# Case Study:
# Orion Health

Wednesday 27 January

From: Warren Wallstreet
Sent: Friday 29th January
To: Orion Health Project team
CC: Charlie Charity; Susan Swaps; Melinda Margin; Bill Banker
Subject: Orion Health Strategy Presentation

Good Morning

Our client, Orion Health, is a leading IT company listed on the New Zealand NZX stock exchange. It provides healthcare organisations around the world with IT software that assists in the collation, management and analysis of health data. The company aims to revolutionise the way healthcare is delivered in order to give everyone healthier, happier and longer lives.

Globally, the size of the healthcare technology industry is expected to be worth $70 billion by 2020. The largest single market for Orion Health is North America where a single private health organization can be larger in scale than the entire New Zealand health system. Orion Health is in an exciting phase of growth as it refines its investment approach and product offering. The company is taking on a more bullish investment approach; spending heavily on research and development (R&D) and building new software products. In conjunction, Orion Health is also altering its business model by encouraging customer uptake in Software as a Service (SaaS). These changes are implemented with a long term view, and the company is willing to absorb initial losses. Having been listed in December 2014, the company has a cash reserve which it is using to fund the investments expenses, and in the first half of the 2016 fiscal year, Orion Health recorded a Net Loss Before Tax of $25 million for the 6 months, with revenues of $102 million.

Orion Health's vision is to be a market leader in health technology. The primary challenge in pursuing this change is that, compared to other industries, healthcare lags in technology uptake. As a result, the challenge lies in developing relevant technology that meets current demand and capabilities, and simultaneously bridges clients to new technologies. Orion believes the North American market will have the most appetite for adapting to these changes, as it is dominated by competing private players, and regulatory incentives under Obama's leadership have acted as a catalyst to drive change in the past. However, the heavily regulated nature of the market presents a challenge both globally and in North America.

The company is interested in your team's strategy for how it can grow with a particular interest in North America, its largest market. To assist you in completing your analysis and develop your recommendations, please find the information prepared by our research team attached. We also suggest you view the short explanatory videos supplied by Orion Health on your team's memory sticks.

Regards
Marty Kaan
Partner
Galweather Stearn

Orion Health

# Case Introduction History / Profile

## Company Overview

Orion Health is an award winning software company that develops modern and creative solutions for healthcare organisations across the globe. Founded in 1993 by CEO Ian McCrae, the company's goal is to revolutionise the way in which healthcare is delivered; designing software that can enable a new model for healthcare centred on each individual patient.

To achieve this vision Orion Health delivers the platform for precision medicine providing the technology to manage the health of individuals, a population and future proofing for emerging models of care.

The company has experienced considerable growth over the last decade, and now employs over 1,200 people in 27 offices around the world. During this time, the firm has delivered a number of successful projects and developed a reputation as a leading provider of HIE[1], EHR[2], care coordination, and integration technology to the healthcare industry. The Chilmark Research 2014/2015 report, which ranked Orion as the top vendor stated: "Orion Health is arguably the most prominent provider of healthcare interoperability globally and a major health information exchange vendor in the US."

## Early History

The company's expertise in connecting and managing health data began with an early project for Auckland District Health Board. The board desired to computerise and connect Auckland's hospitals, through the installation of microwave dishes on the roofs of the hospitals to facilitate data transfer between 50 green screen terminals.

During the early years the firm had a broader set of projects including; baggage handling, airline reservation systems and accounting software. Based on market signals that the greatest opportunity lay in the health sector, the company's focus narrowed to become the health specialist it is today.

## Recent IPO and performance

In November 2014, Orion Health was joint listed on the NZX Main Board and ASX stock exchanges following a successful IPO that raised $125 million of which $120 million was new capital. There was strong demand for the shares which led to a list price of $5.70 at the top of the $4.30-$5.70 indicative price range. Since the listing, the stock had a disappointing 2015, ending the year just above $3.

The company, however, remains positive and states recent performance is in line with expectations as the firm continues to invest in R&D. Interim results for the first half of the 2016 financial year showed pleasing performance with revenues growing 26% year on year to $102 million for the period, similar growth is expected in the second half of the year. The company now manages over 90 million patient records on its systems as it serves a growing list of clients with a number of sizeable contracts won during the period. For the first half of 2016 Orion Health recorded a Net Loss Before Tax of $25 million up from $21 million in the same period last year. The company still has significant cash reserves of $77 million after a net reduction of $18 million during the period.



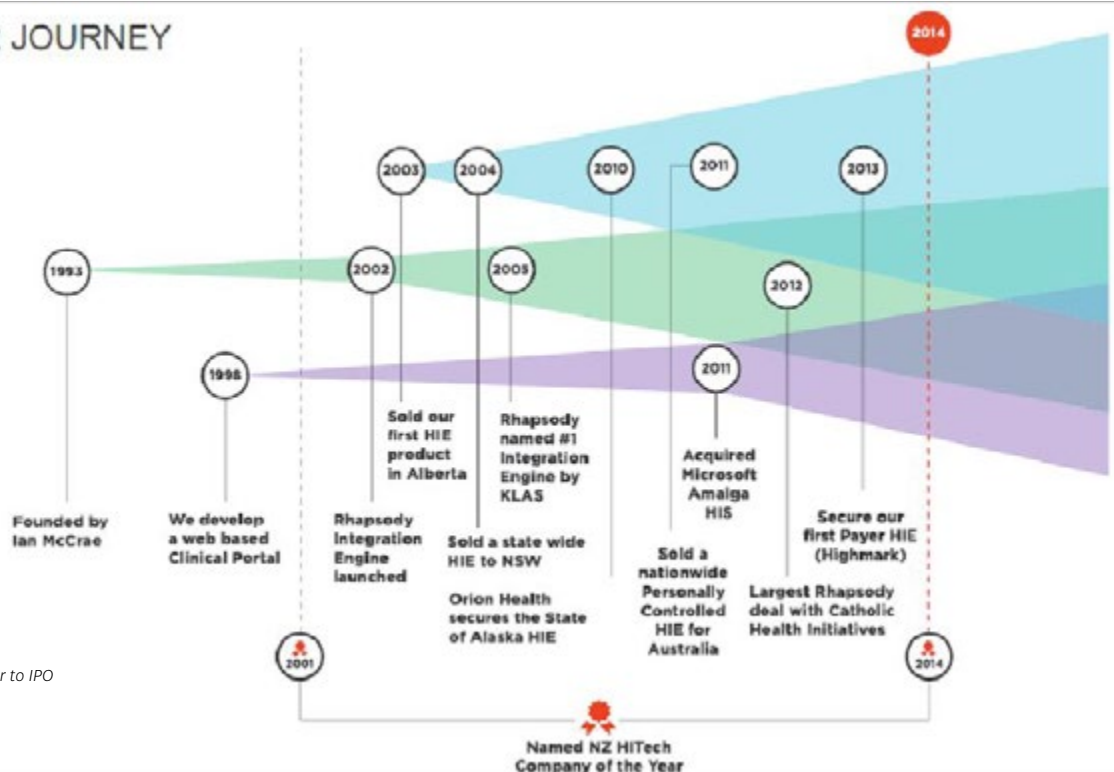Figure 1: Orion Health's journey prior to IPO
(Source: 2014 Corporate Overview)

1 HIE: A Health Information Exchange is a platform for the sharing of health information electronically between doctors, nurse, pharmacists, patients and other health care providers.
2 EHR: A Electronic Health Record is a digital version of patient's paper chart, giving real time patient information securely to authorised users.

## Current Direction

Orion Health is in an exciting period of change; taking on a more aggressive investment approach to develop innovative solutions and transitioning its product offering to standardised cloud based solutions.

Orion Health is investing heavily in R&D as it develops new technology, investing $32 million in the first half of FY2016. This includes 500 technical staff dedicated to building new functional and technical capabilities into the firm's software, sustaining and improving existing products, and building automation to support new cloud-based deployment models. This investment was underscored by the recently rebranded and updated open platform now called Amadeus will be able to process genomic and biometric data alongside clinical, social, pharmaceutical and insurance claims data.

By investing in applied research and new product development to harness and interpret the enormous growth of data, the company aims to build a world class cloud based platform. The company can then deliver on its vision of taking customers on the journey of population health management, ultimately enabling them to improve health outcomes through precision medicine.

