



# Smarter Is: Breaking Data and Disease Down to Size

October 15, 2010, 4:02 pm

: [Search RSSing for similar articles...](#)

Next » [Smarter Is: Saving Minds, Saving Lives](#)

Previous « [Smarter Is: Delivering Social Services Where They're Needed Most](#)



How one Chinese hospital is using big data analysis to make the most of both traditional and Western medicineDavid

Geer

Chronic kidney disease (CKD) is the ninth leading cause of death in the United States, according to the Centers for Disease Control and Prevention.\* Modern Western medicine has had little impact in staying the disease's deadly hand.

But Eastern doctors have found hope for patients with CKD in traditional Chinese medicine (TCM). Over the years TCM has proven effective in delaying the need for kidney dialysis. Guang Dong Hospital of TCM in Southern China treats 10,000 kidney patients a year; if doctors can establish the combinations of treatments that are consistently effective for different categories of CKD patients, they can apply evidence-based treatment plans with confidence, helping to save lives.

Although the Guang Dong Hospital of TCM has access to millions of electronic medical records, much of the patient data will, in the future, be captured in large XML documents that are difficult and time-consuming to sift through and analyze, according to Sarah Knoop, manager for Healthcare Systems Research at IBM Research – Almaden, in San Jose, California.

To address this problem, IBM and the Guang Dong Hospital teamed up to create Healthcare Information Warehouse for Analysis and Sharing (HIWAS), a prototype plug-in-based tool for IBM® InfoSphere® Warehouse. The hybrid solution extracts the existing, complicated XML data and enables it to be converted into more easily analyzed formats, says Knoop. “[These formats are] the most appropriate, efficient storage representation for the business problem at hand leveraging DB2 technology,” she says.

“For clinicians to use this data in the clinical setting, they have to be able to extract it in order to analyze it,” explains Knoop. “However, doing so can be difficult because these XML models are typically complex and more general.”

Knoop also says that HIWAS helps extract valuable information for further analysis so it can be used by IBM Cognos analysis tools. HIWAS converts the excised data into warehouse schemas for hybrid relational-XML or pure relational

databases, Knoop explains. Cognos is then able to analyze the data and create reports that highlight the significant relationships between the data. Doctors use those relationships to build a base of clinical evidence that reveals best practices around treatments for CKD, according to Knoop.

With HIWAS, doctors can analyze the data and categorize CKD patients according to those who became sick because of other diseases or in combination with other chronic diseases. This will help doctors understand which combinations of Western treatment plans and TCM approaches are most effective for certain categories of patients, says Lu Yu Bo, president of Guang Dong Hospital of TCM.

“As clinical doctors, we can use IBM technology to find more useful information from the patients’ cases,” says Mao Wei, professor of nephrology at Guang Dong Hospital of TCM. “This useful data can help us to improve our effectiveness in traditional Chinese medicine in the treatment of chronic disease.”

\* “[The Battle Against Diabetes: Progress Made, Challenges Unmet](#),” by Ann Albright, CDC Congressional Testimony, July 1, 2010.

The post [Smarter Is: Breaking Data and Disease Down to Size](#) appeared first on [IBM DATA](#).



search RSSing.com....

Search



Viewing all articles

Article 9

Browse latest

Browse all 12

## LATEST IMAGES



Like Colton Underwood, it took me a long time to come out – it’s

never easy

Update

## TRENDING ARTICLES

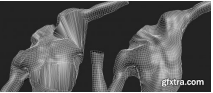
Serial Swanthanam Launching Today at 7:00 P.M on Asianet – Repeat Telecast Time  
September 20, 2020, 9:30 pm



ADINA LORRAINE SULLIVAN Arrested by Clackamas County Sheriff's Office on Apr...  
April 14, 2021, 12:00 am

Pimsleurs Mandarin I-II-III + Extras  
April 3, 2013, 11:52 pm

Deformation Cleaner 1.0 for 3ds Max 2008-2022  
April 12, 2021, 5:53 am



35% Kathavar Pass Full Movie Download HDMp4 DVDRip Torrents  
November 1, 2016, 3:06 am



UserMailbox.Forwardable.Resolver.CreateRecipientItems.40  
August 19, 2020, 2:48 am

Jabariya Jodi Meaning | जबरया जाड़ा  
June 12, 2019, 6:42 am

OLIVER ONIONS - Bud Spencer & Terence Hill - Greatest Hits (1994) mp3 320 kbps  
January 5, 2016, 12:49 am

REQ: Zatox Unstoppable Hardstyle Vol.1  
July 11, 2020, 3:04 pm

Cannabis crop growing in Galashiels home

IMAGE  
NOT AVAILABLE

JONATHAN DOTY Arrested by Columbia County Sheriff's Office on Nov 06, 2016

November 7, 2016, 12:22 am



ARIELLE MCLEAN

January 9, 2017, 4:24 pm

IMAGE  
NOT AVAILABLE

[MULTI] The Sopranos - Saison 1 à 6 (L'INTEGRALE) [FRENCH][DVDRIP]

March 10, 2013, 10:30 am

IMAGE  
NOT AVAILABLE

Reallusion Character Creator 3.4.3924.1 + Pipeline & Resources

March 26, 2021, 12:17 pm

IMAGE  
NOT AVAILABLE

Dawn of the Final Day

April 15, 2021, 11:50 am

Total War Shogun 2.Rise of the Samurai + All Dlc [Steam-Rip] - R.G.Origins

January 10, 2012, 4:20 am

Chiesa di San Giovanni Apostolo ed Evangelista - architetto Franco Feliciani,...

July 9, 2015, 8:40 am

dapl async\_event: DEV ERR 11

April 1, 2020, 7:17 pm

Videohive Pieces of Puzzle

July 16, 2018, 5:36 am

+ More Pages to Explore .....

## TOP-RATED IMAGES

