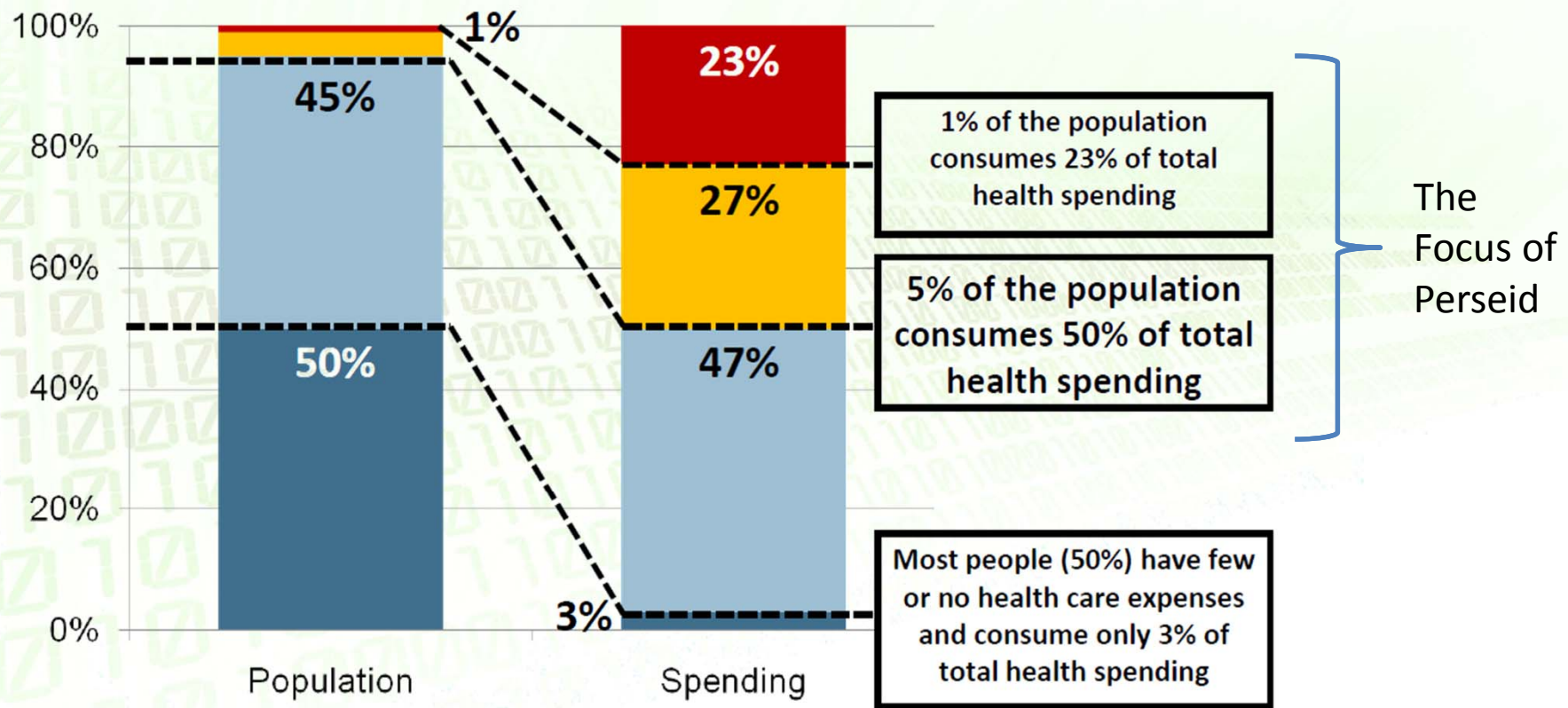
Current State: Institute of Medicine



IOM (Institute of Medicine). 2012. *Best care at lower cost: The path to continuously learning health care in America*. Washington, DC: The National Academies Press.

The Opportunity: Ohio Office of Healthcare Transformation

Medical Hot Spot: A few high-cost cases account for most health spending



Source: Kaiser Family Foundation calculations using data from AHRQ Medical Expenditure Panel Survey (MEPS), 2007

Opportunity: Integrating Care Now



Future State: Institute of Medicine

Yet if some of the transferable best practices from banking, construction, retailing, automobile manufacturing, flight safety, public utilities, and personal services were adopted as standard best practices in health care, the nation could see patient care in which records were immediately updated and available for use by patients:

- Care delivered was care proven reliable at the core and tailored at the margins
- Patient and family needs and preferences were a central part of the decision process
- All team members were fully informed in real time about each other's activities
- Prices and total costs were fully transparent to all participants
- Payment incentives were structured to reward outcomes and value, not volume
- Errors were promptly identified and corrected; and
- Results were routinely captured and used for continuous improvement

The Need and Opportunity for Integrated Care

- Reduce High Service Costs for High Risk Cohorts
 - (It can be done using proven, episode-based healthcare)
- Decrease Unnecessary (Re)Admissions
- Decrease Unnecessary ER Visits
- Improve Outcomes Measurably
- Pay For the Program with Savings
- “Leap Frog” the Current State-of-the-Art
- Use Evidence and Precision to Create New Solutions
- Improve the Safety and Quality of Life of Families
- Use Patient-Centered not Hospital-Centric Care
- Integrate Medical Care and Behavioral Healthcare

Clinical and Financial Solutions
Using Coordinated Community Care:
The Proof on Three Continents



Telehealth Evidence: The VA Telehealth System, 40,000+ Patients 2003-present, Cohort of 17,000 Patient Results

