



LUND UNIVERSITY

Communicating to Employees the Implementation of Patient Online Access to Their EHR. The Case of Adult Psychiatry in Southern Sweden.

Petersson, Lena; Erlingsdottir, Gudbjörg

Published in:

Proceedings from The 14th Scandinavian Conference on Health Informatics 2016, Gothenburg, Sweden, April 6-7 2016

2016

Document Version:

Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):

Petersson, L., & Erlingsdottir, G. (2016). Communicating to Employees the Implementation of Patient Online Access to Their EHR. The Case of Adult Psychiatry in Southern Sweden. In *Proceedings from The 14th Scandinavian Conference on Health Informatics 2016, Gothenburg, Sweden, April 6-7 2016* (pp. 7-11). Article 002 (Linköping Electronic Conference Proceedings). Linköping University Electronic Press.

Total number of authors:

2

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Communicating to employees the implementation of patient online access to their EHR. The case of adult psychiatry in Southern Sweden.

Lena Petersson^a, Gudbjörg Erlingsdóttir^a

^aDepartment of Design Sciences, Lund University, Lund, Sweden

Abstract

In 2015 Region Skåne was the first county council in Sweden to add adult psychiatry patients to the civic service of patient online access to their EHR (electronic health records). The initial implementation of the service in somatic care had previously raised both questions and resistance amongst the healthcare professionals. It was thus considered important to inform the professionals involved about the planned introduction in psychiatry well in advance. This paper presents and discusses how well the management was able to do this. The material presented derives from a survey that was distributed to employees in adult psychiatry in Region Skåne just before the introduction of the service. Overall, the results show that different professions receive information through different channels. This indicates that it is important for an employer to use many information and communication channels to reach employees. It is also important to use both interpersonal and mediated communication channels as they serve different purposes.

Keywords: *eHealth, EHR, psychiatric care, patient online access, employees, communication channels*

Introduction

Government and public agencies in Sweden have promoted the expansion of eHealth in the past decade. In 2006, key organisers in Swedish healthcare, monitored by the Ministry of Health and Social Affairs [1], jointly formulated a national IT strategy. The planned enhancement of development and deployment of eHealth services was later described as a paradigm shift in Swedish healthcare [2]. In its 2013 action plan, the National Board of IT in Healthcare (Cehis, now a part of Inera) described online patient access to their electronic health record (EHR) as one of the most important civic services and anticipated that by 2017, all patients in Sweden would be able to access their EHR through the Internet [3]. The main arguments behind the drive for eHealth as a civic service is to increase patient empowerment and patient participation in their own health. eHealth is also seen as a way of responding to increased demands for healthcare in the future. The Swedish Association of Local Authorities and Regions (SKL) claims that civic services will increase the accessibility, efficiency and quality for patients, inhabitants and families [4].

In November 2012, Uppsala County Council became the first county council in Sweden to introduce online patient access to the EHR service and was followed by Region Skåne in March 2014. In both county councils, some medical specialties were

exempt in cases where patient digital access was considered sensitive. One of the exemptions was psychiatry. However, in 2015 Region Skåne became the first county council in Sweden to add adult psychiatry to the service. This development is in line with the reasoning of the Open Notes Project in the US: that patients in psychiatric care should not be treated differently than other groups of patients in terms of their online access to EHR [5]. Patient online digital access to their medical records had raised both questions and resistance amongst healthcare professionals, primarily in Uppsala [6]. Because of this, it was considered important to inform the professionals in Region Skåne well in advance about the planned introduction of EHR in psychiatry.

Communication between the change management and the employees is an important part of any planned change. However, the view of what information should be shared and how it should be distributed may differ between management and employees. The greater the distance between management and employees, the less direct is the information they receive. Employees will have to rely on the different levels of management to distribute information to them. Still, the engagement and cooperation of employees is key for the success of the implementation process [7].