Orion Health is shifting their product offering toward the software as a service (SaaS) model, to offer more standardised and cloud based solutions. The company has set itself an ambitious target of 50% of total operating revenue coming from recurring revenues (managed services and support services) in three years, the latest interim results highlight the process with 41% recurring revenues up from 30% the year previously. The advantage in developing more standardised and cloud based solutions, such as Amadeus, is that a customer's software suites can then be continuously maintained and upgraded with Orion Health receiving ongoing management fees. In the US health data will completely shift to the cloud as it is the only scalable and efficient way to store the vast quantity of information being produced in the industry.
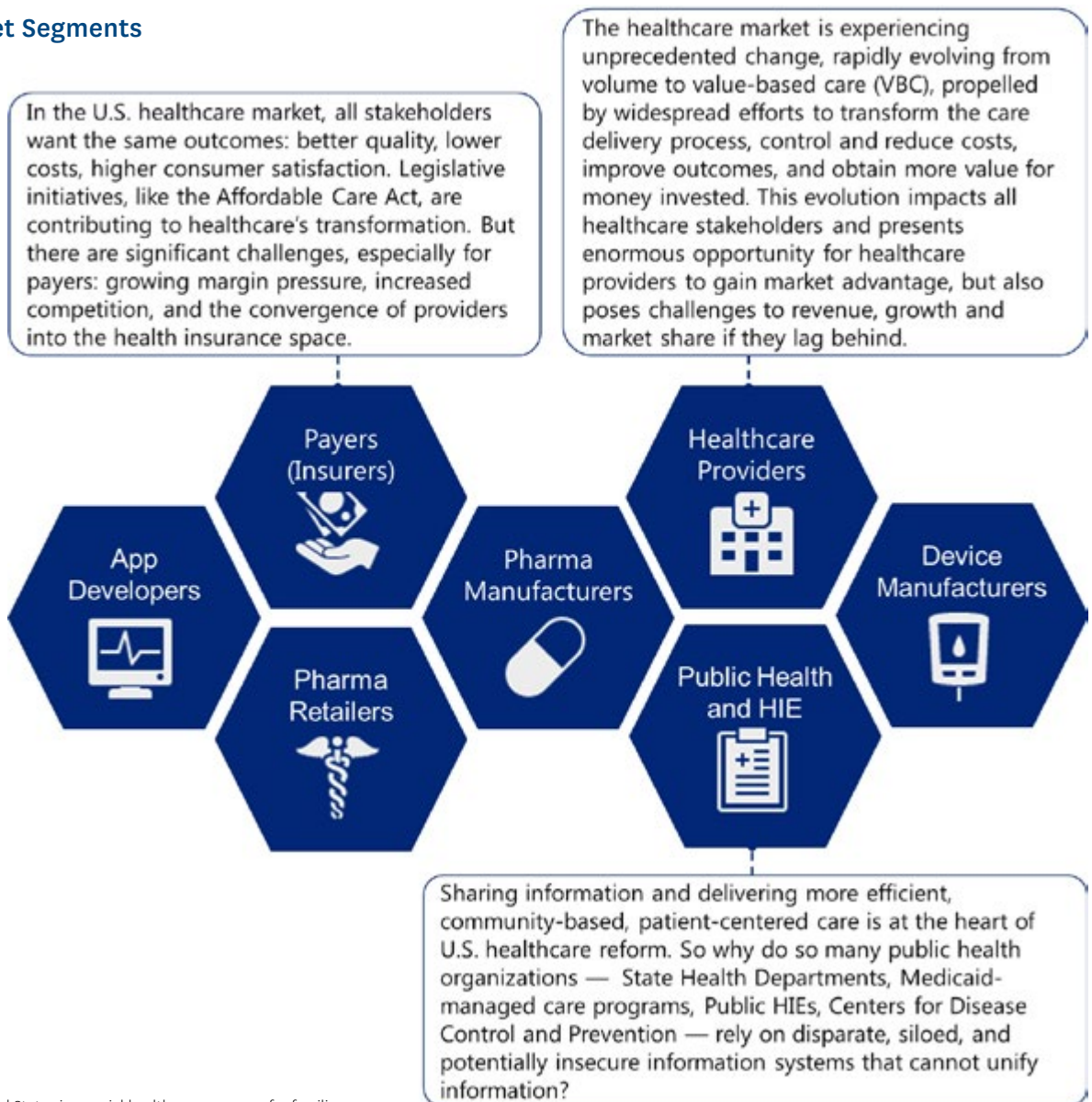
# North American Health Industry

## Overview

North America is the largest healthcare market in the world, with spending in healthcare making up 16.6% of GDP. Healthcare is provided predominantly by private companies with treatment paid for by medical insurers (payers). The 2010 Affordable Care Act (ACA), which expanded Medicaid[3] and introduced mandatory health insurance, has led to a significant transformation in healthcare funding and insurance cover. The act was put in place to address the cost of healthcare in the USA, which was estimated at $2.8 trillion in 2013, with spending on a per capita basis roughly twice that of other developed countries. Across the country health care spending varies by state for a detailed breakdown see appendixes.

## Health Market Segments

In the U.S. healthcare market, all stakeholders want the same outcomes: better quality, lower costs, higher consumer satisfaction. Legislative initiatives, like the Affordable Care Act, are contributing to healthcare's transformation. But there are significant challenges, especially for payers: growing margin pressure, increased competition, and the convergence of providers into the health insurance space.

The healthcare market is experiencing unprecedented change, rapidly evolving from volume to value-based care (VBC), propelled by widespread efforts to transform the care delivery process, control and reduce costs, improve outcomes, and obtain more value for money invested. This evolution impacts all healthcare stakeholders and presents enormous opportunity for healthcare providers to gain market advantage, but also poses challenges to revenue, growth and market share if they lag behind.

Payers (Insurers)

App Developers

Pharma Manufacturers

Healthcare Providers

Device Manufacturers

Pharma Retailers

Public Health and HIE

Sharing information and delivering more efficient, community-based, patient-centered care is at the heart of U.S. healthcare reform. So why do so many public health organizations — State Health Departments, Medicaid-managed care programs, Public HIEs, Centers for Disease Control and Prevention — rely on disparate, siloed, and potentially insecure information systems that cannot unify information?

3  **Medicaid** in the United States is a social health care program for families and individuals with low income and limited resources. The Health Insurance Association of America describes Medicaid as a "government insurance program for persons of all ages whose income and resources are insufficient to pay for health care".

## The Patient Protection and Affordable Care Act aka Obamacare

Arguably the most significant reform of US healthcare since the creation of Medicare and Medicaid in the 1960s, the Patient Protection and Affordable Care Act (commonly referred to as the Affordable Care Act (ACA) or "Obamacare") was introduced in March 2010. This brought in a number of measures to increase health insurance coverage and affordability in the United States Insurance companies (payers) are required to cover all applicants within new minimum standards and offer the same insurance premiums regardless of pre-existing conditions or sex. This Act has increased the number of people with private medical insurance in the US so that it currently stands at around 84%, with the goal of the Act to increase this to 100%.

As a result, payers face increased risk, which they cannot easily pass on through higher premiums. To help manage this risk, the payers are seeking information and solutions that help them assess the health of their members and proactively manage members' health while improving the efficiency of the healthcare offered. This has helped change the way they look at healthcare, moving from a fee for service approach to a fee for an outcome and focused on health quality goals. Some 75% of providers currently participate in at least one value-based model. While these still represent a small part of current revenue, more than 60% of providers expect them to become the dominant payment strategy going forward.

## New models of care

The health industry is trending towards the implementation of new models of care, primarily pay for performance and value-based care. These models will see the industry transition from disease centric to prevention centric underpinned by three Ps – Predictive, Preventative and Promotion. Focus will shift from reactive treatment to a more holistic approach to patient wellbeing as a payment is made based on cohort health outcomes instead of per treatment. The change is driven by both government policy and the commercial imperative of payers.

# Health IT in North America

## Overview

Healthcare companies utilise a number of different software packages to assist with hospital management, customer interaction and patient care records. The technology is rapidly revolving with four key stages of innovation with current products able to deliver population health outcomes with precision medicine a future trend.

Physicians are optimistic about the potential uses of health IT advances however they are weary about the security and cost of implementing software which hasn't been clinically proven. Given its sensitivity and detailed nature, health information it is a target for hackers and security breaches have become a common news item which has led to growing concern for the security of all data. Healthcare information security breaches cost the industry up to $5.6 billion annually.

Consequently, uptake of innovative software platforms, tools and functions has been slow with health organisations purchasing IT solutions based on government incentives or regulations. This is evidenced by the strong market uptake of software products due to the US HITECH Act, detailed below. The challenge for software providers is how to up-sell the additional tools and newer platforms that can deliver the new models of healthcare.

## US HITECH Act

The Health Information Technology for Economic and Clinical Health Act (HITECH Act) was enacted by Obama's government in 2009 to promote and expand the adoption of health information technology aimed at the creation of a nationwide network of electronic health records (EHR). It provided US$38 billion of government funding through the Medicare and Medicaid reimbursement systems as incentives for hospitals and GPs to become meaningful users of Electronic Health Records (EHR) and for these EHRs to be able to share data externally with other healthcare providers. Providers who are not meaningful users can also be penalised (with penalties increasing from 1% of Medicare and Medicaid payments in 2015 to 5% by 2019).

HITECH has incentivised providers to migrate from paper based to electronic record keeping – a critical prerequisite of more advanced population health management IT including HIEs. As of 2014, over 94% of hospitals have registered to qualify for meaningful use subsidies and 90% have been paid a subsidy as part of Stage 1, which requires that some structured data is entered in the EHR for 80% of patients treated. Stages 2 and 3, which will progressively be phased in through to 2021, will raise the quality and quantity of data required. HITECH also specifically provided US$758m for the creation of state-based HIEs.

As such HIEs have become critical for Accountable Care Organisations (ACOs) to connect disparate data and achieve operational improvements. The payments ACOs receive are tied to healthcare quality goals and outcomes that improve efficiency (thus a movement away from fee for service to value-based remuneration). The number of ACOs has expanded since 2011, with over 520 ACOs currently operational in the US serving circa 15%-17% of the population. Two-thirds of the US population is living in localities covered by an ACO. As ACOs continue to expand in number or increase coverage and membership, this is expected to put pressure on other providers to be more efficient or risk losing business and members.
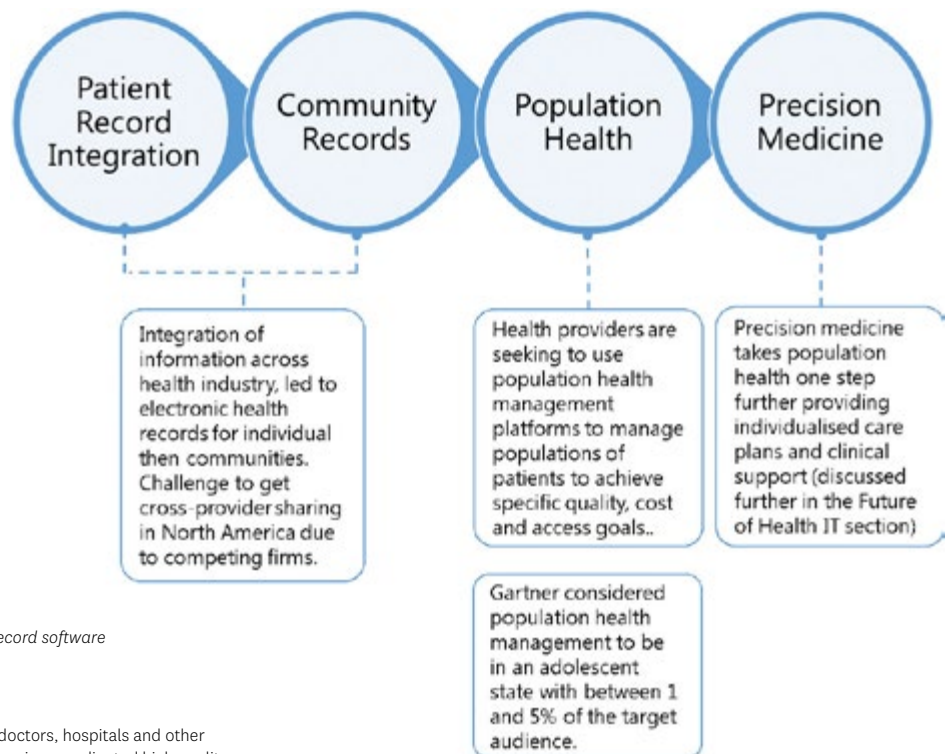


Figure 2: Four stages of innovation in electronic health record software

4  ACOs: Accountable Care Organizations are groups of doctors, hospitals and other health care providers who come together voluntarily to give coordinated high quality care to their Medicare patients. They are then eligible for bonuses for delivering of care more efficiently as part of value-based remuneration.

