Communiqués de presse

Une nouvelle percée dans la qualité des soins dispensés aux patients grâce à Watson et IBM

IBM, le Memorial Sloan-Kettering Cancer Center (MSKCC) et WellPoint collaborent afin de mettre la nouvelle génération d'informatique cognitive au service de la santé.

Paris - 12 févr. 2013:

IBM, le *Memorial Sloan-Kettering Cancer Center* (MSKCC) et WellPoint annoncent la première commercialisation d'un système cognitif basé sur des technologies Watson. Ces innovations permettront de transformer la qualité et la rapidité des soins dispensés aux patients par le biais de diagnostics individualisés basés sur des éléments concrets.

L'*American Cancer Society* prévoit que 1,6 million de nouveaux cas de cancer seront diagnostiqués aux Etats-Unis sur la seule année de 2013. Des études montrent que la complexité associée aux soins médicaux est la conséquence d'un diagnostic erroné ou incomplet sur 5. Les données médicales quant à elles doublent de volume chaque année. Ces statistiques couplées à cette explosion de données représentent une occasion sans précédent pour l'industrie de la santé et les systèmes informatiques cognitifs de nouvelle génération. En effet en les unissant, ces deux domaines pourront améliorer la manière dont la médecine est enseignée, pratiquée et tarifée.

Raison pour laquelle IBM a, depuis plus d'un an, établi des partenariats d'un côté avec WellPoint et de l'autre avec le MSKCC pour former Watson dans les domaines de l'oncologie et de la gestion de l'utilisation des ressources médicales. Des cliniciens et des experts en technologie ont passé des milliers d'heures à « apprendre » à Watson à traiter, à analyser et à interpréter la signification des informations cliniques complexes à l'aide du traitement automatique du langage naturel, tous dans le but de contribuer à augmenter l'efficacité et la qualité des soins médicaux.

« *Le travail d'IBM avec WellPoint et le MSKCC constitue une collaboration historique quant à la manière dont la technologie et la médecine basée sur des faits peuvent transformer la pratique de celle-ci.* » a déclaré **Manoj Saxena, Directeur Général des Solutions Watson d'IBM.** « *Ces nouvelles capacités sont les premières d'une longue série de technologies basées sur Watson. Elles amplifieront la valeur des applications du Big Data, de l'analytique et de l'informatique cognitive dans différents secteurs, pour les aider à résoudre leurs défis les plus importants* ».

Les avancées oncologiques grâce à la médecine basée sur des faits

A ce jour, Watson a absorbé plus de 600 000 données médicales, 2 millions de pages issues de 42 revues médicales et des essais cliniques dans le domaine de la recherche oncologique. Watson a la capacité de passer au crible les dossiers médicaux de 1,5 million de patients, soit des décennies d'histoire de traitement du cancer, et de fournir aux cliniciens des options de traitements adaptés en quelques secondes.

En moins d'un an, le MSKCC a immergé Watson dans la complexité de l'étude des cancers et de la recherche génétique, qui a ouvert une nouvelle voie concernant la façon de dispenser des soins à de nombreux patients atteints du cancer avec des traitements hautement spécialisés selon leur type de tumeur génétique.

En commençant avec 1 500 cas de cancer des poumons, les cliniciens et analystes du MSKCC ont entrainé Watson à extraire et à interpréter les annotations et dossiers annotations médicaux, les résultats de laboratoires et les recherches cliniques tout en bénéficiant de son expertise et de son expérience acquises lors du traitement de centaines de milliers de patients atteints du cancer.

« *Cela peut prendre des années pour que les derniers développements en oncologie deviennent utilisables. La combinaison des technologies cognitives dont dispose Watson, de nos données et processus de décision médicaux ont le potentiel de révolutionner l'accessibilité à l'information pour le traitement du cancer à un niveau mondial* » a déclaré **Craig B. Thompson, M.D., Président du MSKCC**. « *En fin de compte, nous espérons que cette approche factuelle améliorera profondément la manière dont est traité le cancer en accélérant la diffusion des évolutions faites en matière de recherches et de traitement* ».

Le *Maine Center*, centre de cancérologie, et *WESTMED Medical Group* sont les deux premiers centres à avoir adopté cette innovation. Leurs oncologues commenceront à tester le produit afin de donner un feedback à WellPoint, IBM et au MSKCC pour améliorer la facilité d'utilisation.

