Twitter's impact in building reputed hospital brands in USA

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Abstract

Social media have become a strategic tool for hospitals interested in boosting their corporate communication and achieving several organizational objectives such as improving patient's engagement or reinforcing their own corporate reputation. These platforms help hospitals adapt their communication strategies to a new context (new patients' demands, increasing competition between health organizations, development of health technologies, etc.). This paper aims to analyse *Twitter*'s impact in branding initiatives led by hospitals. To do that, we carried out a literature review about corporate communication, branding and social media; and then, we analysed *Twitter*'s corporate profiles of the best US hospitals in the treatment of oncological diseases. This paper concludes that hospitals interested in effectively using *Twitter* as a corporate communication tool for branding initiatives need to carry out a strategic reflection before launching any initiative on this platform, improve *Twitter*'s integration with other social media platforms and mobile applications, and facilitate better collaborations between health professionals and communication experts.

Keywords: Hospital; Corporate Communication; Brand; Social Media; *Twitter*.

Introduction

The professional management of corporate communication has become a strategic priority for hospitals that want to establish satisfactory relationships with their different stakeholders (employees, patients, health authorities, etc.), as well as improve their own brand reputation. However, several factors force these organizations to rethink their communication strategies: new patients' demands, an increasing competition between public and private hospitals, development of new business models based on technology, etc. In this context, social media platforms, such as *Facebook*, *Twitter* or *LinkedIn*, have become useful tools to help hospitals manage their corporate communication in a professional way and achieve several communication goals (patients' engagement, relationships with media companies, etc.). This paper aims to analyse the role of *Twitter* as a corporate communication tool used by hospitals to promote their brand. We have defined three main objectives: 1) better understand how hospitals use *Twitter* for doing branding initiatives, 2) identify some trends related to online corporate communication in health organizations, and 3) define some recommendations for helping hospitals use *Twitter* in an efficient way. To do that, we carried out a literature review about corporate communication, branding, reputation and social media; and, then, we analysed the branding actions on *Twitter* implemented by the best US hospitals specialized in the treatment of cancer diseases.

From corporate communication to hospital branding through social media

Many researchers in Schools of Medicine and Schools of Communication around the world focus their research in health communication as a strategic issue for hospitals (Hannawa et al. 2015). In some countries,

public health organizations and Schools of Medicine have integrated corporate communication as a strategic element in their business structures and study plans (Gonzalez-Pacanowski, Medina Aguerrebere, 2018). According to Blackston and Pressman (2016), helping public health professionals develop communication skills constitutes a priority, especially for those who directly interact with patients, such as health professionals, nurses or other assistants. Public health organizations collaborate with experts in knowledge management in order to better satisfy all stakeholders' needs and expectations (Nazione et al. 2013). Public health and communication have merged and have resulted in a strategic field called "health communication", which represents a challenge as well as a priority for all organizations dealing with health-related issues - hospitals, clinics, patients' associations, public authorities, etc.- (Penafiel Saiz, Pastor Gonzalez, Camacho Markina, 2014). On the other hand, this new field has also influenced some academic institutions which focus now their research and teaching activities on global studies about health communication in order to better understand how to use this professional activity to improve their internal and external functioning (Weberling McKeever, 2014). Thanks to health communication, public health professionals can improve their relationships with some social groups, especially elderly people, children and patients suffering from chronicle diseases (Smailhodzic et al., 2016). Health professionals collaborate with experts in corporate communication working in these organizations in order to influence people' attitudes and behaviors concerning health-related issues (So et al., 2016). According to Rupert et al. (2014), during next years, public health organizations should recruit more communication experts in order to optimize their public health communication campaigns. Public health professionals as well as experts in communication should work together for implementing a new health communication paradigm based on health education, social influence and responsible behavior (Jones et al. 2015).