# Future of Health IT

## Overview

Technology is rapidly changing the health landscape. Gartner, in their latest Hype Cycle report, believes that healthcare is moving from an IT laggard to become a vibrant, dynamic and complex IT sector. Providers are struggling to keep up as major vendors and venture capitalists invest heavily in R&D to capture market share. Innovations that are predicted by Gartner to transform the industry in the next decade include big data and precision medicine these are discussed in more detail in the following sub-sections.
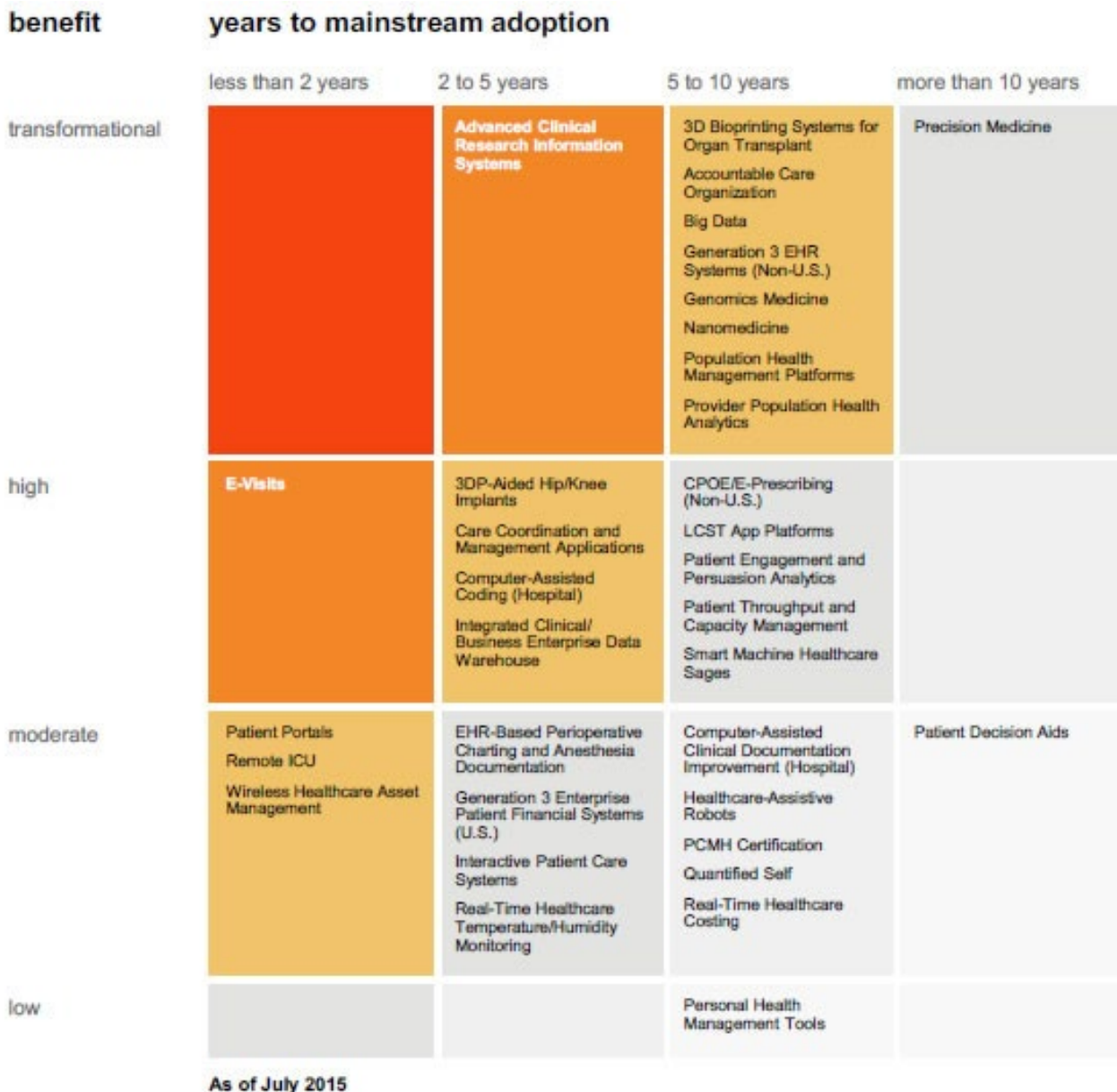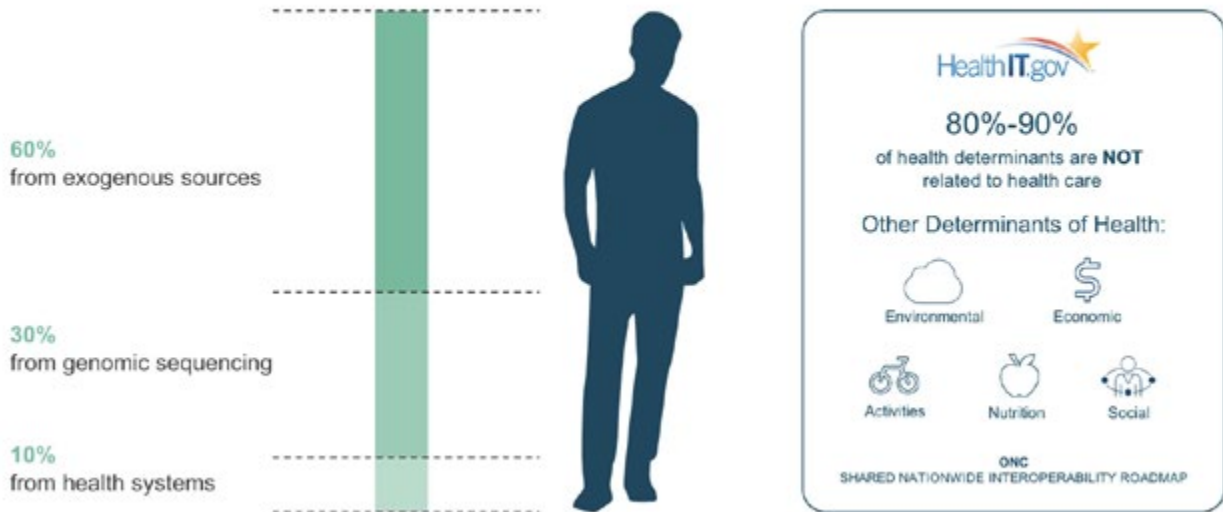
| benefit | **years to mainstream adoption** | | | |
|---|---|---|---|---|
| | less than 2 years | 2 to 5 years | 5 to 10 years | more than 10 years |
| transformational | | Advanced Clinical Research Information Systems | 3D Bioprinting Systems for Organ Transplant<br><br>Accountable Care Organization<br><br>Big Data<br><br>Generation 3 EHR Systems (Non-U.S.)<br><br>Genomics Medicine<br><br>Nanomedicine<br><br>Population Health Management Platforms<br><br>Provider Population Health Analytics | Precision Medicine |
| high | E-Visits | 3DP-Aided Hip/Knee Implants<br><br>Care Coordination and Management Applications<br><br>Computer-Assisted Coding (Hospital)<br><br>Integrated Clinical/Business Enterprise Data Warehouse | CPOE/E-Prescribing (Non-U.S.)<br><br>LCST App Platforms<br><br>Patient Engagement and Persuasion Analytics<br><br>Patient Throughput and Capacity Management<br><br>Smart Machine Healthcare Sages | |
| moderate | Patient Portals<br><br>Remote ICU<br><br>Wireless Healthcare Asset Management | EHR-Based Perioperative Charting and Anesthesia Documentation<br><br>Generation 3 Enterprise Patient Financial Systems (U.S.)<br><br>Interactive Patient Care Systems<br><br>Real-Time Healthcare Temperature/Humidity Monitoring | Computer-Assisted Clinical Documentation Improvement (Hospital)<br><br>Healthcare-Assistive Robots<br><br>PCMH Certification<br><br>Quantified Self<br><br>Real-Time Healthcare Costing | Patient Decision Aids |
| low | | | Personal Health Management Tools | |

**As of July 2015**

*Figure 3: Gartner priority matrix*

## DETERMINANTS OF HEALTH | MOST DATA EXISTS OUTSIDE MEDICAL SYSTEMS

A vast amount of untapped data could have a great impact on our health



60%
from exogenous sources

30%
from genomic sequencing

10%
from health systems

HealthIT.gov

80%-90%
of health determinants are **NOT** related to health care

Other Determinants of Health:

Environmental

Economic

Activities

Nutrition

Social

**ONC**
SHARED NATIONWIDE INTEROPERABILITY ROADMAP

Steven A. Schroeder, M.D. "We Can Do Better — Improving the Health of the American People", NEJM 2007

## Big Data

Big Data can be identified by high-volume, high-velocity and high-variety information that needs to be stored and processed. This is a trend spanning across a number of industries and is particularly relevant to the health sector. A single patient will have health data generated from a number of variable input streams such as general practitioners, clinical specialists, laboratory results within the health system alongside genomic information and data from external sources such as smart watch. This must then be collated and stored in a single patient record which can then output information back to each stakeholder in a patient's health plan. This leads to the importance of interoperability to allow the usable exchange of health information across technological systems and organisations. It also must then by scalable to handle the resultant explosion in health data which globally is expected to grow by 50 times by 2020.

## Precision Medicine

Precision medicine is an emerging approach for disease diagnosis, treatment and prevention that takes into account individual variability in genes, physiology, anatomy, environment and lifestyle. Precision medicine is the 'how', building on from population health management which identifies and defines cohorts of patients as high risk and needs attention, the 'who'. Precision medicine is an accumulation of both medical and IT innovation. These include genomic, patient engagement and persuasion analytics, population health analytics, care management, personal health smart devices, quantified self and 3DP-hip/knee implants, all aided by improving EHR systems.