Accélérer la gestion de l'utilisation des ressources médicales pour améliorer les soins médicaux

Tout au long du pilote de WellPoint sur la gestion de l'utilisation des ressources médicales, Watson a intégré plus de 25 000 scénarios médicaux et plus de 1 500 cas réels. Il a acquis la capacité d'analyser les requêtes et d'en interpréter la signification dans un contexte propre aux données médicales et au langage humain et naturel, dont les notes des médecins, les dossiers des patients, les annotations médicales et commentaires cliniques. En outre, Watson a reçu plus de 14 700 heures de formation pratique avec des infirmières. Watson continue d'acquérir de l'expérience sur le terrain, tout comme un interne, en travaillant avec les infirmières de WellPoint qui, à l'origine, avaient effectué sa formation.

Watson a commencé à traiter les demandes administratives médicales courantes faites par les patients affiliés à l'assurance de WellPoint jusqu'en décembre. Cette initiative a été élargie pour inclure cinq bureaux fournisseurs dans le Midwest. Watson utilisera un outil puissant pour accélérer le processus de révision fait entre un médecin et les assurances.

« *L'industrie de la santé doit opérer des transformations par le biais de l'innovation, y compris en exploitant les dernières technologies qui profiteront au final aux patients*», a déclaré **Lori Beer, Vice-Président Exécutif des entreprises de services spécialisés et des technologies de l'Information chez WellPoint**. « *Nous pensons que les données de WellPoint combinées aux connaissances, à la technologie Watson d'IBM et à l'expertise oncologique du MSKCC peuvent mener à cette transformation* ».

Des innovations dans le domaine de la santé alimentées par Watson

C'est pour cela qu'IBM, MSKCC et WellPoint annoncent la première commercialisation d'un système cognitif basé sur des technologies Watson. Ces innovations présentées par IBM, MSKCC et WellPoint représentent une

avancée capitale quant à la manière dont les médecins peuvent appliquer l'analytique, le Big Data et le traitement automatique de langage naturel combinés aux connaissances cliniques dont les données génomiques pour prendre des décisions basées sur une pratique de la médecine factuelle. Ces systèmes basés sur Watson sont conçus pour aider les médecins, chercheurs, centres médicaux et compagnies d'assurance à améliorer la qualité et la rapidité des soins.

Les nouveautés comprennent les **Interactive Care Insights for Oncology**, fournis par Watson et issus par la collaboration entre IBM, le MSKCC et WellPoint. Le **WellPoint Interactive Care Guide** et l'**Interactive Care Reviewer**, également fourni par Watson, permettent d'améliorer la gestion de l'utilisation des ressources médicales. Cette technologie est issue de la collaboration entre IBM et WellPoint.

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IBM Watson Hard At Work: New Breakthroughs Transform Quality Care for Patients

IBM, Memorial Sloan-Kettering Cancer Center and WellPoint Bring Next-Generation Cognitive Computing Advancements, Medical Expertise and Healthcare Services to the Forefront

NEW YORK CITY - 12 February 2013 - IBM (NYSE: IBM), WellPoint, Inc. (NYSE: WLP) and Memorial Sloan-Kettering Cancer Center today unveiled the first commercially developed Watson-based cognitive computing breakthroughs. These innovations stand alone to help transform the quality and speed of care delivered to patients through individualized, evidence based medicine.

The American Cancer Society projects that 1.6 million new cancer cases will be diagnosed in the U.S. this year alone. Studies suggest that the complexities associated with healthcare have caused one in five health care patients to receive a wrong or incomplete diagnosis. These statistics, coupled with a data explosion of medical information that is doubling every five years, represents an unprecedented opportunity for the health care industry and next generation cognitive computing systems, to combine forces in new ways to improve how medicine is taught, practiced and paid for.

For more than a year, IBM has partnered separately with WellPoint and Memorial Sloan-Kettering to train Watson in the areas of oncology and utilization management. During this time, clinicians and technology experts spent thousands of hours “teaching” Watson how to process, analyze and interpret the meaning of complex clinical information using natural language processing, all with the goal of helping to improve health care quality and efficiency.