In hospitals, the professional management of corporate communication is a recent issue: in other words, during these last years, only some hospitals have fully implemented this activity in a professional way (Medina Aguerrebere, Buil Gazol and Heath, 2015). In these organizations, we can identify three main communication activities: interpersonal, internal and external communications (Medina Aguerrebere, 2017). Professional skills in interpersonal communication allow health professionals to improve their relationships with patients (Weech-Maldonado *et al.* 2012). When doctors interact with them at hospital, they must allow patients to play an active role, ask questions and share information (Salamonsen, 2013). Moreover, they also should base their communication on human values allowing patients to accept the diagnostic and follow the set treatment (Brent, 2016). In hospitals, internal communication activities include all initiatives focused on improving the organization's internal functioning as well as its relationships with employees and patients (Medina Aguerrebere, 2017). Thanks to internal communication, organizations can promote employees' engagement, their sense of belonging to the company and their commitment with corporate objectives (Welch and Jackson, 2007). Finally, external communication refers to all initiatives implemented by hospitals to enhance their relationships with external stakeholders such as providers, media companies, policy makers or pharmaceutical companies (Martini, 2010). In order to reinforce these relationships, hospitals analyse all stakeholders' attitudes towards the organization, its products and employees (Moser, Greeman, 2014); and disseminate public health related content that lead stakeholders to better understand diseases and treatments (Fischer, 2014).

The corporate brand represents tangible and intangible inputs which influences stakeholders' attitudes and behaviours (Esposito, 2017). The hospital's brand includes not only names and logos, but also patients'

experiences at hospital as well as their relationships with health professionals (Wang *et al.*, 2011). Before implementing branding initiatives, hospitals define their brand architecture: identity, values, mission, vision and culture. *Identity* is an external element which allows hospital to differentiate from other public or private companies (Medina Aguerrebere, 2017). Identity determines organizations' strategies: in fact, there is an interdependent, reciprocal and dynamic relationship between both concepts (He and Balmer, 2013). *Corporate values* are a powerful tool to influence employees' behaviours and attitudes, and help them work in an efficient way to achieve the company's organizational objectives (Sheehan and Isaac, 2014). Thanks to these values, organizations can create an emotional link with their stakeholders (Ortega and Sastre, 2013). Concerning the *mission*, it's a corporate element describing all mid-term objectives pursued by the company (He and Balmer, 2013). The *vision* describes the company's long-term objectives and defines all initiatives implemented to meet them (Singal and Jain, 2013). Finally, *culture* refers to the specific way in which all organization's employees work every day; culture should be consistent with the mission and values in order to create an unambiguous brand in all stakeholders' mind (Nelson, Taylor and Walsh, 2014). The professional management of identity, values, mission, vison and culture allows hospital to establish a corporate communication strategy consistent with the organization's priorities (Medina Aguerrebere, 2017). Social media are already a strategic tool for hospitals interested in reinforcing their relationships with stakeholders (Bermudez-Tamayo *et al.* 2013). Using social media in professional way involves respecting ten communication principles: a) implementing social media rules related to how to engage stakeholders and disseminate pedagogical information without commercial interests (Campbell and Craig, 2014); b) respecting medicine principles such as integrity, ethics, humanism and trust (Chretien and Terry, 2013); c) analysing main competitors' communication strategies as well as communication trends in the health market (Blomgren, Hedmo and Waks, 2016); d) developing a corporate framework which helps organization's employees communicate in a coherent way and disseminate an unique brand image (Linke and Zerfass, 2013); e) publishing professional contents useful to better understand health related contents (McCarroll *et al.* 2014); f) promoting a dialogue between health professionals and patients for developing an hospital community (Greysen, Kind and Chretien, 2010); g) monitoring conversations between them in the hospital's corporate social media platforms in order to make sure all health information disseminated is accurate from a scientific point of view (Abramson, Keefe and Chou, 2015); h) implementing innovative strategies useful to communicate differently and establish an emotional connexion with stakeholders (Hackworth and Kunz, 2011); h) using visual information (videos, images, information graphics, etc.) to better disseminate scientific content (Gabarron *et al.*, 2013); and i) defining quantitative indicators to measure the hospital's reputation as well as its stakeholders' perceptions (McCaughey *et al.* 2014).