The term Precision Medicine become more widely used after US President Obama's 2015 State of the Union address which launched his precision medicine initiative. He called for an investment of $215 million USD in the 2016 fiscal year to generate the scientific evidence needed to move the concept of precision medicine into clinical practice. The long term goal is to have a research cohort of over a million participants who will share genetic data, biological samples, and diet/lifestyle information linked to their electronic health record.

*"Population Health Management"*



*All diabetics are the same*

*"Precision Medicine."*



*Every patient is unique*

## DETERMINANTS OF HEALTH | AN INDIVIDUAL VIEW

### Genetic
- Family History of premature heart disease
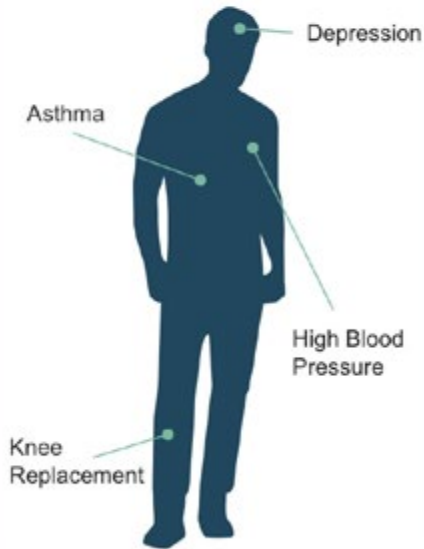- Genotype with heightened depression risk

### Pharmacy
- Compliant with BP Meds
- Last Antidepressant – 12m

### Device Measurements
- Low Activity (<1,000 daily steps)
- Asthma Peak Flow 70% of expected
- Blood Pressure in target but rising

### Clinical
**John – 40 year old male**

- Depression
- Asthma
- High Blood Pressure
- Knee Replacement

### Social
- Increasing alcohol consumption
- Separated from long term partner

### Economic
- Laborer – working outdoors
- Unemployed for 6 months

### Environmental
- Inner city – high pollution levels

### Nutritional
- Unskilled at cooking
- Ready meals / takeaways
- No fruit / high fat / high carb

# Orion Health's Offering

## Overview

To enable the implementation of new models of health care along with precision medicine Orion Health offers customers a data platform solution, Amadeus.  This is in conjunction with Rhapsody, Orion's interoperability engine that enables the information connections across organisations and functions. The platform data can then be accesses and decisions implemented through Orion Health applications or third party applications.

## Selected Product Descriptions

### Orion Health Amadeus

Amadeus is a platform for Precision Medicine, built on modern, scalable technology that provides clinicians and other users with the cognitive support they need to make the best decisions possible. We aggregate, store, and make sense of all forms of relevant data, so that we can transform healthcare by enabling precision medicine - transforming healthcare from being about many to focusing on one.

### Orion Health Rhapsody

Orion Health Rhapsody Integration Engine achieves rapid interoperability between healthcare systems, enabling connected solutions in less time and at a lower cost. Rhapsody is our foundation product, the enabler that brings systems together, and is a proven, high performance engine for robust, reliable exchange and acquisition of health data. Rhapsody acquires and feeds unlimited data types into Orion Health Amadeus with in-built FHIR capabilities.

### Orion Health Coordinate

Orion Health Coordinate facilitates care management and care team collaboration through a suite of applications that simplify patient management, care planning, task management and workflow. These collaborative tools enable clinical and administrative team members to manage cohorts of patients and take action to maintain a patient's health and wellbeing.
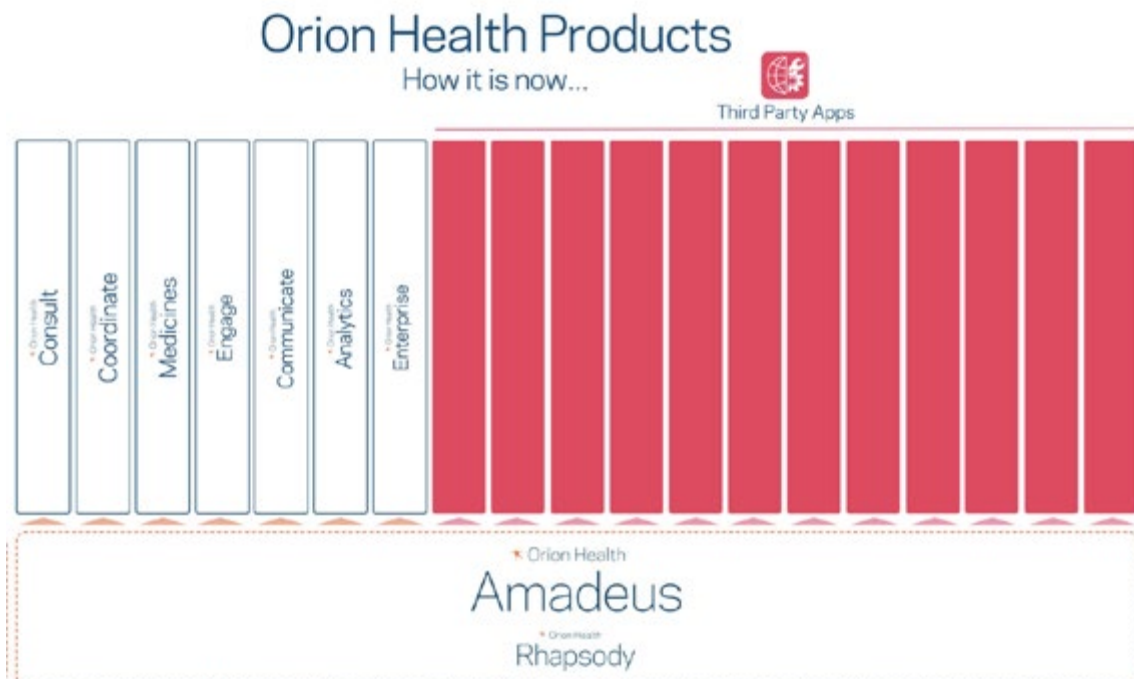
### Orion Health Engage

Until recently, health information belonged to everyone but the patient. Information on conditions was hard to access, diagnoses and results were closely guarded by healthcare providers. But now it's moving to your smartphone in your pocket where patients have instant access to health information and know more about their health. Consumers are increasingly demanding access to (and control over) all their data and health is no exception.

### Orion Health Communicate

Orion Health Communicate provides safe and secure communication between patients, healthcare providers and organisations across mobile, desktop and electronic medical record systems (EMRs). Users anywhere can quickly send accurate patient information to other healthcare providers or even to the patient themselves.

### Orion Health Services

Orion Health offers a comprehensive range of services to complement our full suite of industry leading healthcare technology solutions. Our clinicians, analysts and business advisors can help you realise the full benefit of the technology you have put in place and achieve a faster return on your investment.



Orion Health Products
How it is now...
Third Party Apps

Consult · Coordinate · Medicines · Engage · Communicate · Analytics · Enterprise

Amadeus
Rhapsody

# Orion Health's Customers

Orion Health currently provides its software to a number of health organisations around the world. It targets primarily two segments of the health market in North America.

1. The provider segment, including private and public hospitals.

2. The payer segment such as health insurers and governmental health providers, including a recently awarded contract with the United States Department of Defence.

## KEY CUSTOMERS | UNITED STATES

Alaska eHealth Network (AEHN), Anchorage AK Blue Shield of CA, San Francisco CA
Catholic Health Initiatives, Denver CO
CHIC, Duluth MN
Commonwealth of Massachusetts Executive office of Health and Human Services, Boston MA
DC Department of Health, Washington DC
DCHIE, Washington DC
Greenville Health System, Greenville NC Highmark, Pittsburgh PA
Huntsville Hospital, Huntsville AL
Idaho Health Data Exchange, Boise ID Inland Empire HIE (IEHIE), Riverside CA KeyHie, Danville PA
Lahey Clinic, Burlington MA
Lehigh Valley Health Network (LVHN), Allentown PA
Louisiana Health Care Quality Forum (LaHIE), Baton Rouge LA
Maine HealthInfoNet, (MHIN), Portland ME
Mary Washington Healthcare, Fredericksburg VA
New Hampshire Health Information Organization (NHHIO), Concord NH
New Mexico Health Information Collaborative (NMHIC), Albuquerque NM
North Carolina HIE, Raleigh NC
North Dakota HIE, Fargo ND
North Texas Accountable Healthcare Partnership (NTAHP), Dallas TX
OK State Department of Health, Oklahoma City OK
Rush Health, Chicago IL
Scottsdale Health Partners, Scottsdale AZ
St. Luke's University health Network, PA
St Vincents Medical Center, Jacksonville FL
St. Francis Care, Hartford CT
Sutter Health, CA
Vanderbilt Health Access Network, Nashville TN
Walgreens, Chicago IL
Western Connecticut Health Network (WCHN), Danbury CT
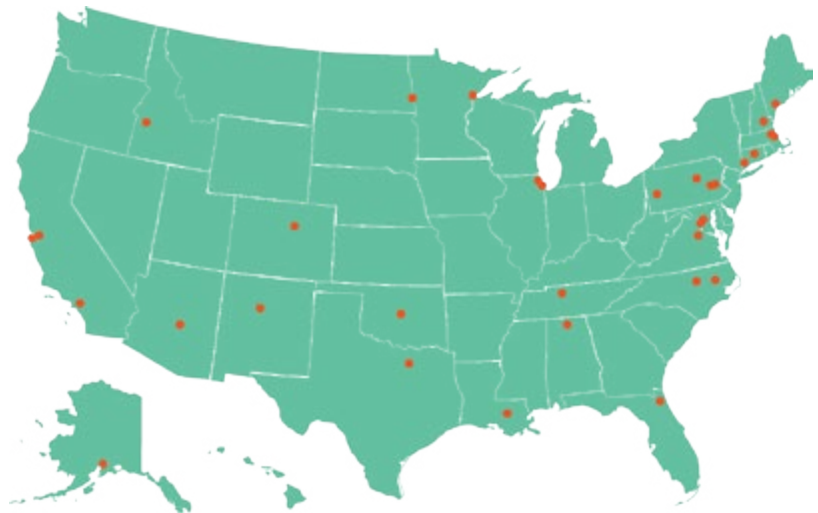
# Competitive Landscape

## Overview

The competitive landscape has changed and continues to change with existing specialist health firms broadening their offering, new entrants and multinational general IT companies moving into health IT. Orion Health's strength is interoperability, making data usable across platforms and format, which means even with competition coming from both sides they can help play a connector role. Gartner in completing a market survey found there was no trend to which provider survey respondents considered to be their top competition, as the report states: "the answer supports the assertion that the market is wide open". The market is fragmented with consolidation highly likely as platforms compete for patient record numbers and be the primary provider.