"*IBM's work with WellPoint and Memorial Sloan-Kettering Cancer Center represents a landmark collaboration in how technology and evidence based medicine can transform the way in which health care is practiced*," said **Manoj Saxena, IBM General Manager, Watson Solutions** . "*These breakthrough capabilities bring forward the first in a series of Watson-based technologies, which exemplifies the value of applying big data and analytics and cognitive computing to tackle the industries most pressing challenges*."

Advancing Oncology Through Evidence Based Medicine

To date, Watson has ingested more than 600,000 pieces of medical evidence, two million pages of text from 42

medical journals and clinical trials in the area of oncology research. Watson has the power to sift through 1.5 million patient records representing decades of cancer treatment history, such as medical records and patient outcomes, and provide to physicians evidence based treatment options all in a matter of seconds.

In less than a year, Memorial Sloan-Kettering has immersed Watson in the complexities of cancer and the explosion of genetic research which has set the stage for changing care practices for many cancer patients with highly specialized treatments based on their personal genetic tumor type.

Starting with 1,500 lung cancer cases, Memorial Sloan-Kettering clinicians and analysts are training Watson to extract and interpret physician notes, lab results and clinical research, while sharing its profound expertise and experiences in treating hundreds of thousands of patients with cancer.

"*It can take years for the latest developments in oncology to reach all practice settings. The combination of transformational technologies found in Watson with our cancer analytics and decision-making process has the potential to revolutionize the accessibility of information for the treatment of cancer in communities across the country and around the world*," said **Craig B.Thompson, M.D., President of Memorial Sloan-Kettering Cancer Center**. "*Ultimately, we expect this comprehensive, evidence-based approach will profoundly enhance cancer care by accelerating the dissemination of practice-changing research at an unprecedented pace*."

The Maine Center for Cancer Medicine and WESTMED Medical Group are the first two early adopters of the capability. Their oncologists will begin testing the product and providing feedback to WellPoint, IBM and Memorial Sloan-Kettering to improve usability.

Speeding Utilization Management to Improve Patient Care

Throughout WellPoint's utilization management pilot, Watson absorbed more than 25,000 test case scenarios and 1,500 real-life cases, and gained the ability to interpret the meaning and analyze queries in the context of complex medical data and human and natural language, including doctors notes, patient records, medical annotations and clinical feedback. In addition, more than 14,700 hours of hands-on training was spent by nurses who meticulously trained Watson. Watson continues to learn while on the job, much like a medical resident, while working with the WellPoint nurses who originally conducted its training.

Watson started processing common, medical procedure requests by providers for members in WellPoint affiliated health plans in December, and was expanded to include five provider offices in the Midwest. Watson will serve as a powerful tool to accelerate the review process between a patient's physician and their health plan.

"*The health care industry must drive transformation through innovation, including harnessing the latest technology that will ultimately benefit the health care consumer*," said **Lori Beer, WellPoint's executive vice president of Specialty Businesses and Information Technology**. "*We believe that WellPoint's data, knowledge and extensive provider network, combined with the IBM Watson technology and Memorial Sloan-Kettering's oncological expertise can drive this transformation.*"

Watson-Powered Health Innovations

As a result, IBM, Memorial Sloan-Kettering and WellPoint are introducing the first commercially based products based on Watson. These innovations represent a breakthrough in how medical professionals can apply advances in analytics and natural language processing to "big data," combined with the clinical knowledge base, including genomic data, in order to create evidence based decision support systems. These Watson-based systems are designed to assist doctors, researchers, medical centers, and insurance carriers, and ultimately enhance the quality and speed of care.

The new products include the **Interactive Care Insights for Oncology**, powered by Watson, in collaboration with IBM, Memorial Sloan-Kettering and WellPoint. The **WellPoint Interactive Care Guide** and **Interactive Care Reviewer**, powered by Watson, designed for utilization management in collaboration with WellPoint and IBM.

New Interactive Care Insights for Oncology

· The cognitive systems use insights gleaned from the deep experience of Memorial Sloan-Kettering clinicians to provide individualized treatment options based on patient's medical information and the synthesis of a vast array of updated and vetted treatment guidelines, and published research.

· A first of-its-kind Watson-based advisor, available through the cloud, that is expected to assist medical professionals and researchers by helping to identify individualized treatment options for patients with cancer, starting with lung cancer.

