IBM Watson Health

Leadership & Technology
- 23 Years Patent Leadership
- Global Data Centers: 42
- Watson APIs: 100+
- Watson Technologies: 50
- Research Spend: $6B
- Global Presence: 170 Countries

Health Data
- Health Records: 200M
- Health Longitudinal Data Points: 315B
- Physicians: 350,000+

Growth
- Talent: 7000+
- Partners + Ecosystem: 120+
- Clients: 250+
  - 16 Cancer Institutes
- Programs served in 18 Countries: 80

IBM Watson, explorys, MERGE, PHYTEL, CúRAM SOFTWARE

Watson APIs, Watson Technologies
Humans excel at:

- Common Sense
- Dilemmas
- Morals
- Compassion
- Imagination
- Dreaming
- Abstraction
- Generalization

Cognitive systems excel at:

- Natural Language
- Pattern Identification
- Locating Knowledge
- Machine Learning
- Eliminate Bias
- Endless Capacity
Going beyond current limitations

What if you could…

**Consume 4 billion pages of text in 1 minute** and extract insights that help you deliver more personalized care?

**Identify clinical trials** for which a patient may be eligible without entering any clinical information?

**Advance medical science** by more quickly and efficiently fulfilling clinical research targets?

**Bring leading oncologists’ experience to your own practice** for faster identification of appropriate treatment options?

**Leverage the power of genomics** to design individualized care plans for patients in your care?

**Ready to see what is possible?**
It begins with the power of Watson

- Understands, reasons, learns and interacts
- Extracts and derives meaning from structured and unstructured content – at scale
- Provides analyses across vast arrays of criteria to transform decision-making
- Dynamically updates hypotheses based on variable chains of evidence
- Harnesses entire bodies of knowledge
Oncology

Demand for cancer care will increase 42% over the next ten years

Watson Health cognitive solutions can help oncologists more confidently plan treatment regimens, more efficiently match patients to clinical trials, and apply genomic insights to each patient’s cancer.

Case study: advancing evidence-based care

- Using a Watson–powered solution, clinicians were quickly armed with evidence-based and ranked treatment options
- It takes 17 years, on average, for science to be translated into clinical best practice¹
- Recommendations based on the patient’s condition and medical evidence were available in approximately 30 seconds*

“"It is fast, thorough, and has the uncanny ability to understand how the available evidence applies to the unique individual I am treating.”

--Dr. Stephen Miser,
Chief Medical Information Officer

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29 hours each work day

Required for a physician to stay up-to-date with the latest medical literature

3 seconds

Needed for Watson to read 200 million documents

*Preliminary results, as reported by client

¹https://www.researchgate.net/publication/51897868_The_answer_is_17_years_what_is_the_question_Understanding_time_lags_in_translational_research
A purpose today... a mission for tomorrow

Government
Provide organizations longitudinal analysis of multivariate data sets to benefits and services organizations
So that we can help...
Improve the delivery of health and human services programs, while supporting efforts to better meet individual's unique needs

Value-Based Care
Enhance the ability of organizations to contract, organize for, and deliver personalized, quality care to individuals and populations
So that we can help...

Life Sciences
Spur the discovery of medicines by enabling researchers to uncover insights
So that we can help...

Oncology & Genomics
Help oncologists more confidently plan treatment regimens, more efficiently match patients to clinical trials, and apply genomic insights to each patient’s cancer
So that we can help...

Imaging
Help radiologists improve productivity so that you can enable patient care with image analysis tools
So that we can help...

Government
Value-Based Care
Life Sciences
Oncology & Genomics
Imaging

Life Sciences

Imaging

Oncology & Genomics

Value-Based Care
Government
Support for the delivery of evidence based care

Find patients for my trials; which are the right Pharma trials for to open in my hospital

How does mutational status impact my treatment planning, Can I identify areas of future research from mutational information

Incorporate patient reported outcomes to personalize treatment plans

Advanced analytics on real world and outcomes data to advance research

Comprehensive Cognitive Cancer Care Platform

Watson for Oncology
Watson for Clinical Trial Matching
Watson for Genomics
Real World Evidence

Continuous Learning Platform

Detect patterns from outcomes, real world data to update guidelines; benchmark

Patient Data Repository

EMR

Clinical data
Patient reported outcomes
Exogenous data

Biobank

Genomic data

GUIDELINES
Capability: Oncology & Genomics

Mission: Empower care teams to deliver more personalized and informed care

Oncologists
Leverage information to help improve clinical decision making
Enable oncologists to more confidently recommend treatment approaches based on medical evidence, guidelines, available clinical trials, and genomic insights

Chief Medical Officers
Harness insights to help elevate the consistency of care
Ability to provide robust and consistent presentations of evidence to help providers improve the quality and consistency of care

Payers
Help validate care protocols
Increased confidence in care providers’ abilities to identify care pathways and potentially effective treatment options
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<tr>
<th>To enrich your capacity for care</th>
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<tbody>
<tr>
<td>Utilize cognitive and digital tools in conjunction with one of the largest health data sets available to help...</td>
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<tr>
<td>Improve patient access to personalized, evidence-based cancer treatments to help...</td>
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<tr>
<td>Harness the power of leading oncologists’ expertise in cancer research and treatments to help...</td>
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<tr>
<td>Unlock insights from a vast amount of published data and clinical knowledge to help...</td>
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<td>by efficiently identifying treatment pathways, helping to reduce manual processes</td>
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<td>by providing clinical decision support as a way to reduce treatment variation</td>
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<th>Create Value</th>
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<td>by providing patients with the opportunity to receive treatment options from their oncologist validated by an industry leading cancer center</td>
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<td>by allowing clinicians to spend less time contemplating care plans and more time caring for patients</td>
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Thank you