This paper presents and discusses how well the management in this case was able to inform the professionals beforehand. The material presented is derived from a survey that was distributed to the employees in adult psychiatry in Region Skåne two and a half weeks before the introduction of the service. The survey study is a sub-study in a research project (the EPSA project, financed by AFA insurance in Sweden) on how healthcare professionals' work and work environment are affected by eHealth services, such as patient digital access to their EHR.

Description of the case

The Division of Psychiatric Care in Region Skåne consists of three subdivisions: adult psychiatry, children and youth psychiatry, and forensic psychiatry. It was decided that only patients in adult psychiatry should have online access to their EHR, at least to begin with. The adult psychiatry subdivision employs roughly 3000 people divided into four geographic areas. A multi-professional management board including representatives from patient organizations was established in the autumn of 2013. The management board held regular meetings to discuss and decide on the introduction and implementation of online patient access to their EHR in adult psychiatry. The date for introduction was set to the 28th of September 2015.

One of the tasks of the management board was to carry out a risk analysis. One of the main risks identified was the failure to inform the employees or the professionals in the adult psychiatry subdivision. It was thus considered very important to find suitable communication channels to let the employees know about the planned implementation. Ambassadors for the service were engaged in each of the four geographical areas in Region Skåne and were included in the management board. A communication plan, aimed at the employees, was formulated by the management board. The plan consisted of:

- Education, given in form of two identical 1½ hour slots (one in the morning and one in the afternoon) in each geographic area during the spring of 2015
- Information on the Region Skåne's intranet
- Information at workplace meetings
- Information at professional staff meetings
- Information sent by managers to employees by email

The management board considered the education events to be the most important information channel because they gave the participants an opportunity to pose questions and to participate at their workplace.

Somewhat delayed, the online patient access to the EHR service opened on the 5th of October. Through the service, patients in adult psychiatric care in Region Skåne were able to access entries in their EHR from then on. Inpatients (ca 5% of the patients) are exempted from immediate access to the service, but are able to access their EHR four weeks after hospitalisation. Outpatients can choose to read entries in real time or with a delay of two weeks.

Methods

The researchers gathered information about the formulation and execution of the communication plan from observations they made of the management board meetings, the education events, and from focus group interviews. Thereafter, an online survey concerning online patient access to their EHR, and the work environment of the professionals was distributed to all health professionals in adult psychiatry in Region Skåne.

Subject selection

The survey was a full population study encompassing all individuals employed in adult psychiatry in Region Skåne ($n = 3017$). Previous surveys on the implementation of online patient access to their EHR in Sweden have either been directed to doctors or nurses [8].

Study design

The baseline survey used in this study is based on an electronic survey used in the Open Notes Project in the US [9]. The survey was adjusted to fit the Swedish context. It consists of 30 fixed-choice questions and three open-ended questions. The survey was programmed so that the person taking it could

choose not to answer individual questions. A pre-test of the survey was carried out involving two members of the management board. For the purpose of this study, only the answers to one of the fixed-choice questions is reported. The results from the rest are planned to be published in future papers.

The 3017 email addresses were provided by the Communication Department at the Division of Psychiatric Care in Region Skåne. The web survey tool, *Sunet Survey*, was used and Lund University was the sender of the emails.

On the 17th of September, a pre-notification email was sent to the study population and on the 18th of September, the survey was sent electronically to the institutional email addresses with a cover letter and a link to the survey. Both the pre-notification email and cover letter informed the recipients that participation was voluntary, that the computer files with the results were confidential, that the respondent could terminate their participation at any time and that it will not be possible to track the individuals' responses. Reminders were sent the 22th, 24th, 28th of September and the 1st of October. The survey closed on the 2th of October, three days before patients could get online access to their EHR. All the material in the baseline study was thus collected before the implementation.

The three research questions are:

- From which communication channels did employees in adult psychiatric care in Region Skåne get information about the implementation of online patient access to their EHR?
- Does the main communication channel differ between different professions?
- Comparing the answers in the questions in the survey to the communication strategy of the management board, how well did the strategy work?