POPULATION HEALTH TECHNOLOGY LANDSCAPE SUGGESTS OPPORTUNITY TO CAPTURE SHARE WITH EARLY ACTION
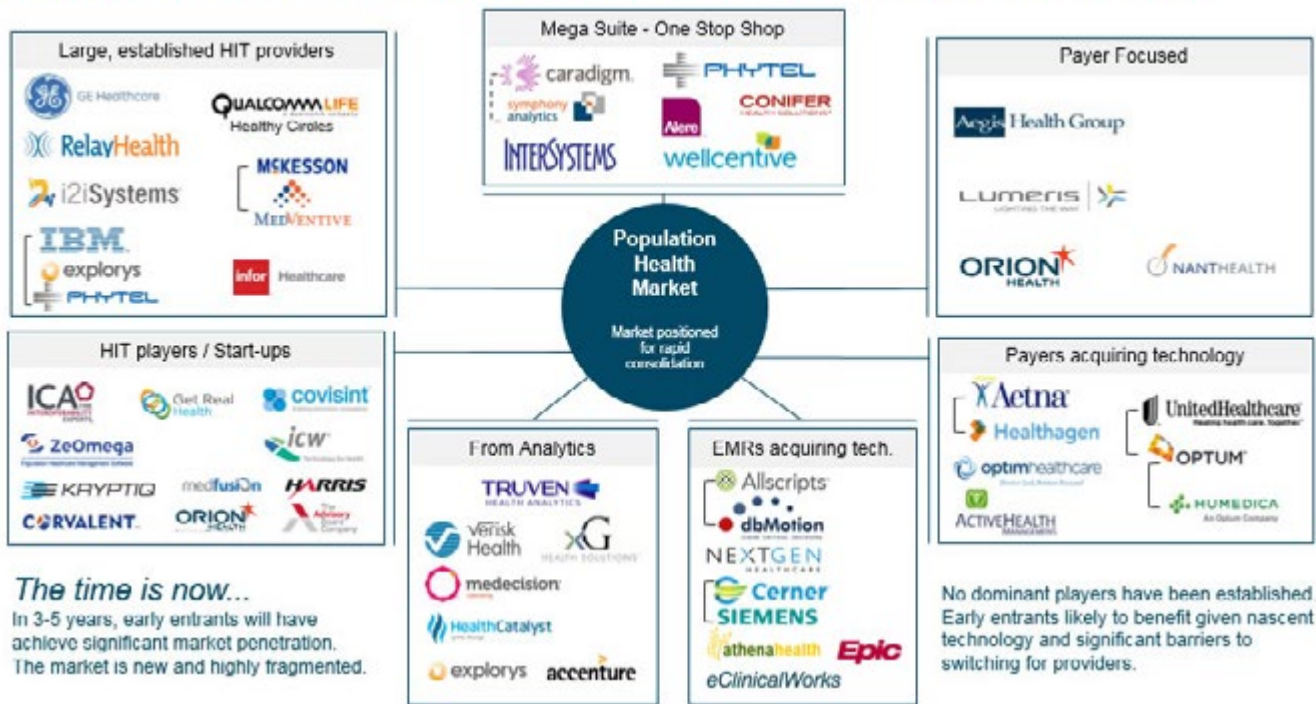
## Selected Competitor Profiles

### Epic

Epic is a privately held American firm founded in 1979 providing a range of health IT solutions. It is a top ranked provider, voted best overall software suite for the last five years (2010-2014) by hospitals and physician practices independently surveyed by KLAS. Epic develops and implements its software in house via dedicated project teams for its 355 customers worldwide. Pricing is based on a software license and support model.

Solutions include, Healthy Planet their population health and accountable care platform which supports a multi electronic medical record (EMR) ecosystem on a single patient-centric database. Epic currently has 129 million patient registries in the ecosystem with 15.3 million patient records exchanged securely on the Care Everywhere network in June 2015.

### InterSystems

Like Epic, InterSystems is a privately held American company founded a year earlier in 1978, today it has clients in over a 100 countries. InterSystems is a profitable business generating around half a billion American dollars in revenue. The firm's data management, connectivity and analytics technologies are used across a number of industries, the largest of which are banking and health.

In the health sector InterSystems serves more than two-thirds of the U.S. populations through healthcare solutions that use InterSystems Cache database and integration software. Interoperability and analytics can be performed in InterSystems HealthShare a health informatics platform that can be implemented across a hospital network, community, region or nation.

### Cerner

Cerner is a publicly listed on the Nasdaq stock exchange with a market cap in excess of $20B. Net earnings for FY2014 were $525 million USD on a revenue of $3.4 billion USD Cerner uses a recurring software subscription revenue model as a result of HealtheIntent, their population health management platform, being a SaaS product. They are a recognised leader winning six Best in KLAS 2014 awards including winning best remote hosting for the sixth consecutive year.

HealtheIntent has a number of modules that can be integrated into the platform to provide a customised solution. Modules include HealtheRegistries a management tool, HealtheAnalytics with run analytical tools, HealtheLife with acts as a patient and clinical portal.

### IBM Watson Health

In 2015 IBM created a new business unit IBM Watson Health combining their existing health team with the acquired health data analytics vendor Explory and population health vendor Phytel. The business unit has a discreet budget, R&D authority and a starting staff of 2,000 employees. At the same time, they announced partners with Johnson & Johnson, Medtronic and Apple. This has signalled its strategic intent to become a major played in the transformation of health technology.

# Conclusion

The North American market for health IT solutions is wide open as it goes through a period of innovative change. This has led to global competitors investing heavily while moving quickly to grab market share. Healthcare providers are reluctant to invest due to concerns around unproved benefits, the large cost and complexity of implementation amid security concerns of moving to cloud based software.

Orion Health is in both an exciting and challenging situation. Ian McCrae is a visionary with a strong belief in positioning Orion Health as a globally leader through R&D. Orion needs to understand where it should position it's Amadeus platform in the marketplace, what the addressable market in North America is, and whether their footprint should grow out or up.

Looking to the future, as Orion provides for current market demand, it must also be equipped to become the provider of choice when Precision Medicine, the final stage of innovation, becomes mainstream. Additionally, while profitability is not critical in the short-medium term as it responds to shifting market trends, the company needs to build confidence amongst investors that these changes will pay off in the long term. To achieve this Orion Health must deliver on its vision and continue to grow the business.

# Appendices

# Financial Information

**Finances taken from 2016 Interim results**

## Consolidated Statement of Comprehensive Income

FOR THE SIX MONTHS ENDED 30 SEPTEMBER

| | Note | 6 months Unaudited 30 Sep 2015 NZ$'000 | 6 months Unaudited 30 Sep 2014 NZ$'000 |
|---|---|---|---|
| **Operating revenue** | 3 | **101,679** | **80,522** |
| Other income | | 2,631 | 2,565 |
| **Total Income** | | **104,310** | **83,087** |
| | | | |
| **Expenses** | | | |
| Direct operating costs and expenses | | (24,805) | (16,674) |
| Employee benefits expense | | (85,757) | (72,098) |
| Promotional expenses | | (1,807) | (814) |
| Administration and other expenses | | (10,029) | (7,858) |
| Occupancy expenses | | (5,157) | (5,109) |
| Depreciation and amortisation expense | | (3,691) | (2,357) |
| Net foreign exchange gains | | 1,153 | 1,298 |
| Other operating losses | | (532) | (271) |
| | 4 | **(130,625)** | **(103,883)** |
| **Operating loss** | 3 | **(26,315)** | **(20,796)** |
| Finance income | | 1,456 | 107 |
| Finance costs | | (111) | (185) |
| Finance income/(costs) – net | | 1,345 | (78) |
| **Loss before income tax** | | **(24,970)** | **(20,874)** |
| Income tax (expense)/credit | 5 | (1,883) | 6,116 |
| **Loss for the period attributable to equity holders of the Parent** | | **(26,853)** | **(14,758)** |
| | | | |
| **Other comprehensive income for items that may be reclassified subsequently to profit or loss** | | | |
| Currency translation differences | | 2,735 | 1,161 |
| **Total other comprehensive income** | | **2,735** | **1,161** |
| **Total comprehensive loss attributable to equity holders of the Parent** | | **(24,118)** | **(13,597)** |
| | | | |
| **Earnings per share** | | | |
| Basic and diluted loss per share (cents) | | (16.9) | (10.9) |

# Consolidated Balance Sheet

AS AT 30 SEPTEMBER

| | Note | Unaudited 30 Sep 2015 NZ$'000 | Audited 31 Mar 2015 NZ$'000 |
|---|---|---|---|
| **ASSETS** | | | |
| **Current assets** | | | |
| Cash and cash equivalents | | 50,589 | 30,944 |
| Term deposits | | 26,400 | 64,200 |
| Trade and other receivables | | 56,482 | 58,680 |
| Accrued revenue | | 20,390 | 20,025 |
| Current income tax asset | | 1,494 | 2,469 |
| | | **155,355** | **176,318** |
| **Non-current assets** | | | |
| Accrued revenue | | 8,336 | 6,870 |
| Deferred tax assets | | 662 | 930 |
| Property, plant and equipment | | 13,733 | 13,028 |
| Intangible assets | | 4,791 | 4,145 |
| | | **27,522** | **24,973** |
| **TOTAL ASSETS** | | **182,877** | **201,291** |
| **LIABILITIES** | | | |
| **Current liabilities** | | | |
| Trade and other payables | | 16,015 | 14,024 |
| Current income tax payable | | 68 | 199 |
| Employee benefits | | 15,875 | 15,388 |
| Revenue in advance | | 54,603 | 50,899 |
| Provisions for other liabilities | | 2,575 | 2,437 |
| | | **89,136** | **82,947** |
| **Non-current liabilities** | | | |
| Trade and other payables | | 1,664 | 1,595 |
| Revenue in advance | | 1,603 | 2,431 |
| Provisions for other liabilities | | 786 | 656 |
| Deferred tax liabilities | | 232 | 880 |
| | | **4,285** | **5,562** |
| **TOTAL LIABILITIES** | | **93,421** | **88,509** |
| **NET ASSETS** | | **89,456** | **112,782** |
| **EQUITY** | | | |
| Share capital | 7 | 159,999 | 159,752 |
| Treasury shares | 8 | (4,287) | (4,388) |
| Share-based payment reserve | 8 | 1,701 | 1,257 |
| Accumulated losses | | (69,650) | (42,797) |
| Foreign currency translation reserve | | 1,693 | (1,042) |
| **TOTAL EQUITY ATTRIBUTABLE TO THE OWNERS OF THE PARENT** | | **89,456** | **112,782** |