Twitter is a strategic social media platform allowing hospitals to achieve several communication objectives such as reinforcing their brand, disseminating health information, or improving their health professionals' skills in interpersonal communication (Rando Cueto and De las Heras Pedrosa, 2016). Hospitals carry out different initiatives to promote their brand through *Twitter*: a) dissemination of corporate information related to health, treatments and pathologies (Park, Reber and Chon, 2016); b) establishment of a corporate dialogue between the organization and its stakeholders to explain the hospital's corporate identity (Rando Cueto and De las Heras Pedrosa, 2016); c) dissemination of scientific information which helps patients better understand their treatments and communicate in a more efficient way with health professionals (Terry, 2009); d) implementation of platforms letting patients to communicate with health professionals about

treatments, pathologies or other health preoccupations (Antheunis, Tates and Nieboer, 2013); e) training health professionals to effectively communicate with patients during the whole year, and not only during their medical consultation at hospital (Alpert and Womble, 2016); f) publication of corporate information about health professionals' activities such as papers published in scientific journals or participation in international conferences (Lee and Dundar, 2013); g) collaboration with international organizations and public authorities for launching public health campaigns (Chung, 2016); h) reinforcing the emotional relationships established with stakeholders (Kim *et al.*, 2016); i) developing a convergence between social media platforms and corporate websites in order to promote patients' engagement and reinforce the participative medicine approach (Gallant *et al.*, 2011); and j) implementation of different *Twitter*'s applications -videos, statistics, etc- to build an unique brand image (Huang and Dunbar, 2013).

Methodology

In order to analyse the role of social media platforms in branding initiatives carried out by hospitals, we have analysed the *Twitter*'s profile of main US hospitals specialised in the treatment of oncological diseases. We have focused on American hospitals because United States was the first country to develop corporate communication in health organizations in a professional way, that is why they have now some of the most reputed hospital brands such as *Mayo Clinic*, *Cleveland Clinic* or *MD Anderson*. To analyse the American hospital market, we have resorted to the *Best Hospitals US News World Report*, a reference report published by the *US News*. This organization compares more than 4.500 medical centres around the country in 25 medical specialities, procedures and conditions. For elaborating this ranking, they analyse several indicators like risk-adjusted survival and readmission rates, volume, patient experience, patient safety and quality of nursing.[1] They propose several rankings by specialities (cardiology, diabetes, geriatrics, gynaecology, etc.). Among these different rankings, we have chosen the 2017 best US hospitals in oncology, since cancer patients require a lot of monitoring by health professionals, as well as an emotional support from other patients (Gilligan *et al.* 2018). And, for both functions, *Twitter* turn out to be a very appropriate tool (Rando Cueto and De las Heras Pedrosa, 2016).

From 2nd April to 28th May 2019, we have analysed the *Twitter*'s profile of the 100 best US hospitals in oncology[2]. To do that, we have searched each hospital's corporate profile on *Twitter*, and we have checked

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[1] More information about this methodology on: https://health.usnews.com/health-care/best-hospitals/articles/faq-how-and-why-we-rank-and-rate-hospitals.

[2] In 2017-2018, the 100 best US hospitals in oncology were: 1) University of Texas MD Anderson Cancer Center, 2) Memorial Sloan Kettering Cancer Center, 3) Mayo Clinic, 4) Dana-Farber/Brigham and Women's Cancer Center, 5) Seattle Cancer Alliance/University of Washington Medical Center, 6) Johns Hopkins Hospital, 7) Cleveland Clinic, 8) Hospitals of the University of Pennsylvania-Penn Presbyterian, 9) Moffitt Cancer Center and Research Institute, 10) UCSF Medical Center, 11) Stanford Health Care-Stanford Hospital, 12) Massachusetts General Hospital, 13) UCLA Medical Center, 14) University of Michigan Hospitals and Health Centers, 15) USC Norris Cancer Hospital-Keck Medical Center of USC, 16) North-western Memorial Hospital, 17) Mayo Clinic-Phoenix, 18) Mayo Clinic Jacksonville, 19) Siteman Cancer Center, 20) Thomas Jefferson University Hospitals, 21) City of Hope Helford Clinical Research Hospital, 22) New York-Presbyterian Hospital-Columbia and Cornell, 23) Ohio State University James Cancer Hospital, 24) University of North Carolina Hospitals, 25) University of Kansas Hospital, 26) OHSU Hospital, 27) Wake Forest Baptist Medical Center, 28) Fox Chase Cancer Center-American Oncologic Hospital, 29) University of Colorado Hospital, 30) University of Virginia Medical Center, 31) University of Chicago Medical Center, 32) University of California, Davis Medical Center, 33) Roswell Park Comprehensive Cancer Center, 34) University Hospitals Seidman Cancer Center, 35) UPMC Presbyterian Shadyside, 36) University of Wisconsin Hospitals, 37) University of Minnesota Medical Center, 38) Duke University Hospital, 39) Huntsman Cancer Institute at the University of Utah, 40) UC San Diego Health-Moores Cancer Center, 41) University of Iowa

