



# Social Computing for Healthcare Organizations

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## Abstract

Social computing has taken the world by storm in the past decade. Today, there are around 500 million users on Facebook alone. Previous research studied how and why individuals use Facebook in social life; yet relatively little research has been conducted on how organizations utilize Facebook to interact with an expansive population of social computing users. The healthcare sector has been investing a lot of time and money to improve patient-centeredness and patient involvement in the provision of care [5-8].

## Introduction

The question of how social computing can help improve healthcare delivery is raised when looking at how many people are actively using social media. We obtained data of 164 Missouri-area hospitals from the Missouri Hospital Administration (MHA). From there we searched to find out whether or not the hospitals had Facebook pages, and what information was on these pages.

## Literature

Our literature review has been interdisciplinary, spanning across communication technology [3-7], management and organizational theory [1,2], and health and medicine [6,8,9]. Much of the literature deals with addictions to Facebook; some are concerned with business expansion and privacy issues. As healthcare organizations have begun to use Facebook to reach out to external parties, they have to be very careful with what information they are sharing online. For hospitals, information posted online by healthcare professionals can breach doctor-patient confidentiality. Our research focuses on identifying the types of discussions in hospital-sponsored Facebook pages.

## Method

We first identified hospitals that have set up an official Facebook page to enable interactions between patients, administrators, and other “likers”. To quantify the utilization of Facebook, we examine (1) the number of likers, (2) pages of “wall-post” discussions, and (3) the time of first post in our sample. Third, we studied the contents in these wall posts, following a specific coding scheme with a sub-sample. The posts were determined to be one of

three types: reputation building, information-sharing or discussion-forming. Some posts cannot be coded, as they pertain to more than one type.

## Results

The extracts below represent different types of posts:

### Information Sharing

“We need platelet donors today! You can come in, watch the game from a comfy recliner on your own personal TV .... Call now – XXX-XXX-XXXX. Please.”

### Reputation Building

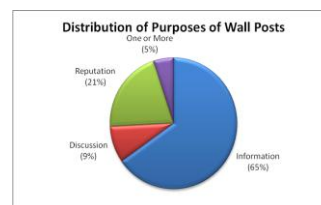
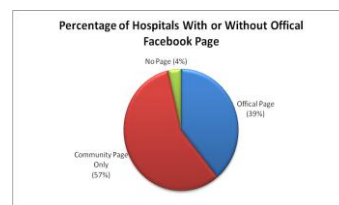
“Out of 53 metro-area hospitals, [we] ranked #1 by U.S. News! We couldn't have done it without our stellar employees - you're the best! “

### Discussion Forming

“Bringing items from home can help transform your hospital room and make it a more comfortable stay. What would you bring?”

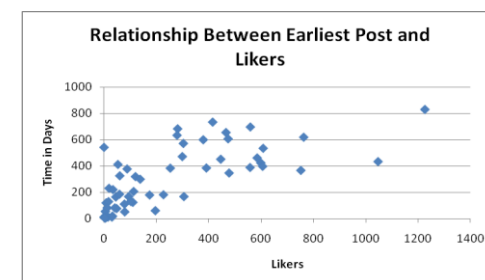
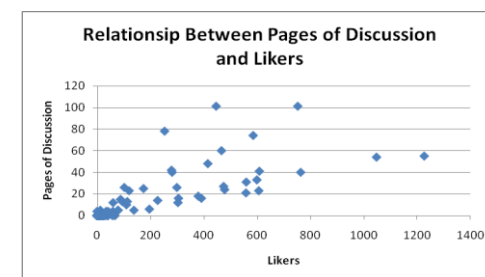
### “More-than-one-purpose” posts

“The marvels of modern medicine are hard at work here at [our hospital]- click on the link to ... [help save] a man's life.”



Out of the 164 hospitals that were researched 39% had an official Facebook page. In our sub-sample, on average, 65% of the wall posts were information-sharing, 9% were discussion-forming and 21% were reputation building. The rest cannot be determined.

The range of likers is between 0 and 1,226 (except outliers) in our sample. The range of wall-post discussions spreads between 0 and 101 pages (except outliers). As for our research, the earliest Facebook in our sample was set up 828 days ago (in November of 2008) and the most recent one was set up 3 days ago (in February of 2011).



## Conclusion

While Facebook changes daily, many hospitals are also changing by adopting social computing to interact with their patients. However, there are still problems to overcome, such as patient security. Security is a big topic when looking at social networking sites. Many schools and doctors are warned about sharing private patient information through websites. Additional research could predict better ways for health care organizations to interact with their community through Facebook and other social-media platforms. It is useful to find out how patients' information can be kept safely, and to attain better use of social media in health.

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