## Social Health Media Communication Platforms and Their Efficacy in the Disruption of Patient Engagement Norms

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### We hope you learn more about:

Identification of date sources to enhance quality improvement and patient safety programs

How information retrieval links to knowledge generation and wisdom

The value of both structured and unstructured data

How to handle the complexity and unique challenges of health care data

### When you need change, how do covert snails into believers?

### Believers vs. Snails



-- Kaptchuk, BMJ, 2003;326:1453-5

### It's all about the story you can tell with the right data!



Harper, E. (2015). *Clinical Integration and the Continuum of Care [PowerPoint slides]*. Retrieved from http://files.himss.org/2015Conference/handouts/NI5\_1428848643264\_4.pdf

What do we mean by quality of care?

"The degree to which healthcare services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."



# Quality measures assess three levels of health care and its intended results:

- Structure measures sufficiency of resources and proper system design.
- 2. Process measures interaction between the patient and the provider.
- 3. Outcome measures description of how the care delivered affects the patient's health, health status and function.

Why is healthcare data complex and unique?

Much of the data is in multiple places and in different formats – and different across systems

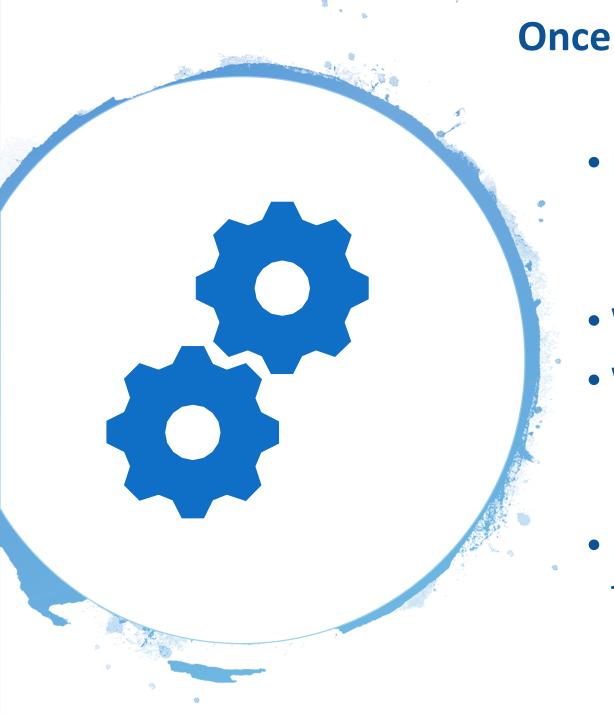
Data is structured and unstructured

Inconsistent and variable definitions

There are changing regulations about what data to collect and what to report

Data is complex – claims data is the most standardized but it is not clinical (real world) data

New data and evidence is coming out everyday



Once you know the why of the data, how do you get it?

- Research vs. Quality Improvement
  - Intend to publish/ disseminate results?
- Who to ask
- What permissions do you need?
  - Ensure signatures are obtained

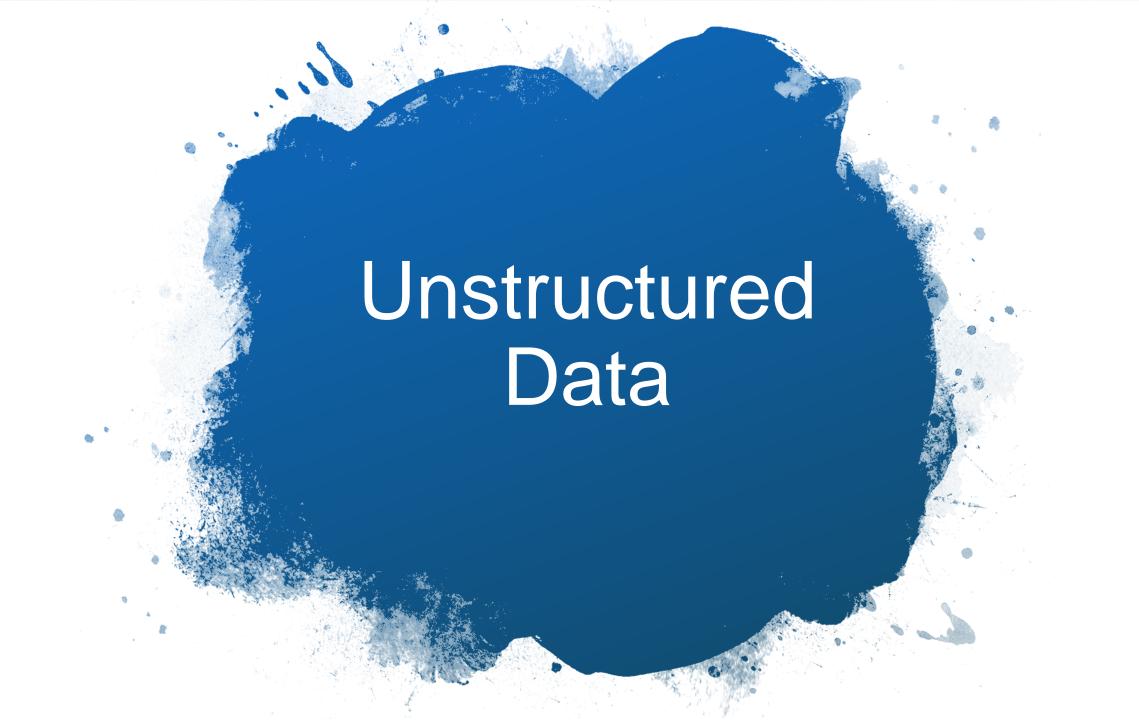
• Ensure the ALL involved know about the data extraction and its purpose