whether this profile is active or not, and whether it belongs only to a department or is the true hospital's corporate profile. Second, we have analysed each profile according to ten indicators concerning *branding actions* – 1) corporate elements in the main profile image, like the hospital's buildings, health professionals, etc.-, 2) logo in the main profile image, 3) hospital's description, 4) links to the hospital's corporate website and 5) inscription date-; *communication activities* – 6) number of *tweets*, 7) number of subscriptions and 8) number of lists-; and *patients' engagement* – 9) number of followers and 10) number of likes-. Using images directly related to the company's identity (health professionals, hospital's buildings, logo etc.) allows these organizations to develop their *brand* because, on the one hand, health professionals are also considered as "brands"; and on the other hand, buildings and logos represent the hospital in a tangible way. Explaining clearly the hospital's structure (description) and recommend patients to refer to the corporate website involves an effort to disseminate complete information about the company in order to build an unambiguous brand. The inscription date shows how experienced hospitals are using this social media platform, as well as their true interest in using *Twitter* to dynamize their brand. As to *communication activities*, we analyse the number of tweets, subscriptions and lists to check if hospitals are active on *Twitter* and use it as a true communication tool for establishing a constant dialogue with stakeholders. And finally, concerning the *patient's engagement*, we consider the number of followers and likes because these data prove how patients participate in this corporate dialogue established with hospitals. Followers' activities on *Twitter* (number of likes, sharing content, etc.) show their engagement with the organization (Chen and Pirolli, 2012) as well as their level of activity in the corporate relationships established with companies (Bhattacharya, Srinivasan and Polgreen, 2014).

For doing this analysis, we have used a binary code for the first four criteria; and a quantitative record for the other ones. We have fulfilled a database with all this information in order to analyse results and obtain clear conclusions. Once we have finished this database, we have checked again all hospitals' corporate profile on *Twitter*, and this way we have validated the whole analysis.

Hospitals and Clinics, 42) MUSC Health-University Medical Center, 43) Rush University Medical Center, 44) Mount Sinai Hospital, 45) NYU Langone Medical Center, 46) Vanderbilt University Medical Center, 47) Cedars-Sinai Medical Center, 48) Banner University Medical Center Tucson, 49) University of Maryland Medical Center, 50) University of Kentucky Albert B. Chandler Hospital, 51) Yale-New Haven Hospital, 52) Houston Methodist Hospital, 53) University of Alabama at Birmingham Hospital, 54) Emory University Hospital, 55) UF Health Shands Hospital, 56) Indiana University Health University Hospital, 57) UT Southwestern Medical Center, 58) Carolinas Medical Center, 59) Froedtert Hospital and the Medical College of Wisconsin, 60) Beth Israel Deaconess Medical Center, 61) Dartmouth-Hitchcock Medical Center, 62) Loyola University Medical Center, 63) Penn State Milton S. Hershey Medical Center, 64) Kaiser Permanente South Bay Medical Center, 65) Queen's Medical Center, 66) Montefiore Medical Center, 67) Advocate Lutheran General Hospital, 68) Nebraska Medicine-Nebraska Medical Center, 69) Karmanos Cancer Center, 70) Baylor University Medical Center, 71) West Virginia University Hospitals, 72) Cleveland Clinic Fairview Hospital, 73) Robert Wood Johnson University Hospital, 74) UC Irvine Medical Center, 75) Lenox Hill Hospital, 76) Ochsner Medical Center, 77) Hackensack University Medical Center, 78) Magee-Womens Hospital of UPMC, 79) Presbyterian-St. Luke's Medical Center, 80) Scripps La Jolla Hospitals, 81) University of Miami Sylvester Cancer Center, 82) Dan L Duncan Comprehensive Cancer Center at Baylor St. Luke's Medical Center, 83) Temple University Hospital, 84) Avera McKennan Hospital and University Health Center, 85) Medical City Dallas Hospital, 86) VCU Medical Center, 87) Aurora St. Luke's Medical Center, 88) University of Illinois Hospital, 89) Cleveland Clinic Florida, 90) Sanford USD Medical Center, 91) Hoag Memorial Hospital Presbyterian, 92) SSM Health St. Louis University Hospital, 93) Christ Hospital, 94) Henry Ford Hospital, 95) Kaiser Permanente San Francisco Medical Center, 96) Kaiser Permanente Sacramento Medical Center, 97) UMass Memorial Medical Center, 98) Christiana Care-Christiana Hospital, 99) Emory University Hospital Midtown and 100) Sinai Hospital of Baltimore.
Source : https://health.usnews.com/best-hospitals/rankings/cancer.