Material and statistical analysis

The response rate to the survey was 29% ($n = 871$). The survey data reported in this paper include demographic data of the participants' professions, and the results from one of the survey questions, posed as a statement:

I have received information about the online patient access to their EHR in adult psychiatry through (you can choose several answers to this question):

- Intranet
- Work place meeting
- Education during the spring of 2015
- Meeting for a specific profession, such as meeting for doctors
- Email
- Informal conversation with colleagues
- Social media
- Mass media

- I did not receive any information

Results

The demographic characteristics of the respondents' professions are presented in Table 1. The results from the above question are presented for all the respondents in Table 2, and for all the respondents according to professional groups in Table 3. The statistical analyses were made in IBM SPSS Statistics 23.

Table 1 - Demographic characteristics of the respondents in percentage and number (n).

Profession*	
Occupational Therapist	2% (17)
Doctor	15.6% (133)
Medical secretary	8.9% (76)
Psychologist	10.7% (91)
Physiotherapist	1.9% (16)
Nurse	26.7% (228)
Assistant nurse	21.3% (182)
Social worker	6.7% (57)
Other	6.2% (53)

* 853 of the 871 respondents answered the question about their professional affiliation.

As the survey is a population study, it is important to investigate if the 871 individuals who answered the survey are representative of the full population. The survey population was thus compared with demographic information about all the employees at the adult psychiatry subdivision in Region Skåne. The comparison showed that the response rate is consistent for medical secretaries, is a few percentage points lower for nurses and assistant nurses, and slightly higher for the other professional groups. All deviations are less than 10%.

Table 2 - Responses to the statement, "I have received information about the online patient access to their EHR in adult psychiatry through (you can choose several possible answers to this question)", given in percentage and number (n).

Communication channel	
Workplace meeting	48.9% (414)
Intranet	40.4% (342)
Email	37.8% (320)
Informal conversation with colleagues'	24.9% (211)
Mass media	15.8% (134)
Education during spring 2015	14.4% (122)
Meeting for a specific profession	13.0% (110)
I didn't get any information	7.3% (62)
Social media	4.1% (35)

The results presented in Table 2 show that the respondents received information from a variety of channels. It is important to note that respondents could choose multiple answers to this question. The total percentage is therefore higher than 100% and there were a total of 1750 responses to this question. 48.9% of the respondents stated that they received information at a workplace meeting. 14.4% of the respondents received information at one of the education meetings held in the spring of 2015. Slightly more respondents (15.8%) stated that they had been informed through the mass media. It is also noteworthy that 7.3% of respondents claimed they had not received any information at all.

Table 3 shows that the different professionals groups received information through a variety of communication sources and that the results differ between the professions. 34.1% of the physicians received the information via the intranet, while the result for medical secretaries was 52.1%. The results also show the most common channel of information for each profession.

Table 3 - The different professions responses to the statement "I have received information about the online patient access to their EHR in adult psychiatry through (you can choose several answers to this question)" in percentage.

	Occupational Therapist	Doctor	Medical secretary	Psychologist	Physiotherapist	Nurse	Assistant nurse	Social worker	Other
Workplace meeting	70.6%	28.8%	49.3%	65.9%	53.3%	53.6%	44.4%	64.9%	36.5%
Intranet	52.9%	34.1%	52.1%	38.5%	33.3%	39.7%	35.0%	49.1%	55.8%
Email	35.3%	44.7%	39.7%	29.7%	33.3%	34.4%	46.7%	21.1%	38.5%
Informal conversation	5.9%	35.6%	26.0%	35.2%	33.3%	24.1%	17.8%	21.1%	17.3%
Mass media	5.9%	22.0%	8.2%	14.3%	13.3%	19.6%	15.6%	8.8%	11.5%
Education	35.3%	12.9%	21.9%	13.2%	26.7%	11.2%	8.3%	21.1%	26.9%
Meeting profession	0%	50.0%	6.8%	7.7%	0%	4.5%	1.7%	1.8%	30.8%
No information	0%	6.1%	6.8%	7.7%	6.7%	8.0%	10.6%	1.8%	1.9%
Social media	0%	3.0%	5.5%	1.1%	0%	4.9%	5.0%	3.5%	7.7%

For occupational therapists, psychologists, nurses, physiotherapists and social workers, workplace meetings were the most common information channel; for the doctors, it was in meetings for their specific profession; and for the assistant nurses, email was the most common channel of information.