### At the beginning...

 Decide who is your audience

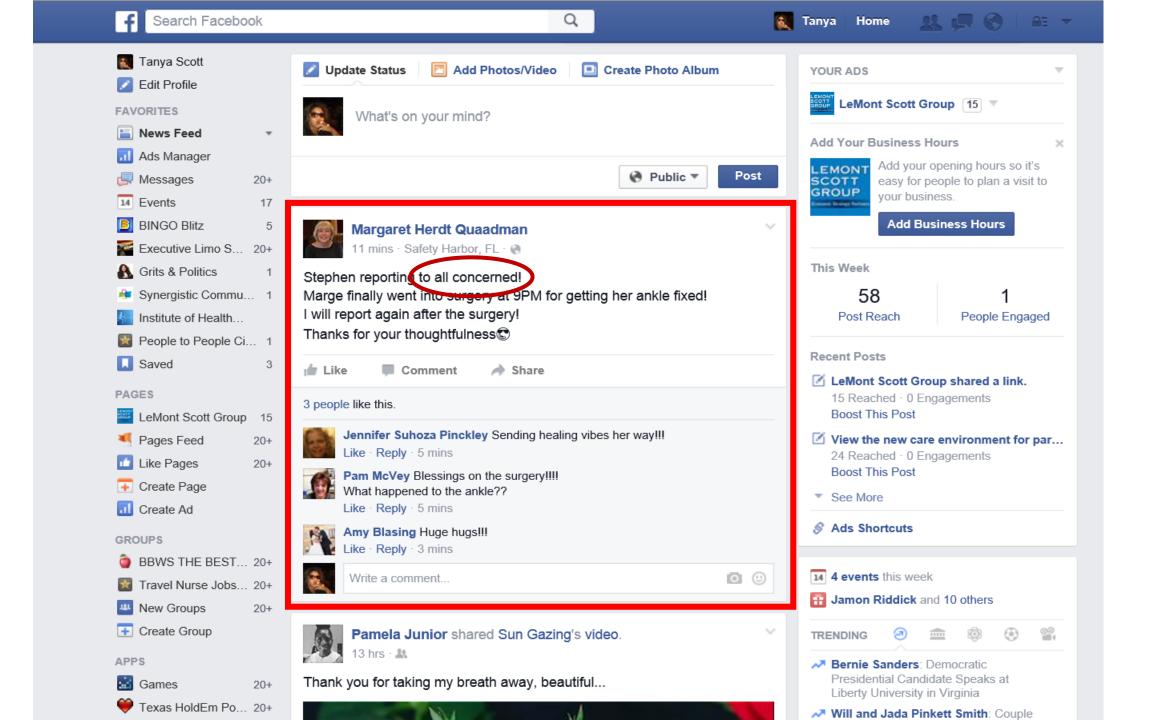
 Be prepared to tell your story several ways





# How do you and your friends and family share data or information?













"I don't know which doctor to choose. One has more friends on Facebook, but the other one just retweeted my message."

What Unstructured Data Gifts Do Our Patients Give Us?

Comment ID	Comment Type	Valence	Comment Text	Coded As	Posted Date	Discharge Date
Comment 1	General	Negative	Food service needs to change!!! Completely unsatisfied & disappointed with what was offered and lack thereof with a full cafeteria downstairs with needing to breastfeed which leaves you very HUNGRY with no way to get anything other than the WORST T.V. tray meal, and only 3x a day microwaved & shipped in from somewhere else.	Dietary/Service	7/18/2013	6/20/2013
Comment 2	General	Negative	Food was terrible most days and no one came around to ask what entree I would like. Last baby I had, they offered a tablecloth lunch, none this visit. The tablecloth lunch was great.	Dietary/Service	3/19/2013	1/28/2013

Patient comments are unstructured data that allow processes to be evaluated and restructured based on perceptions today...