Results

After analysing the corporate communication initiatives carried out on *Twitter* by the 100 best US hospitals specialised in oncological diseases, we propose four main results.

First, 96% of hospitals have an active profile on *Twitter*. The only four hospitals not having a profile on this social media platform are *Mayo Clinic Phoenix*, *Mayo Clinic Jacksonville*, *Sinai Hospital of Baltimore* and *Cleveland Clinic Fairview*. *Mayo Clinic* has a corporate profile, but not a profile for its local branches in Jacksonville and Phoenix. *Cleveland Clinic* has a corporate profile, another one for *Cleveland Clinic Florida*, but none for *Cleveland Clinic Fairview*. Below, we analyse how these 96 hospitals use *Twitter* as a corporate communication tool.

Second, *branding actions*. Concerning the inscription's date, most hospitals have a *Twitter* profile since 2008 (20 hospitals), 2009 (43 hospitals) or 2010 (17 hospitals). Nine hospitals launched their *Twitter* profile in 2011; two, in 2012; three, in 2014; one, in 2015; and another one in 2016. As to four other indicators about branding actions (corporate elements in the main profile image, logo in the main profile image, hospital description and link to the corporate website), we must highlight that 75% of hospitals respect all these indicators; 18,75%, 3 indicators; and 6,25%, 2 indicators. Regarding the main profile image, 84,38% of American cancer hospitals use a corporate image (patients and doctors, buildings and facilities, etc.); and 98,96% also add the corporate logo as a complement. On the other hand, 85,42% of hospitals propose a brief description that helps users understand the structure and corporate objectives pursued by the hospital. Finally, all hospitals have a link to their corporate website in order to let users to contact health professionals and better know the organization.

Third, *communication activities.* We identified several differences regarding the number of *tweets*, subscriptions and lists. *Cleveland Clinic*, *Mayo Clinic* and *Dana Farber Brigham and Women's Cancer Center* are the three more active hospitals on *Twitter* (see *Table 1. Number of Tweets*). As to the number of subscriptions, *USC Norris Cancer Hospital-Keck Medical Center* has 171.135 subscriptions; in other words, it's the best hospital in this domain (see *Table 2. Number of subscriptions*). And, finally, concerning the number of lists, the three more active hospitals are *University of Michigan Hospitals and Health Centers*, *UMass Memorial Medical Center* and *Dartmouth-Hitchcock Medical Center* (see *Table 3. Number of lists*).

Table 1: Number of *Tweets*

	Hospital	Number of *Tweets*
1	*Cleveland Clinic*	43.632
2	*Mayo Clinic*	40.674
3	*Dana-Farber/Brigham and Women's Cancer Center*	29.165
4	*Montefiore Medical Center*	29.104
5	*Advocate Lutheran General Hospital*	24.515

6	Roswell Park Comprehensive Cancer Center	24.256
7	Vanderbilt University Medical Center	23.341
8	Houston Methodist Hospital	22.585
9	UPMC Presbyterian Shadyside	21.578
10	UT Southwestern Medical Center	20.239

