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# Patient Empowerment in the Process of Sickness Certificates

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**Abstract.** A national patient portal for secure communication between the patients/citizens and primary care (Mina vårdkontakter) is available in Sweden. This system was used in a pilot project in the Stockholm County where patients were invited to prepare the visit to their physician for the discussion on the need for prolonged sickness leave by filling out a web based questionnaire on their current health status and working conditions. The opinions of the patients and their primary care physicians about the system were analyzed with positive feedback.

**Keywords.** Patient portal, empowerment, web-based anamnesis, sickness certificate

## Introduction

In Sweden, the national government have created a series of stimulation activities aiming to improve the quality of the sickness certification process. The main actors are the National Insurance Corporation that manages the administration of sickness allowance based on physician sickness certificates together with the National Board of Health and the regional health governments, the County Councils. The previous paper based system was having several problems [1]. One line of current development has been to improve the management of the sickness certificate forms, providing integrated decision support and electronic submission of the digitally signed forms. We have participated in this development, both for the specification of requirements and as pilot users in our primary care physician roles. The major emphasis of this article is the development and testing of a system to include the patients as active providers of information through the internet to improve the process and to empower the citizens.

We have used the national patient portal called “Mina Vårdkontakter”<sup>2</sup> (My Care Contacts in English). It is used by essentially all primary care centres as a communication channel with their patients. We strongly believe in the importance of active patient participation in describing his own health and in this case, his working conditions [3]. In the current project we developed a questionnaire to be filled out by patients requesting sickness certificates. The following questions are addressed:

- Will the sick patients be willing to provide information through the web?
- Can this information lead to a more efficient and better process?

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<sup>2</sup> [www.minavardkontakter.se](http://www.minavardkontakter.se) (last accessed 2012-01-21)

## 1. Methods

### 1.1. The pilot test site and development of the patient questionnaire

Råcksta-Vällingby Närvård is a large primary care centre in a suburb in the west of Stockholm with a mixed demographic group of 18 000 listed patients, eight physicians and a total of 50 staff including nurses and medical secretaries. The two authors and two other physicians used the system as recipients of the patient information, including one in Stuvsta Vårdcentral in South-west of Stockholm. A group of four physicians were meeting four times to finalise the form using the authoring tool of the Patient portal. The design was presented to around 80 staff at both health care centres before starting the patient enrolment. This resulted in no suggestions for change.

### 1.2. Follow-up of patient views

The nine patients enrolled were asked in the last two questions of the questionnaire to both rank their opinions about the system using and also to provide a free text comment. In addition, the patients were asked about their views when meeting the physician.

### 1.3. Follow-up of physician views

The physicians were receiving the answers of the individual patient usually just prior to the visit by the patient which was used to further ask questions as needed and doing a physical examination and reviewing the available recorded data. After each patient visit, the physicians completed a paper questionnaire with five questions on their views on the system in this specific case. In addition an interview was conducted as a group after the completion of the pilot and used for the qualitative assessment.

## 2. Results

### 2.1. The set of questions

It was agreed that the focus of the questionnaire would be on issues related to the working environment and the patient assessment of their functioning and their views on the prospects for future work. Also, we aimed to capture information about previous history of sickness certificates for the current or other health problems.

The full questionnaire with twenty questions is available (in the original Swedish language) in the preliminary first report of the system [3]. In order to allow repeat assessment of the overall experience of health problems we included questions based on the howRu work in England [4].

### 2.2. The Patient Views

The first issue was if patients would be willing to use the new web based questionnaire. Most of the patients offered the new service agreed to try the new system. However, in a few cases patients e.g. with severe depression had no energy to try the new service and for some an obstacle was the access to a secure authentication method.

The expressed views by the participants were generally very positive and the system was considered easy to use.

### 2.3. The Physician Views

The results of the physician questionnaires are shown in Table 1.

**Table 1.** The physician questionnaire. The following results were obtained using a 5-graded scale from 1-5 with 5 being expressed as "Yes, very much"

Question	Median score (range)
Have your work been facilitated?	4 (4-4)
Have you saved time?	4 (3-5)
To what extent have your assessment been improved?	4 (3-5)
To what extent have your communication been improved?	4 (3-5)

### 3. Discussion

This pilot project is small and no definite conclusions as to the usability and future role can be drawn from the limited number of observations. However, the pilot application was using a tool and a context which is in large national use with 850 000 registered citizens. This means there is a high probability of rather rapid uptake for the improvement of the sickness certificate process. The presented approach also provides empowerment to patients who are sometimes otherwise not fully allowed to express their views on the need for sickness benefits in a brief meeting with a physician.

It is important that the important security measures required for authentication are not creating too large barriers for the users [5]. It is also important for the general spread of such patient filled questionnaires to recognise that many citizens have difficulties with the dominant language, in our case Swedish [6].

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