For and on behalf of the Board, 24 November 2015

**Andrew Ferrier**
Chairman

**Ian McCrae**
Director and Chief Executive Officer

The accompanying notes form an integral part of these financial statements

# Consolidated Statement of Cash Flows

FOR THE SIX MONTHS ENDED 30 SEPTEMBER

| | Note | 6 months Unaudited 30 Sep 2015 NZ$'000 | 6 months Unaudited 30 Sep 2014 NZ$'000 |
|---|---|---|---|
| **CASH FLOW FROM OPERATING ACTIVITES** | | | |
| **Cash provided from:** | | | |
| Receipts from customers | | 109,083 | 91,461 |
| Interest received | | 1,231 | 107 |
| | | 110,314 | 91,568 |
| **Cash applied to:** | | | |
| Payment to suppliers | | (44,618) | (35,102) |
| Payment to employees | | (81,386) | (65,204) |
| Interest paid | | (17) | (185) |
| Taxation paid | | (3,673) | (4,633) |
| | | **(129,694)** | **(105,124)** |
| **Net cash outflow from operating activities** | 12 | **(19,380)** | **(13,556)** |
| | | | |
| **CASH FLOW FROM INVESTING ACTIVITIES** | | | |
| **Cash provided from:** | | | |
| Term deposits | | 37,800 | - |
| **Cash applied to:** | | | |
| Property, plant and equipment – additions | | (1,364) | (2,333) |
| Intangible assets – additions | | (1,135) | (444) |
| **Net cash inflow/(outflow) from investing activities** | | **35,301** | **(2,777)** |
| | | | |
| **CASH FLOW FROM FINANCING ACTIVITIES** | | | |
| **Cash provided from:** | | | |
| Issue of shares | | - | 25,717 |
| **Net cash inflow from financing activities** | | **-** | **25,717** |
| | | | |
| **TOTAL NET CASH INFLOW** | | **15,921** | **9,384** |
| | | | |
| Cash and cash equivalents as the beginning of period | | 30,944 | (928) |
| Effect of exchange rate on foreign currency balances | | 3,724 | 1,066 |
| Net cash inflow | | 15,921 | 9,384 |
| **Cash and cash equivalents at the end of period** | | **50,589** | **9,522** |
| | | | |
| **Composition of cash and cash equivalents** | | | |
| Cash and cash equivalents | | 50,589 | 13,817 |
| Bank overdraft | | - | (4,295) |
| **Total cash and cash equivalents** | | **50,589** | **9,522** |
| | | | |
| Term deposits – within investing activities | | 26,400 | - |
| **Total funds available and on deposit** | | **76,989** | **9,522** |

The accompanying notes form an integral part of these financial statements

## 3. SEGMENT INFORMATION (CONTINUED)

Regional segmentation by category of product/service:

| 6 months to 30 September 2015<br>Unaudited | NA<br>NZ$'000 | APAC<br>NZ$'000 | EMEA<br>NZ$'000 | Corp/Dev<br>NZ$'000 | Total<br>NZ$'000 |
|---|---|---|---|---|---|
| **Revenue: third party** | | | | | |
| Perpetual licences | 9,702 | 3,386 | 9,703 | - | 22,791 |
| Implementation services | 22,264 | 7,193 | 6,836 | - | 36,293 |
| Support services | 9,870 | 5,075 | 4,901 | - | 19,846 |
| Managed services | 19,893 | 484 | 1,319 | - | 21,696 |
| Other revenue | 558 | 76 | 62 | 357 | 1,053 |
| **Operating revenue** | **62,287** | **16,214** | **22,821** | **357** | **101,679** |
| | | | | | |
| **Segment operating profit/(loss): third party** | **5,037** | **3,232** | **7,200** | **(42,937)** | **(27,468)** |
| Inter-segment transactions | (3,035) | (453) | (6,093) | 9,581 | - |
| **Segment operating profit/(loss)** | **2,002** | **2,779** | **1,107** | **(33,356)** | **(27,468)** |

| 6 months to 30 September 2014<br>Unaudited, Restated | NA<br>NZ$'000 | APAC<br>NZ$'000 | EMEA<br>NZ$'000 | Corp/Dev<br>NZ$'000 | Total<br>NZ$'000 |
|---|---|---|---|---|---|
| **Revenue: third party** | | | | | |
| Perpetual licences | 7,623 | 8,543 | 3,735 | - | 19,901 |
| Implementation services | 21,460 | 8,161 | 6,106 | - | 35,727 |
| Support services | 7,734 | 4,505 | 2,131 | - | 14,370 |
| Managed services | 8,389 | 751 | 545 | - | 9,685 |
| Other revenue | 375 | 68 | 80 | 316 | 839 |
| **Operating revenue** | **45,581** | **22,028** | **12,597** | **316** | **80,522** |
| | | | | | |
| **Segment operating profit/(loss): third party** | **(411)** | **9,935** | **2,233** | **(33,851)** | **(22,094)** |
| Inter-segment transactions | (421) | (6,980) | (2,394) | 9,795 | - |
| **Segment operating profit/(loss)** | **(832)** | **2,955** | **(161)** | **(24,056)** | **(22,094)** |

Reconciliation from segment operating loss to consolidated operating loss:

| | 6 months<br>Unaudited<br>30 Sep 2015<br>NZ$'000 | 6 months<br>Unaudited<br>30 Sep 2014<br>NZ$'000 |
|---|---|---|
| Segment operating loss | (27,468) | (22,094) |
| Net foreign exchange gains | 1,153 | 1,298 |
| **Operating loss** | **(26,315)** | **(20,796)** |

## USA State Health Spend Data

| State | Population (2010 census) | Total Health Spending by State of Provider (2009) (millions) | Avg. Annual % Growth (between 1991-2009) | Health Spending per Capita (2009) | Avg. Annual % Growth per Capita (between 1991-2009) | Population over age 65 (2010) | Life expectancy at birth, in years (2009) | Hospital Beds per 1000 people (2014) |
|---|---|---|---|---|---|---|---|---|
| Alabama | 4,779,736 | $29,126 | 7.9% | $6,272 | 5.1% | 13.8% | 75.4 | 3.08 |
| Alaska | 710,231 | $6,185 | 9.2% | $9,128 | 7.3% | 7.7% | 78.3 | 2.22 |
| Arizona | 6,392,017 | $36,349 | 9.5% | $5,434 | 4.5% | 13.8% | 79.6 | 1.98 |
| Arkansas | 2,915,918 | $17,130 | 8.2% | $6,167 | 5.4% | 14.4% | 76.0 | 3.13 |
| California | 37,253,956 | $231,026 | 7.7% | $6,238 | 4.8% | 11.4% | 80.8 | 1.79 |
| Colorado | 5,029,196 | $30,763 | 8.6% | $5,994 | 5.0% | 10.9% | 80.0 | 1.96 |
| Connecticut | 3,574,097 | $30,328 | 8.1% | $8,654 | 5.5% | 14.2% | 80.8 | 2.17 |
| Delaware | 897,934 | $7,247 | 9.3% | $8,480 | 6.2% | 14.4% | 78.4 | 2.19 |
| District of Columbia | 601,723 | $8,196 | 6.4% | $10,349 | 4.5% | 11.4% | 76.5 | 5.38 |
| Florida | 18,801,310 | $132,342 | 9.3% | $7,156 | 5.0% | 17.3% | 79.4 | 2.69 |
| Georgia | 9,687,653 | $54,302 | 8.9% | $5,467 | 4.4% | 10.7% | 77.2 | 2.42 |
| Hawaii | 1,360,301 | $8,899 | 8.0% | $6,856 | 5.5% | 14.3% | 81.3 | 2.02 |
| Idaho | 1,567,582 | $8,199 | 9.2% | $5,658 | 5.6% | 12.4% | 79.5 | 2.03 |
| Illinois | 12,830,632 | $84,197 | 7.0% | $6,756 | 5.2% | 12.5% | 79.0 | 2.45 |
| Indiana | 6,483,802 | $43,153 | 8.0% | $6,666 | 5.5% | 13.0% | 77.6 | 2.61 |
| Iowa | 3,046,355 | $19,838 | 7.2% | $6,921 | 5.7% | 14.9% | 79.7 | 3.13 |
| Kansas | 2,853,118 | $18,780 | 7.5% | $6,782 | 5.5% | 13.2% | 78.7 | 3.45 |
| Kentucky | 4,339,367 | $28,078 | 8.4% | $6,596 | 5.8% | 13.3% | 76.0 | 3.17 |
| Louisiana | 4,533,372 | $30,508 | 7.7% | $6,795 | 5.4% | 12.3% | 75.7 | 3.24 |
| Maine | 1,328,361 | $10,865 | 8.8% | $8,521 | 7.0% | 15.9% | 79.2 | 2.54 |
| Maryland | 5,773,552 | $41,995 | 8.3% | $7,492 | 5.7% | 12.3% | 78.8 | 2.01 |
| Massachu-setts | 6,547,629 | $62,780 | 8.0% | $9,278 | 5.9% | 13.8% | 80.5 | 2.38 |
| Michigan | 9,883,640 | $64,281 | 6.8% | $6,618 | 5.2% | 13.8% | 78.2 | 2.46 |
| Minnesota | 5,303,925 | $40,440 | 8.0% | $7,409 | 5.9% | 12.9% | 81.1 | 2.67 |
| Mississippi | 2,967,297 | $18,552 | 8.5% | $6,571 | 6.3% | 12.8% | 75.0 | 4.17 |
| Missouri | 5,988,927 | $42,734 | 7.8% | $6,967 | 5.8% | 14.0% | 77.5 | 3.07 |
| Montana | 989,415 | $6,354 | 8.4% | $6,640 | 5.9% | 14.8% | 78.5 | 3.6 |
| Nebraska | 1,826,341 | $12,845 | 7.9% | $7,048 | 6.2% | 13.5% | 79.8 | 3.55 |
| Nevada | 2,700,551 | $15,284 | 10.5% | $5,735 | 4.9% | 12.0% | 78.1 | 1.95 |
| New Hampshire | 1,316,470 | $10,021 | 9.7% | $7,839 | 6.6% | 13.5% | 80.3 | 2.14 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| New Jersey | 8,791,894 | $63,329 | 8.2% | $7,583 | 5.3% | 13.5% | 80.3 | 2.3 |
| New Mexico | 2,059,179 | $12,655 | 9.3% | $6,651 | 6.2% | 13.2% | 78.4 | 1.81 |
| New York | 19,378,102 | $162,740 | 7.6% | $8,341 | 5.5% | 13.5% | 80.5 | 2.8 |
| North Carolina | 9,535,483 | $60,581 | 9.6% | $6,444 | 6.0% | 12.9% | 77.8 | 2.22 |
| North Dakota | 672,591 | $5,408 | 7.7% | $7,749 | 6.1% | 14.5% | 79.5 | 4.25 |
| Ohio | 11,536,504 | $81,776 | 7.4% | $7,076 | 5.5% | 14.1% | 77.8 | 2.9 |
| Oklahoma | 3,751,351 | $23,072 | 7.8% | $6,532 | 5.8% | 13.5% | 75.9 | 2.9 |
| Oregon | 3,831,074 | $25,296 | 8.5% | $6,580 | 6.0% | 13.9% | 79.5 | 1.7 |
| Pennsylvania | 12,702,379 | $99,576 | 7.6% | $7,730 | 5.4% | 15.4% | 78.5 | 2.98 |
| Rhode Island | 1,052,567 | $8,910 | 7.9% | $8,309 | 6.0% | 14.4% | 79.9 | 2.13 |
| South Carolina | 4,625,364 | $27,682 | 9.3% | $6,323 | 5.8% | 13.7% | 77.0 | 2.53 |
| South Dakota | 814,180 | $5,974 | 8.4% | $7,056 | 6.0% | 14.3% | 79.5 | 4.79 |
| Tennessee | 6,346,105 | $42,364 | 8.4% | $6,411 | 5.2% | 13.4% | 76.3 | 3.06 |
| Texas | 25,145,561 | $149,908 | 8.9% | $5,924 | 5.2% | 10.3% | 78.5 | 2.28 |
| Utah | 2,763,885 | $14,585 | 9.3% | $5,031 | 5.3% | 9.0% | 80.2 | 1.77 |
| Vermont | 625,741 | $4,292 | 8.6% | $7,635 | 6.7% | 14.6% | 80.5 | 1.92 |
| Virginia | 8,001,024 | $48,887 | 8.7% | $6,286 | 5.6% | 12.2% | 79.0 | 2.19 |
| Washington | 6,724,540 | $45,396 | 8.9% | $6,782 | 5.6% | 12.3% | 79.9 | 1.7 |
| West Virginia | 1,852,994 | $12,931 | 7.5% | $7,667 | 6.2% | 16.0% | 75.4 | 3.7 |
| Wisconsin | 5,686,986 | $40,446 | 7.9% | $7,233 | 6.0% | 13.7% | 80.0 | 2.2 |
| Wyoming | 563,626 | $3,258 | 8.2% | $7,040 | 6.6% | 12.4% | 78.3 | 3.14 |
| Total | 308,745,538 | $2,089,862 | 8.1% | $6,815 | 5.3% | 13.0% | 78.9 | 2.47 |