· Provides users with a detailed record of the data and information used to reach the treatment options.

· Oncologists located anywhere can remotely access detailed treatment options based on updated research that will help them decide how best to care for an individual patient.

New WellPoint Interactive Care Guide and Interactive Care Reviewer

· Delivers the first Watson-based cognitive computing system anticipated to streamline the review processes between a patient's physician and their health plan, potentially speeding approvals from utilization management professionals, reducing waste and helping ensure evidence-based care is provided.

· Expected to accelerate accepted testing and treatment by shortening pre-authorization approval time, which means that patients are moving forward with the first crucial step toward treatment more quickly.

· Analyzes treatment requests and matches them to WellPoint's medical policies and clinical guidelines to present consistent, evidence-based responses for clinical staff to review, in the anticipation of providing faster, better informed decisions about a patient's care.

· WellPoint has deployed Interactive Care Reviewer to a select number of providers in the Midwest, and believes more than 1,600 providers will be using the product by the end of the year.

Watson: Then and Now

The IBM Watson system gained fame by beating human contestants on the television quiz show Jeopardy! almost two years ago, Since that time, Watson has evolved from a first-of-a-kind status, to a commercial cognitive computing system gaining a 240 percent improvement in system performance, and a reduction in the system's physical requirements by 75 percent and can now be run on a single Power 750 server.

The transformational technology, named after IBM founder Thomas J. Watson, was developed in IBM's Research Labs. Using advances in natural language processing and analytics, the Watson technology can process information similar to the way people think, representing a significant shift in the ability for organizations to quickly analyze, understand and respond to vast amounts of Big Data. The ability to use Watson to answer complex questions posed in natural language with speed, accuracy and confidence has enormous potential to improve decision making across a variety of industries from health care, to retail, telecommunications and financial services.

About IBM

For more information on IBM Watson, please visit www.ibmwatson.com

To join the social discussion about Watson at Rensselaer include the hashtag #ibmwatson

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For more insights on this story please visit the Smarter Planet blog.

About WellPoint, Inc.

At WellPoint, we believe there is an important connection between our members' health and well-being—and the value we bring our customers and shareholders. So each day we work to improve the health of our members and their communities. And, we can make a real difference since we have more than 36 million people in our affiliated health plans, and nearly 67 million people served through our subsidiaries. As an independent licensee of the Blue Cross and Blue Shield Association, WellPoint serves members as the Blue Cross licensee for California; the Blue Cross and Blue Shield licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (as the Blue Cross Blue Shield licensee in 10 New York City metropolitan and surrounding counties and as the Blue Cross or Blue Cross Blue Shield licensee in selected upstate counties only), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.), and Wisconsin. In a majority of these service areas, WellPoint's plans do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia and Empire Blue Cross Blue Shield, or Empire Blue Cross (in the New York service areas). WellPoint also serves customers throughout the country as UniCare and in certain markets through our Amerigroup and CareMore subsidiaries. Our 1-800 CONTACTS, Inc. subsidiary offers customers online sales of contact lenses, eyeglasses and other ocular products. Additional information about WellPoint is available at www.wellpoint.com.

About Memorial Sloan-Kettering Cancer Center

Memorial Sloan-Kettering Cancer Center is the world's oldest and largest private institution devoted to prevention, patient care, research, and education in cancer. Our scientists and clinicians generate innovative approaches to better understand, diagnose, and treat cancer. Memorial Sloan-Kettering specialists are leaders in biomedical research and in translating the latest research to advance the standard of cancer care worldwide. For more information, go to http://www.mskcc.org

SAFE HARBOR STATEMENT UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

This press release contains forward-looking information that is intended to be covered by the safe harbor for "forward-looking statements" provided by the Private Securities Litigation Reform Act of 1995. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)", "intend", "estimate", "project" and similar expressions are intended to identify forward-looking statements, which generally are not historical in nature. These statements include, but are not limited to, statements regarding plans, objectives and expectations with respect to future operations, products and services. Such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond our control, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include technical, business, financial, regulatory and/or legal issues that may arise in the development and/or implementation of the proposed Watson healthcare systems. Readers are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof. Except to the extent otherwise required by federal securities law, we do not undertake any obligation to republish revised forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Readers are also urged to carefully review and consider the various disclosures in WellPoint's and IBM's SEC reports.