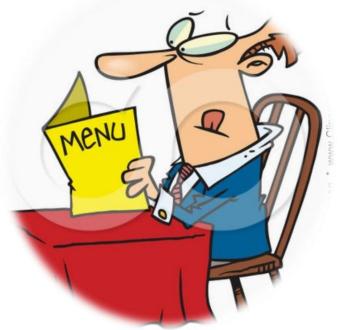
Lyft

Grab



DoorDash







Unstructured data can become the design for new strategy





### Writing

Textual analysis of written works such as medical notes and blogs.

### **Social Media**

Scanning streams of social media to detect real time information such as changes in conditions.

### **Natural Language**

Systems that accept voice commands or understand what people are saying for purposes such as analytics.

### **Photographs & Video**

Analysis of video to understand events

### **Communications**

Scanning communications such as emails and text messages to detect PHI.

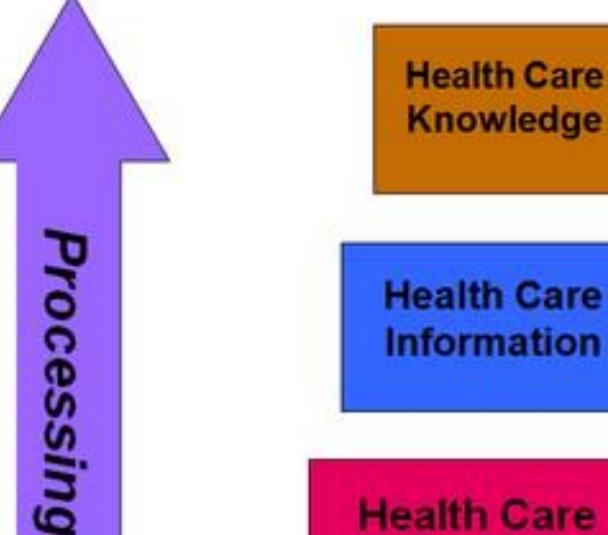
### Health

Analysis of x-ray images for signs of disease.

### Search

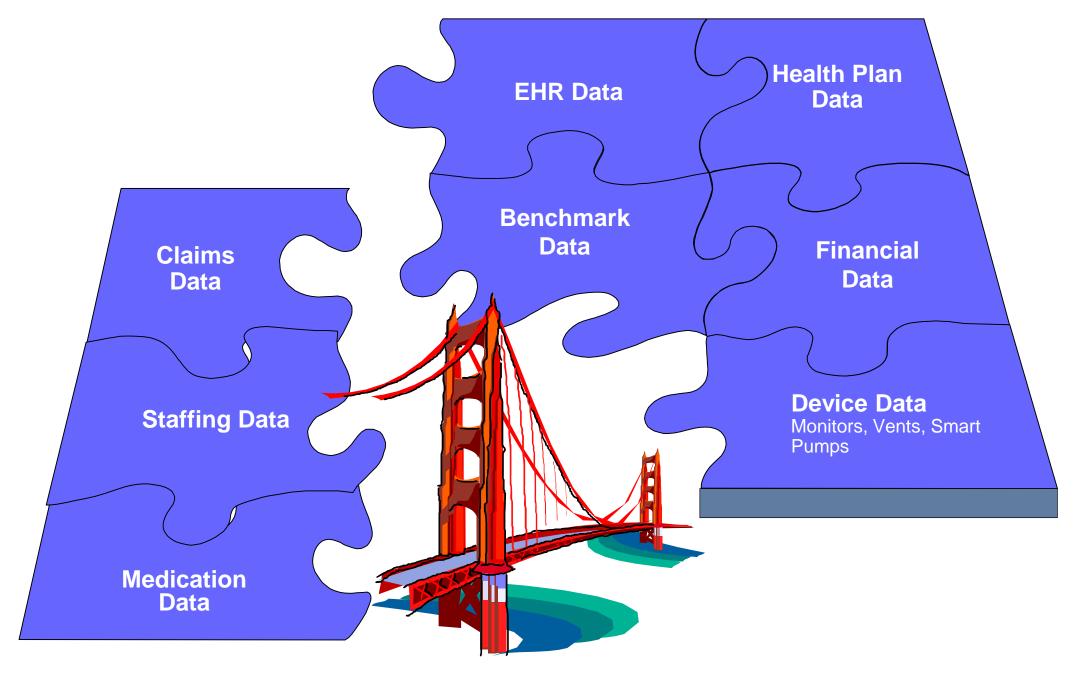
A search engine that spiders unstructured EMR documentation pages in order to understand their content.

### From Data to Knowledge



**Health Care** Information

**Health Care** Data



Slide from:https://www.himss.org/Healthcare Information and Management Systems Society