Table 2: Number of subscriptions

	Hospital	Number of Subscriptions
1	USC Norris Cancer Hospital-Keck Medical Center of USC	171.375
2	Vanderbilt University Medical Center	17.186
3	Dana-Farber/Brigham and Women's Cancer Center	10.228
4	Rush University Medical Center	8.564
5	Scripps La Jolla Hospitals	8.472
6	UCLA Medical Center	5.562
7	New York-Presbyterian Hospital-Columbia and Cornell	4.176
8	Loyola University Medical Center	3.875
9	Massachusetts General Hospital	3.577
10	Seattle Cancer Alliance/University of Washington Medical Center	3.543

Table 3: Number of Lists

	Hospital	Number of lists
1	University of Michigan Hospitals and Health Centers	56
2	UMass Memorial Medical Center	40
3	Dartmouth-Hitchcock Medical Center	34
4	University of Virginia Medical Center	20

5	Mount Sinai Hospital ; New York-Presbyterian Hospital-Columbia and Cornell	14
6	Sanford USD Medical Center	12
7	Scripps La Jolla Hospitals ; UC San Diego Health-Moores Cancer Center	10

Fourth, *Patients' engagement*. *Mayo Clinic*, *Cleveland Clinic* and *John Hopkins Medicine* are the three best hospitals concerning the number of followers (see *Table 4. Number of followers*); however, the three hospitals having more "likes" are Dan*a-Farber/Brigham and Women's Cancer Center*, *Advocate Lutheran General Hospital* and *Memorial Sloan Kettering Cancer Center* (see *table 5. Number of likes*).

Table 4: Number of Followers

	Hospital	Number of Followers
1	Mayo Clinic	1.906.623
2	Cleveland Clinic	1.753.138
3	Johns Hopkins Hospital	509.336
4	USC Norris Cancer Hospital-Keck Medical Center of USC	230.588
5	Dana-Farber/Brigham and Women's Cancer Center	80.049
6	University of Texas MD Anderson Cancer Center	79.513
7	Memorial Sloan Kettering Cancer Center	58.048
8	UCSF Medical Center	49.429
9	Massachusetts General Hospital	40.761
10	Vanderbilt University Medical Center	38.641

Table 5: Number of Likes

	Hospital	Number of Likes
1	Dana-Farber/Brigham and Women's Cancer Center	18.904
2	Advocate Lutheran General Hospital	17.663
3	Memorial Sloan Kettering Cancer Center	13.669

4	Penn State Milton S. Hershey Medical Center	10.543
5	USC Norris Cancer Hospital-Keck Medical Center of USC	10.443
6	University of Texas MD Anderson Cancer Center	10.002
7	Scripps La Jolla Hospitals	8.818
8	New York-Presbyterian Hospital-Columbia and Cornell	8.617
9	Thomas Jefferson University Hospitals	8.311
10	UPMC Presbyterian Shadyside	8.093

We want to highlight the case of four hospitals that are especially active on *Twitter* (number of *tweets* and subscriptions) and whose patients are really engaged (number of followers): *Cleveland Clinic*, *Mayo Clinic*, *Dana Farber Brigham and Women's Cancer Center* and *Vanderbilt University Medical Center*. These four health organizations use efficiently *Twitter* as a corporate communication tool for building their brand in a collective way along with stakeholders.

Discussion

Hospital should create a corporate communication department to manage in a professional way all communication activities taking place on social media; otherwise, they cannot protect their own corporate reputation (Ruiz-Granja, 2015). This department analyses all the information disseminated on social media and make sure this information is reliable and respects patients' privacy (Moorhead *et al.* 2013). The Corporate Communication Director trains health professionals to use social media in a strategic way; in other words, they help them integrate some principles in their daily professional logic: a) be authentic and only share interesting information, b) ask for help to the Corporate Communication Department in case of questions, and c) prioritize information which can help the hospital boost patients' engagement (Grajales *et al.*, 2014). According to the results obtained in this paper, 75% of US hospitals respect, at least, four indicators concerning branding actions, which means that they are committed to the professional management of social media like a corporate communication tool. In other words, it seems that most hospitals analysed have already integrated an in-house corporate communication department.