SCOTTSDALE
*health partners*

# For a Successful Journey to Population Health

Making current Clinical and Patient Information available across all Settings, across all Providers

## CHALLENGE

Patients and Clinical Information
not available to Providers

### BARRIERS

No Data Integration          Data and Process Silos
Isolated Local Providers     Incomplete Records
Outdated Information          Multiple Systems
No Secure Exchange           Limited Data Sharing

## SUCCESS

Scottsdale Health Partners (SHP) launched in 2012 a physician-led Clinical Integration Network and ACO to transform healthcare delivery in the greater Scottsdale, Arizona community. In 2014, SHP became the first and only ACO in the Medicare Shared Savings Program to earn a performance payment in Arizona.

**1 million**
of patient records
in the HIE

**$3.7 million**
generated in savings for the
Federal Government in 2014

**$1.8 million**
earned in MSSP shared
savings in 2014

SHP HEALTH INFORMATION EXCHANGE ROLLED OUT IN 2014 WITH OVER 1,100 CLINICIANS TRAINED AND A WIDESPREAD PRACTICE ADOPTION.

## GOALS

Achieve the coveted Triple Aim

**POSITIVE PATIENT EXPERIENCE**
PATIENT

+

**INCREASED QUALITY**
COMMUNITY

+

**REDUCED COST**
PAYERS

**3** Hospitals          **220** Practices
**690** Primary Care Providers     **35,000** Patient Lives

## STRATEGIES

Partnering with Orion Health
to support initiatives

**CARE MANAGEMENT**          **ANALYTICS**          **INTEGRATED DATA EXCHANGE**

## OUTCOMES

Improved Quality / Reduced Cost /
Improved Patient Satisfaction

with **25** staff members

**2.65 to 3.94**
STAR rating
improvement in one
year for Medicare
Advantage plan

**40-45%**
better readmission
rates than market

**10%**
of cost reduction
reported by Medicare
Advantage Plan in
2013 and another
4.5% in 2014

**ENDLESS COMMENTS**
and stories from
happy patients helped
by care coordinators

*"Orion Health HIE allows us to give our clinicians a Longitudinal Patient Record that pulls together a lot of otherwise disparate clinical data. We are working with them on the MSSP product which is sorely missing from the technology space to support ACOs. We are also working closely with Orion Health on a care coordination product. We are taking an innovative approach to support ambulatory care management. There are no other good solutions in this market today."*

FARON THOMPSON, COO, SCOTTSDALE HEALTH PARTNERS

www.orionhealth.com

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# Sutter Health

Creating Comprehensive Data Exchange for Improving

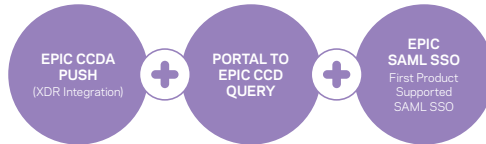# Care Management & Clinical Quality across Northern California

## CHALLENGE

Lack of clinical information sharing across networks of care

### BARRIERS

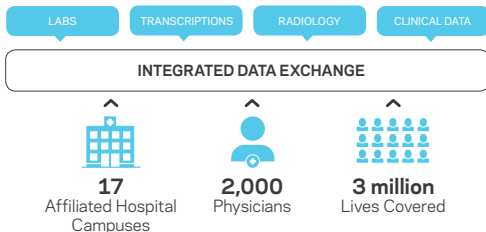| | |
|---|---|
| No Interoperability | Data and Process Silos |
| Isolated Local Providers | Incomplete Records |
| Outdated Information | Multiple Systems |
| No Secure Exchange | In and Out of Network |

## UNIQUE CONFIGURATION

Uses Initiate as the MPI which is hosted by Sutter and connected to SaaS HIE

**EPIC CCDA PUSH** (XDR Integration) **+** **PORTAL TO EPIC CCD QUERY** **+** **EPIC SAML SSO** First Product Supported SAML SSO

## GOALS

Support Providers

LABS · TRANSCRIPTIONS · RADIOLOGY · CLINICAL DATA

**INTEGRATED DATA EXCHANGE**

**17**
Affiliated Hospital Campuses

**2,000**
Physicians

**3 million**
Lives Covered

## STRATEGIES

Sharing Clinical Data including:

- Patient's lab
- Transcription
- Radiology
- Medications
- Allergies
- Problem List, etc.

## SUCCESS

Health Information Exchange Roll Out in 2014
**Medications and Allergies CCD Parsing live in September 2015**

**13.5 million**
Unique Patient Encounters

**1.9 million**
Rad Results
Epic Radiant Interface (Radiology)

**2.9 million**
Epic ID's

**32.2 million**
Transcribed Documents

*"As we look to the future, our goal is to partner with Orion Health, Epic and other vendors in the decision support space. We want decision support that isn't just based on data within the EHR, but within the HIE as well."*

DR. CHRIS JAEGER, CMIO AND VP OF MEDICAL INFORMATICS AT SUTTER HEALTH

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**Alberta Health Services**

# Successful Transformation to an Integrated Electronic Health Information System

## CHALLENGE

Provide a fully Integrated and Coordinated network of ehealth systems with decision support at the point of care

### BARRIERS

**Providers with:**
Too little time
Too little information
Too little clinical support
No longitudinal view of patient
No outcomes tracking
Not enough evidence-based care

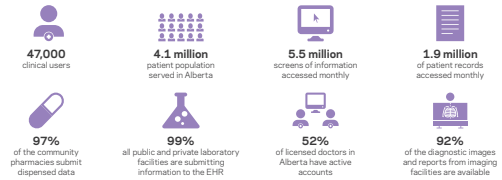**Patients with:**
Long wait time
High utilization of ED visits
No community care
No chronic disease control
No ongoing follow-ups
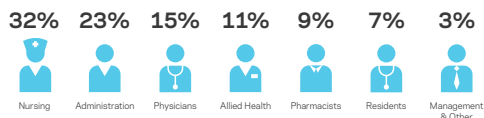No integrated care

## SUCCESS

### Impressive Adoption

Alberta is home to Orion Health's largest HIE implementation in North America, called Alberta Netcare. It has been in production since March 2006 and integrates and connects over 50 eHealth systems. It accommodates approximately 5,000 concurrent users at any given time.

