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Issues Discussed in EMR Meetings

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User Issues Discussed in EMR Meetings

Nina Boulus

Audience:

This document is intended for Wolf Medical Software and for various health services delivery in British Columbia.

Aim:

This document summarizes briefly empirical data that was collected from Electronic Medical Record (EMR) meetings. The information presented here is based on in-depth analysis for a single clinic.

Background:

After using the EMR for a period of time, the staff in one of the clinics in Vancouver decided to establish an EMR committee constituted of a representative from each professional group (administrative staff, front desk and doctors). In their weekly meetings, the group discussed concrete challenges and complexities they faced with the implementation of the EMR, and defined new goals for further changes of the existing work practices. The establishment of an EMR committee was highly significant in terms of having a group that can continuously evaluate the transition process.

EMR meetings involved negotiations of chains of issues that are continuously reordered and reconstructed to accommodate the work practices as they change in relation to the introduction of the EMR. Work practices are situated in an actual clinical setting, and change in relation to the culture of that clinic, the clinic's work organization, and the interruption of past work practices related to the EMR. Since these meetings gathered the different groups of EMR users, these meetings were viewed as a central place for increasing awareness of changes in activities, exchanging knowledge across professional boundaries and reaching mutual decisions.

Various issues were discussed at the EMR meetings, and the implementation of the EMR was progressively redefined to cover new domains, beyond the technical infrastructure. As can be seen in Figure 1, these newly defined domains included various organizational changes and work practice adaptations, the regulation of policies and ethical issues that arose in relation to use of the EMR, financial changes related to IT costs/investments, and changes required to create an ergonomic work environment in relation to increased use of computers in the clinical setting.



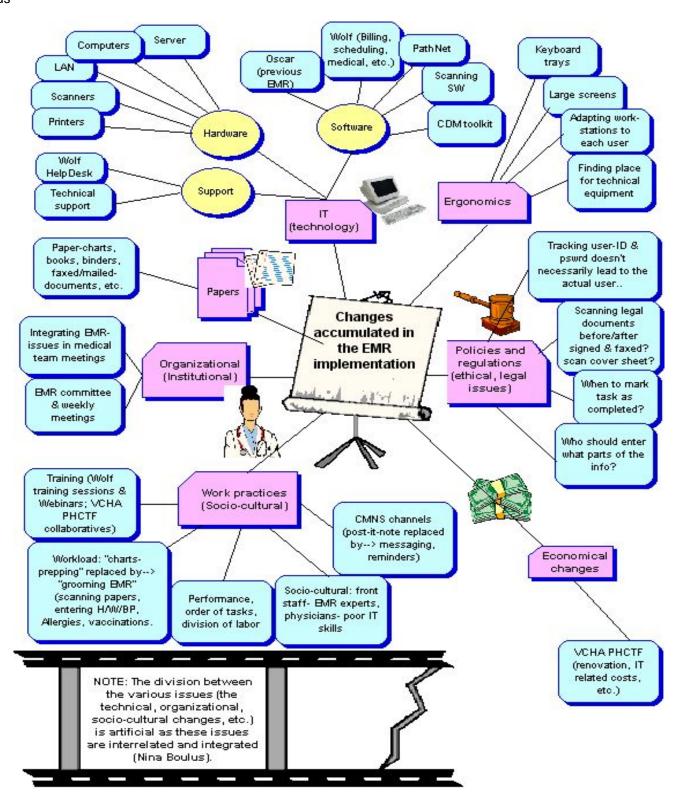


Figure 1: General overview of changes accumulated in the EMR implementation.



General notes:

The charts in Figures 2 and 3 show the range of issues discussed each month in one of the clinics that is using Wolf. The issues were defined by the clinic and presented as agenda items during the EMR meetings. Please note that an 'issue' here is not necessarily a complexity or a challenge that is faced, but rather something may be recorded as an issue if it required clarification or an update of new information.

The changes can be observed in the charts:

- A decrease in the frequency of meetings: From weekly to biweekly meetings.
- A gradual decrease in the number of issues discussed each month.

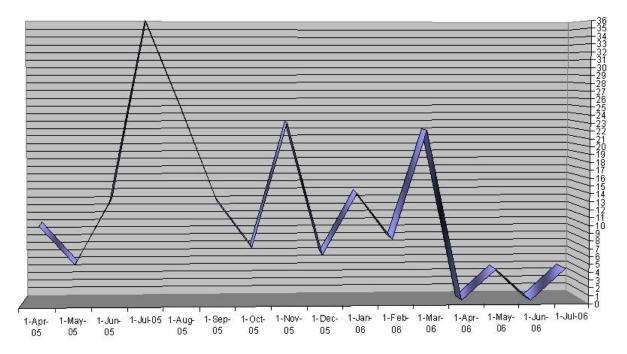


Figure 2: Number of Issues discussed each month.