Discussion

This paper presents and discusses how well management was able to inform the professionals in adult psychiatry in Region Skåne beforehand about patient online access to their EHR. In Sweden, the rhetoric put forth by key actors is that patient online access to EHR is a civic service and a technical solution aimed at the patient [4]. It is thus not considered to have any significant impact on the healthcare professionals' work or work environment. However, through experiences from other implementation cases of similar services, there was an awareness of the necessity to inform all the professionals in adult psychiatry in Region Skåne about the implementation.

Communication channels can be interpersonal, primarily face to face communication, or they can be mediated, implying the use of either mass media or some form of technical mediator. The interpersonal channels are preferable when complex changes, or changes involving risks are implemented. The strength of the mediated channels, however, are that they are efficient mediators of general information, such as facts about the change [7] [10].

The results of the survey show that the employees received information from a variety of channels. Interpersonal channels such as workplace meetings are the most common. Almost half of the respondents (48.9%) got information at these meetings. In workplace meetings, managers are able to inform employees who have the opportunity to ask questions and different issues can be discussed. As workplace meetings are common for different types of professionals, they also reach many categories of employees at the same time.

On the contrary, meetings for specific professions are internal and limited to a single profession. In total, these meetings are not considered by the entire group of respondents to be a large channel of information (13.0%). But they are the main information channel for doctors (50.0%). This may indicate that doctors prefer receiving and giving information amongst their professional peers, or that they simply do not participate in the workplace meetings as frequently as employees in other professions. Email is also an important information resource for doctors (44.9%), and the largest one for assistant nurses (46.7%). Generally, email is one of the most frequently used channels of information.

Informal discussions with colleagues are on average an information channel for 24.9% of the respondents. This could imply that some of the employees that got information through planned information channels spread it to their peers. But as many of the respondents received information through more than one communication channels, it can also be interpreted as employees discussing the implementation and further informing each other. On the other hand, as information sometimes is

misinterpreted or misunderstood, even misinterpretations or misunderstandings may have been passed on.

One of the most interesting findings is that only 14.4% claim that they were informed through the education events. This is noteworthy as the management board considered the education events to be the most important activity in the communication plan. It is also interesting in light of that 15.8% of the respondents were informed through mass media, a communication channel that Region Skåne did not use consciously and thus had little or no control over. Since there were only a limited number of articles in the local press and reports in the local radio about the implementation of patient online access to their EHR, some of the professionals may have got information through their trade press where the implementation was discussed.

The organization's intranet was considered to be one of the most important source of information by management and was thus expected in this case to be an effective information channel to reach all employees since the intranet is available to everyone and employees can access the information when it suits them. Despite this, only 40.4% of the respondents stated that they received information through the intranet. This is in line with earlier research that shows that management often believes in and relies on technical channels such as intranet, whilst it is often less appreciated information source of the employees [11]. Actually, some of the employees who participated in the focus group interviews referred to the Region Skåne's Intranet as "a black hole". Their opinion was that it is impossible to find anything on the Intranet and as a result they never sought information there.

Despite all the different communication channels used in the information campaign, it became clear during the focus group interviews that all employees had not been reached by the information or, at least, had not got all the information they needed. Participants in the focus group interviews had several unanswered questions, especially about practical and technical details. Amongst others, they wondered what type of information the patients will be able to see; how to make entries that patients cannot see; when entries become visible to the patient; what happens if a patient is upset about the information in their EHR and contacts the healthcare professionals to complain and how these situations should be handled. It is also noteworthy that 7.3% of the respondents of the survey stated that they had not received any information at all despite all the efforts made by management.