**47,000** clinical users

**4.1 million** patient population served in Alberta

**5.5 million** screens of information accessed monthly

**1.9 million** of patient records accessed monthly

**97%** of the community pharmacies submit dispensed data

**99%** all public and private laboratory facilities are submitting information to the EHR

**52%** of licensed doctors in Alberta have active accounts

**92%** of the diagnostic images and reports from imaging facilities are available

## GOALS

Support Clinical Decisions and Improve Quality of Care

with accessible real-time information and decision support for all stakeholders
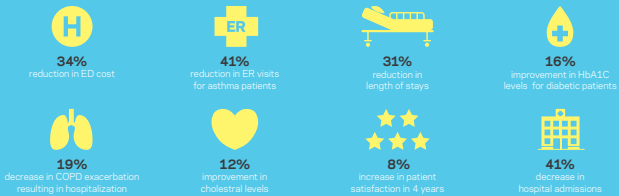
### ALBERTA USER STATISTICS

| 32% | 23% | 15% | 11% | 9% | 7% | 3% |
|---|---|---|---|---|---|---|
| Nursing | Administration | Physicians | Allied Health | Pharmacists | Residents | Management & Other |

## STRATEGIES

Partnering with Orion Health to support new patient centered models of care and deliver essential data in a timely manner

- eREFERRAL
- CHRONIC DISEASE MANAGEMENT
- ALBERTA NETCARE PORTAL (ANP)
- SHARED HEALTH RECORDS (SHR)

## OUTCOMES

### Improved Care / Reduced Cost / Improve Patient Satisfaction

Specific outcomes of the Chronic Disease Management project are impressive. These statistics were measured between years 3 and 4 of the program (Briggs 2009-2012):

**34%** reduction in ED cost

**41%** reduction in ER visits for asthma patients

**31%** reduction in length of stays

**16%** improvement in HbA1C levels for diabetic patients

**19%** decrease in COPD exacerbation resulting in hospitalization

**12%** improvement in cholestral levels

**8%** increase in patient satisfaction in 4 years

**41%** decrease in hospital admissions

*"I had a young patient diagnosed with a UTI infection (or thought to have been). The next expected intervention would be surgical. The results in the EHR showed that the previous two suspected UTIs' were not really UTIs. The surgical intervention which has not only a high cost but also a morbidity risk was averted."*

PHYSICIAN, EDMONTON, ALBERTA

www.orionhealth.com

**ORION** HEALTH
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# HealthInfoNet

A National Leader in Health Information Exchange Innovation

# Maine takes HIE to New Levels

## CHALLENGE

Lack of timely & actionable medical Information across maine state

### BARRIERS

A high proportion of the provider population are not using certified EHRs (Behavioral Health and LTC) - no connectivity

Competing workflows between EHR and HIE

Lack of incentives to use HIE by those paid for through fee-for-service

Interoperability standards do not support comprehensive data sets for analytics

## SUCCESS

Live in 2009 / High adoption / Sustainable

Successful financial model for HIE growth and sustainability

Legislation passed to include mental and behavioral health data in the HIE with patient permission

Expanded use of data to include research and development of 12 month risk models for:

- ED admission
- Readmissions
- Cost of care
- Heart Attack
- Stroke
- Mortality
- Development of Type 2 diabetes

## GOALS

Drive improvements in Healthcare efficiency, quality, costs & value

Deliver trusted health information exchange services that help the healthcare community create lasting system-wide improvements in the value and quality of patient care.

Offer value-added services and tools to support providers in their IT adoption and use of data

Expand HealthInfoNet and analytics services into regional and national markets

**2016 PRIORITIES**
Workflow Integration, Analytics Expansion, Claims Integration

## STRATEGIES

New Services & Programs

- Partner with Orion Health and other vendors to advance interoperability and workflow integration
- Incorporate new data sets - Long-term care, Social Determinants, Administrative data
- Improve breadth and scalability of data processing and Invest in data-driven evidence-based research

## OUTCOMES

**LARGE DATABASE**

1.5 million of individual records in HealthInfoNet

3.6 million clinical messages sent to support ACOs

ALL hospitals connected (31 bi-directional)

**HIGH ADOPTION**

97% (1.2m) of all Maine residents have their medical information into the HIE

227,842 patient records accessed in 2014 by clinical users

445 ambulatory sites connected (328 bi-directional)

**HIGH CONNECTIVITY**

1.2% patients opted out

84,804 real-time event of care email notifications sent

594,893 Public Health transmissions to Maine CDC

"HealthInfoNet enables our office to quickly and efficiently obtain medical records – especially to track down prior diagnostic imaging for our pulmonary patients. It also support our physicians to ensure ease of continuity of care for patients transferred between our intensive care unit and other facilities

PATIENT SERVICE REPRESENTATIVE, MID COAST MEDICAL GROUP, MAINE

ORION HEALTH
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## USA Office Location

# Press Releases

## Orion Health announces global launch of Amadeus, Accelerates move to Precision Medicine

Dec. 9, 2015

*https://orionhealth.com/press-release/orion-health-announces-global-launch-of-amadeus-accelerates-move-to-precision-medicine/*

Auckland, New Zealand – Orion Health™ (OHE:NZX/ASX), the New Zealand technology company at the forefront of the revolution in healthcare, is firing up its global offering by launching Amadeus, a platform that will enable highly personalised healthcare and the implementation of Precision Medicine. CEO Ian McCrae says Amadeus is at the forefront of Precision Medicine – the newest frontier in modern healthcare.

"Precision Medicine is enabled when all information unique to an individual is combined to identify preventative care and treatments which will be effective for them based on genetic, environmental and lifestyle factors," says Mr McCrae.

"Today many factors impact health outcomes, yet currently, only a few will be taken into account when healthcare decisions are being made. Amadeus will enable doctors to get the insights they need to help them make accurate diagnoses and provide the optimal treatment," he says. "In addition, patients will increasingly have the information they need to be active participants in their own healthcare."

Amadeus is an open-data platform that scales to aggregate and manage different types of health-related data. Orion Health has evolved its industry-leading population health management platform to accommodate huge data file sizes, including genomic (the genetic makeup of the patient) information. Mr McCrae says Amadeus has been designed to encourage collaboration and harness the expertise of leading healthcare vendors from across the health sector.

"What is particularly exciting is that we are delivering Amadeus as an open platform, upon which third parties can innovate. The platform's APIs (Application Program Interfaces) will enable third-party applications to have access to rich data and services so that they can provide additional services that will benefit both doctors and their patients," says Mr McCrae.

Patient privacy is of paramount importance, which is why Amadeus features an advanced privacy service that provides granular access to data elements based on user roles and the sensitivity of the data.

Orion Health's Executive Vice President of APAC, Darren Jones, believes that Precision Medicine will dramatically change healthcare as we know it today.

"Current models of care delivery focus on applying treatments to conditions, not individuals. The consequence of that "one size fits all" approach is that individuals don't receive treatments that take into account factors that make them unique – their family and clinical history, environmental and social factors, and importantly their genome, which when combined with their information can reveal treatment and prevention strategies right for them," says Mr Jones.

Amadeus combines Orion Health's extensive data integration experience with the scalability and performance of its modern technologies Cassandra™, Spark™ and ElasticSearch™. It has a distributed architecture to handle massive volumes of high velocity data.

The modern data platform incorporates predictive modelling to identify the most at-risk patients in a population to drive rapid decision-making, and will leverage machine-learning to make predictions on its immense data.

Orion Health is already making strides into Precision Medicine and last week joined up with innovative New Zealand medical technology companies Medtech and Computer Sciences Corporation (CSC) to work together to deliver a world-leading Precision Medicine solution for New Zealand.

McCrae says that Amadeus goes beyond delivering the technology for today's population health management needs - it future-proofs organisations for emerging models of care.

"Effective collaboration between innovative companies is the key to delivering world-class solutions," says Mr McCrae.

"This is a critical evolution of our business, and for healthcare generally. Imagine a world where everyone receives the treatment that's perfect for them. That's what we're aiming for."

# Orion Health Named a Leader in IDC Health Information Exchange MarketScape Report

July 16, 2015

*https://orionhealth.com/press-release/orion-health-named-a-leader-in-idc-health-information-exchange-marketscape-report/*

Boston, MA - Orion Health™, a population health management and healthcare integration company, today announced that it has been named a leader in the IDC MarketScape report, titled "U.S. Health Information Exchange Platform Solutions 2015 Vendor Assessment." Orion Health is one of only seven vendors evaluated in the report, all of which were selected based on their market share, market penetration, and growth potential.

This IDC MarketScape report, which provides an evaluation of the leading health information exchange (HIE) technology vendors in the healthcare industry, specifically highlights Orion Health's Healthier Populations Solution Suite, a comprehensive set of interoperability and data aggregation tools including the following products:

Open Platform: Combines the company's world-class integration engine technology with a highly-scalable and flexible modern database architecture, making it possible for healthcare organisations to drive informed action across various clinical settings.

Orion Health Rhapsody® Integration Engine: Provides seamless connectivity between legacy and next-generation health systems, simplifying complex healthcare interoperability.

Clinical Portal: Grants secure, online access to all users in the community involved in patient care to a single, accurate patient record that contains centralised data from all the connected source systems.

eHealth Exchange Gateway: Creates a secure, standards-based, auditable and bi-directional connection between Orion Health and the eHealth Exchange enabling users to share and query complete patient information with other HIEs and federal agencies.

The report noted that one of Orion Health's primary assets is its Rhapsody Integration Engine— as its ability to integrate with any HIT system enables true interoperability. The report also cited that another Orion Health strength is that it uses open APIs, so its clients and third-party developers can develop their own applications to run on the Orion Health Open Platform, and that the Open Platform is unique in that it uses Apache Cassandra, an innovative, open source distributed database management system.

Additionally, Orion Health's big data platform is able to ingest and process clinical, claims and less traditional data types, such as data from wearables and genomics, in real-time.

"Healthcare organisations seeking population health and accountable care solutions built on a strong interoperability foundation should consider Orion Health," recommends Lynne A. Dunbrack, research vice president, IDC Health Insights.

"With its origins as a leader in health information exchange, our Healthier Populations Solution Suite has set the standard for data-driven end-to-end population health management," said Paul Viskovich, Global President at Orion Health. "Being recognised by IDC for not only our easy-to-use integration engine, but also our robust technology that supports population health and ACO initiatives, is something we are very proud of and is a true testament to the breadth, depth and flexibility of our solutions. We plan to continue to invest in research and development and continue to bring leading, next-generation technologies to the healthcare market."

# Champions Trophy
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