With time, the various healthcare personnel become more familiar with Wolf (the EMR) and have established a common platform of knowledge related to the socio-technical changes brought by the implementation of Wolf. At the same time, the complexity of challenges increases as new applications are implemented (i.e. new templates, server, PathNet).



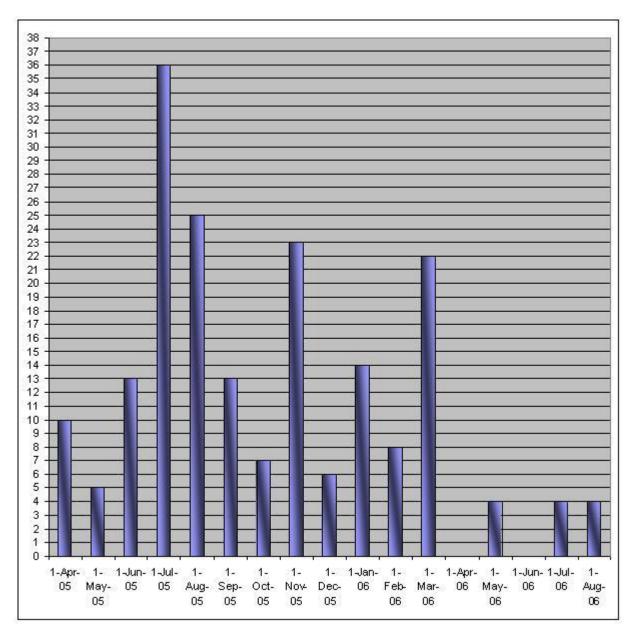


Figure 3: Number of issues discussed each month.

Explanation:

Highlights from the most intense EMR meetings, documenting when the most important issues were discussed for the first time, follow:

July 2005:

Follow-up/Messaging/Patient-to-Come-In (PCI)/ Reminders/ Recall: These
features were discussed most often as there was a need for precise clarification
about the technical differences between each of these categories of messages.
Clarification required included determining who receives a copy of a message
(doctors/front desk) and what happens when a task is marked as completed by



User Issues Discussed in EMR Meetings

Nina Boulus

- either the doctors or the front desk (e.g., When the front desk marks a task as completed, is it automatically removed from the doctor's list?)
- Updating Narcotic Agreements and entering information into Wolf.
- Chronic Disease (CD) Template.
- Ultrasound and X-ray requisitions.
- Registering allergies in Wolf: Who was to conduct the data entry and when?
- Use of existing templates and creation of new templates is one of the issues discussed most often throughout the year.
- Scanning patients' handouts: It was suggested to scan and save the various patients' handouts that are in the file cabinet, in order to make them easily accessible to the doctors who are interested.
- Entering vaccinations and flu shots into Wolf: Discussions arose regarding how to deal with the clash between the existing work practices where two different providers execute these tasks, and the system that does not allow the editing of pre-entered information.

Aug 2005:

- Dealing with urgent messages.
- Finding strategies and communication channels to disseminate knowledge to all doctors about the EMR and changes to work practice related to the EMR as well as technical information about the EMR.

Nov 2005:

- WCB claims: How to request and organize training session about the WCB electronic claims...How to deal with the challenges faced when using the WCB claims template that is very comprehensive and long, and contains many questions (compared to the paper based version). In addition, discussion arose regarding the existing work practice and whether there is a need to change it when going to electronic claims. Currently, the front staff enter demographic information and the clinicians fill up the rest of the form.
- MSP billing in Wolf: How to standardize the heterogeneous documenting and billing practices. This includes standardizing the existing codes (diagnostic and extended codes) as well as adopting a more systematic and coherent use of these codes.



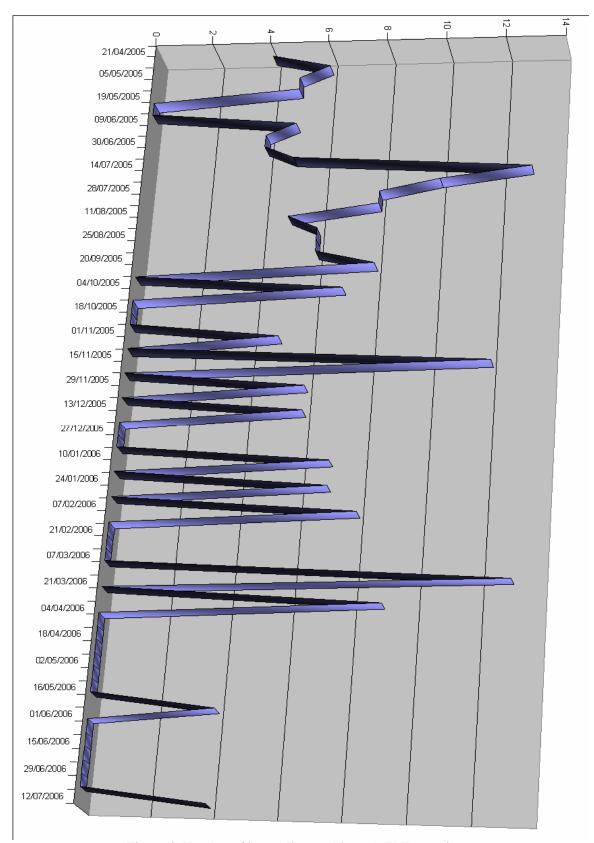


Figure 4: Number of issues discussed in each EMR meeting.



