# CMS Signs $92-mil Contract with Defense Giant…Is Consumer Healthcare Data Privacy Left Unguarded?

At first glance, there is no overlap between the business of healthcare and manufacture of weapons of war.

Look again.

Strange bedfellows as they may seem, the Centers for Medicare and Medicaid Services (CMS) recently signed a $92-million contract with major defense entity Northrop Grumman. The contract directs Northrop Grumman to build the second stage of a computer system immediately aimed at decreasing fraud, but which will eventually do double-duty in foreshadowing patients' medical conditions.

The use of "big data" to anticipate individuals' healthcare demands is not exactly brand-new (sophisticated technology can alr gather data based on social media and the like, as well as patient interactions with pharmacies, hospitals, and doctors). But th Northrop Grumman-CMS collaboration is an example of big data on an enormous scale (one of the largest efforts of its kind).

"Predictive analytics" are systems designed to increase healthcare's efficiency and effectiveness by proactively addressing m matters before they grow into major difficulties.

## Does a "comprehensive approach to using medical information" mean a loss of privacy?

"There are tremendous advantages to big data in healthcare," says Gerard Magill, a professor of healthcare ethics at Duquesn University in Pittsburgh. "It's about creating a comprehensive approach to using medical information."

Magill isn't alone in the recognition of the importance of data in this equation.

"The use of data in healthcare is absolutely critical," says Dr. Shantanu Agrawal, director of Medicare's Center for Program In (tasked with reducing costs). "Having it be predictive of various issues is extremely important."

A possible scenario for how the predictive analytics of big data might work on the level of individual patient:

A patient taking medication to lower her cholesterol tells her physician that she's not having success in losing weight. She put post on Facebook that describes her stress over issues at work or in her relationship. An algorithm would notify the woman's that she's at risk for a heart attack and would urge timely medical attention.

If this prevents a major cardiac episode, one doesn't have to look far to see the upside. The downside to this process, though? The loss of individual privacy.

"Big data requires that information; it's nonnegotiable," Magill said. "Individual privacy is gone for the common good."

## Short-term goal: secure the gates against billing fraud

Despite the attention on big data as a means of predicting medical crises in patients, though, the immediate goal of the North Grumman-CMS contract is fraud protection.

CMS reports that the initial phase of the fraud detection system designed by Northrop has saved the government upwards of billion over the past two years.

Amy Caro is vice president of the health solutions division of Northrop Grumman Technology Services. She notes that sophisticated algorithms are the most effective means of identifying fraudulent healthcare claims since they can weed through millions of submitted claims (Medicare receives 4.5 million claims per day) and spot markers that set the potentially fraudulent claims apart.

Identifying fraud before claims are paid is exactly the opposite of how CMS has long been operating, and it is certainly more effective, expedient, and economical.

Caro sees a logical extension from working proactively to prevent fraud to working proactively to prevent Medicare and Medic beneficiaries' medical problems.

"You have all types of data out there and available," she said. "You're able to drill down and look for signs of certain diseases conditions."

However, she does acknowledge the need for a "national conversation" about the specific ways big data will use consumer m information, as well as means for safeguarding consumers in the process.