Conclusion

Overall the results show that different professions receive information by different channels. This implies that it is important for an employer to use many information and communication channels to reach employees. It is also important to use both interpersonal and mediated communication channels as they serve different purposes. Mediated channels, such as email, can give exact and correct information whereas interpersonal channels, such as workplace meetings and education

events, provide employees with an opportunity to pose questions and discuss the implementation.

The education events do not seem to have had the expected impact, but may well have had a symbolic value as they signal that the management was prepared to invest resources in the information campaign and make the effort to disseminate information amongst all four geographic areas. The mass media may have been an underestimated information channel and could probably have made an even greater impact than it did. Still, that requires a conscious usage of the media and a wish to reach out to the public as well, which may not have been one of the management's aims.

Acknowledgments

The research presented in this paper is funded by AFA Insurance in Sweden via the project eHealth Services' Impact on the Working Environment of Health Professionals" (EPSA).

References

- [1] Socialdepartementet. Nationell IT-strategi för vård och omsorg. Skr. 2005/06:139 [Internet]. Stockholm: Socialdepartementet; 2006 [updated 02 Apr. 2015; cited 08 Feb. 2016] Available from <http://www.regeringen.se/rattsdokument/skrivelse/2006/03/skr.-200506139/>
- [2] Socialdepartementet. Nationell eHälsa – strategin för tillgänglig och säker information inom vård och omsorg, S2010.020 [Internet]. Stockholm: Socialdepartementet; 2010 [updated 02 Apr. 2015; cited 08 Feb. 2016] Available from <http://www.regeringen.se/rapporter/2010/06/s2010.020/>
- [3] Cehis. Handlingsplan 2013 – 2018. Landstings, regioners och kommuners samarbete inom eHälsoområdet [Internet]. Stockholm: Inera; 2012 [cited 08 Feb. 2016] Available from http://www.inera.se/Documents/OM_OSS/handlingsplan_2013_2018.pdf
- [4] SKL, Sveriges Kommuner och landsting. Invånartjänster [Internet]. Stockholm: SKL; 2014 [cited 08 Feb. 2016] Available from <http://skl.se/halsasjukvard/ehalsa/invanartjanster.1741.html>
- [5] Kahn M W, Bell S K, Walker J, Delblanco T. Let's Show Patients Their Mental Health Records. *JAMA*. 2014;311(13):1291-2.
- [6] Erlingsdóttir G, Lindholm C. When patient empowerment encounters professional autonomy: The conflict and negotiation process of inscribing an eHealth service. *Scandinavian Journal of Public Administration*. 2015; 19:2.
- [7] Lewis L K. Employee Perspectives on Implementation Communication as Predictors of Perceptions of Success and Resistance. *Western Journal of Communication*. 2006; 70 (1): 23–46.
- [8] Scandurra I, Jansson A, Forsberg-Fransson M-L, Ålander T. Is 'Patient's Online Access to Health Records' a Good Reform? – Opinions from Swedish Healthcare Professionals Differ. *Procedia Computer Science*. 2015; 64: 964-8.
- [9] Walker J, Leveille S G, Ngo L, Vodicka E, Darer J D, Dhanireddy S, Elmore J G, Feldman H J, Lichtenfeld M J, Oster N, Ralston J D, Ross S E, Delbanco T. Inviting Patients to Read Their Doctors' Notes: Patients and Doctors Look Ahead: Patient and Physician Surveys. *Ann Intern Med*. 2011;155(12):811-9.
- [10] Lewis L K. Organizational Change. Creating Change Through Strategic Communication [Internet]. Chichester: Wiley-Blackwell; 2011. [cited 08 Feb. 2016]. Available from: <http://onlinelibrary.wiley.com/book/10.1002/9781444340372>
- [11] Heide M. Social intranets and internal communication. Dreaming of democracy in organisations. In: Coombs W T, Falkheimer J, Heide M and Young P, eds. Strategic Communication, Social Media and Democracy. The challenge of the digital naturals. London: Routledge; 2016. p. 45-53.

Address for correspondence

Lena Petersson
Lena.Petersson@design.lth.se
Department of Design Sciences
Faculty of Engineering at Lund University
Box 118
221 00 Lund