Social media have become a useful tool for hospitals to disseminate health information and improve their professional relationships established with patients (Matarin Jiménez, 2015). Thanks to these platforms, hospitals can improve their collective decision-making processes established between health professionals and patients (Lim, 2016). Social media let hospitals to better understand patients' expectations and needs, what is really useful to improve the hospital's health services (Bubien, 2015). Hospitals implement knowledge management programs for correctly using all information disseminated on *Twitter* and help health professionals improve their performance (Rozenblum and Bates, 2013). According to results obtained in this paper, we wanted to highlight the case of *Mayo Clinic* (1.906.623 followers), *Cleveland Clinic* (1.753.138

followers) and *Dana Farber/Brigham Women's Cancer Center* (18.904 likes): these hospitals manage efficiently to engage theirs patients in an active way, what allows them to access many information about these patients.

Patients use several indicators to evaluate hospitals' quality, such as their presence on social media platforms, the information disseminated in these platforms and the kind of interaction that these organizations establish with stakeholders (Huesch, Currid-Halkett & Doctor, 2014). Several studies found that suggestions and opinions disseminated by stakeholders through social media influence patients' perceptions and their satisfaction with the hospital's health services (Bardach *et al.*, 2013). In order to improve patients' perceptions, hospitals can implement a strategic approach for using social media as a true corporate communication tool (Park, Rodger and Stemmle, 2013). Thanks to these platforms, hospitals can improve their reputation; however, to do that, they must disseminate accurate information useful for all stakeholders (Gurau, 2013). Although these organizations can use social media to communicate with stakeholders, the real goal is to promote their reputation and influence their perceptions (Tsimonis and Dimitriadis, 2014). Hospitals' reputation is an extension of the organization's legitimacy to carry out its professional activities: research, medical assistance, event, health education, etc. (Blomgren, Hedmo and Waks, 2016). Increasing the number of subscriptions, lists and *tweets* could help hospitals influence stakeholders' perceptions and improve their own reputation; that is why is interesting to show the case of U*S Norris Cancer Hospital – Keck Medical Center USC* (171.375 subscriptions), *Universtiy of Michigan Hospitals and Health Centers* (56 lists) and *Cleveland Clinic* (43 632 tweets).

Despite the interesting results provided by this paper, we can point out several limitations, such as the lack of information about hospitals' online communication strategies (*Facebook*, *Instagram*, etc.); the impossibility to analyse how each hospital organises its Corporate Communication Department (employees, budget, processes, etc.); or even the difficulty to access similar scientific studies in other countries. However, this paper raises future avenues of research such as the training of health professionals in online communication skills, the use of *Twitter* as a strategic tool to promote hospitals' brand reputation, or the impact of this social media platform on patients' attitudes during their medical consultation at hospital. The main contribution of this paper is to highlight that *Twitter* is a corporate communication tool able to help hospitals dynamize their online strategies and build their brand in a collective way along with their stakeholders.

Conclusion

In the hospital context, social media have become one of the main corporate communication tools. Thanks to these platforms, hospital can improve patients' commitment, dynamize their online communication strategies and reinforce their own corporate reputation. *Twitter* allows hospitals to promote their brand to different internal and external stakeholders and build an unambiguous, credible company. To do that, these organizations implement some trendy initiatives such as integrating social media platforms and corporate websites or using health professional's image to promote the hospital's corporate brand.

In order to conclude this paper, we propose three recommendations or managerial implications. First, hospitals need to carry out a strategic reflection before implementing any initiative on *Twitter*: they must

define key aspects such as their communication objectives, main and secondary targets, brand positionings, or key performance indicators. This strategic reflection is led by the Corporate Communication Director, but all the hospital's employees should take part to that. Second, as shown by results obtained in this study, *Twitter* has become a corporate communication tool used by the most important US cancer hospitals. However, these hospitals must still improve several aspects such as the integration of *Twitter* with other social media platforms, their own corporate website and their mobile applications. Moreover, they should promote videos as a communication support for explaining pathologies and treatments, and increase health professionals' participation on this platform. And third, the collaboration between health professionals and experts in communication is essential to help hospitals monitor all conversations on *Twitter* in order to make sure all information disseminated is accurate from a scientific point of view. Nevertheless, hospitals should apply codes of ethics in order to respect patients and health professionals' privacy.

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