- 19% reduction in hospital admissions
- 25% reduction in lengths of stay
- 86% mean patient satisfaction score
- No change in health status
- Financial Results
 - Annual cost of CCHT \$1,600 per patient
 - Annual cost of traditional care \$13,121
 - Annual cost of nursing home \$77,745

98% Reduction
In Cost

* VA, 2003-present, Health Informatics/Home Telehealth/Disease Management Care Coordination Home Telehealth (CCHT), 5% patients/43% of costs, Diabetes, Heart Failure, Hypertension, Depression, Wound care, Complex Conditions

Telehealth Evidence: The NHS Whole System Demonstration Randomized Clinical Trial 2008-2012: 3,000 Patients, 3 Cohorts

- 45% reduction in mortality rates
- 20% reduction in emergency admissions
- 15% reduction in ER visits
- 14% reduction in elective admissions
- 14% reduction in bed days
- Expected 18-24% reduction in U.S. costs
 - (8% NHS tariff costs converted to DRGs in USD, e.g., HRG GA10 to CMS DRG 411)

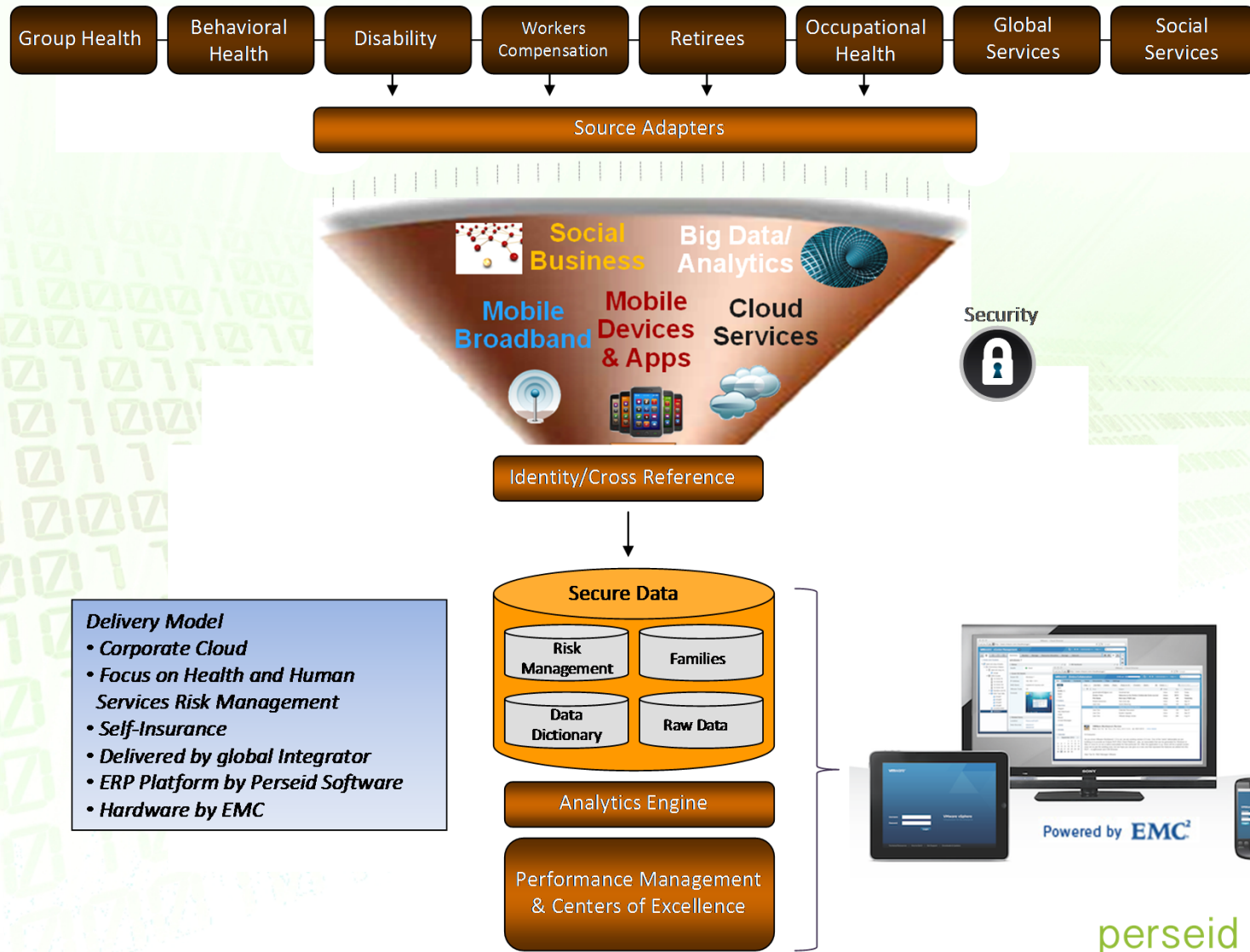
* NHS, 6191 patients and 238 GP practices across three sites, Newham, Kent and Cornwall. Three thousand and thirty people with one of three conditions (diabetes, heart failure and COPD) were included in the telehealth/telecare trial versus traditional office visit and walk-in directed care, 2008-2011

Telehealth Evidence: Australian My Health Guardian (MHG) Retrospective Study: 23,000 Patients, 2 Cohorts

- 11% reduction in elective admissions
- 12% reduction in bed days (ALOS)
- 26% reduction in re-admissions

* MHG, Healthways, Inc., 23,000 people with one of two conditions (diabetes, heart disease) were included in the telehealth/telecare study versus traditional office visit and walk-in directed care, 2009-2011, difference of differences, 12 & 18 months, $p < 0.01$, *Population Health Management 2012*

The Health Sciences Universe — A Platform for Change



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