How often each issue was discussed:

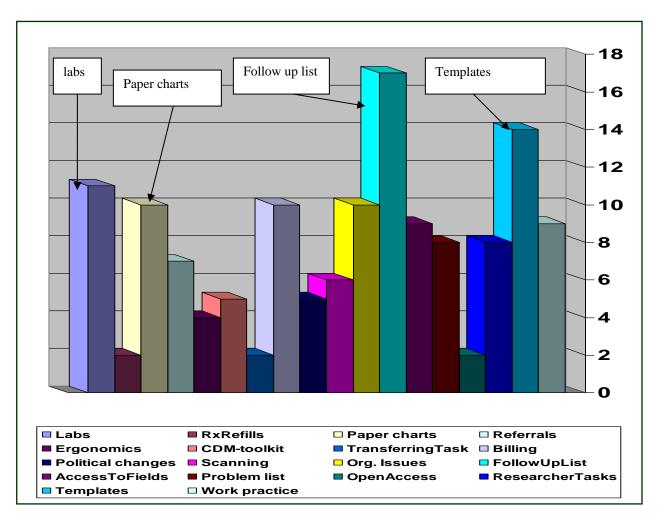


Figure 5: How often each issue was discussed.

Based on the partial analysis conducted thus far, issues most often discussed (see Figure 5) were:

- Follow-up list (discussed 17 times): How to deal with the problem that tasks do not disappear from the doctors' follow-up list when marked as completed by front desk. The EMR is based on a best-practice model where the doctors are responsible for determining the trajectory of tasks and making sure tasks are completed. But the doctors in this particular clinic distinguish between the execution of clinical tasks (i.e. different examinations) and administrative tasks (i.e. calling a patient). Hence, the doctors consider an administrative task completed immediately after sending it to the front staff. Currently, the doctors have such long follow-up lists that they have lost the overview of their tasks.
- Creation and use of templates (discussed 14 times): As the front desk staff and clinicians became familiar with Wolf, they gradually started using existing



templates (i.e. SOAP template, allergy shots template, consult letters), as well as requesting the modification of existing (i.e. customizing the generic requisition template to ultrasounds and x-rays requisitions and adding pictures to templates). In addition, there was an increase in the staff's requests for design of new templates (e.g., blank document, transmission template, well-baby template, smoking questionnaire, etc.).

- Labs (discussed 11 times): How to deal with the transition period of duplicates of paper and electronic labs. How to deal with exceptions related to critical results, i.e. how to redirect results when the pharmacist is away (INR's can be sent either to all doctors or one doctor). What to do with lab results of unknown patients (labs restrict deletion of patient record). What to do with labs that do not follow the standard and must be entered manually into EMR.
- Paper charts (discussed 10 times): Establishment of a policy governing how doctors would stop pulling and signing off charts.
- Online billing (discussed 10 times): This includes both MSP and CDM billing. An
 important issue that was discussed is how to standardize the different billing
 practices as well as the use of diagnostic and extended codes. Organizing training
 for the clinicians to use WCB forms, and finding a way to deal with incomplete
 billing.

Examples of issues that were less discussed:

- Transferring tasks (discussed twice).
- Open access (discussed twice): this refers to a different project that is implemented in the clinic and has indirect impact on the use of EMR.

It is important to note however that the fact that some issues were discussed more often than others can, but not necessarily, imply that these were more important/crucial. This could be due to the significant complexity of the technical function.

Chronological order of issues:

When looking at the chronological order in which the issues were discussed, one can note the following:

- A progression from simple features to sophisticated and advanced ones (i.e. from grooming paper-charts and data-entry into Wolf → Templates → Urgent messages and Recalls).
- A progression from the most common and general functions to more concrete and specialized ones (i.e. from Referrals (which applies to many patients) → to vaccine, flu shots, and Pap tests (which are usually conducted a few times a year).

Identified criteria for prioritization:

Issues that were prioritized:

- Issues that were crucial for new and/or existing work practice.
- Issues that were viewed as beneficial in the long term.
- Issues that have financial implications.

Issues that were on a lower priority:

- Scanning patient's handouts.
- Registering vaccinations and flu shots.



User Issues Discussed in EMR Meetings

Nina Boulus

How are decisions made and by whom?

- Some issues were solved individually and locally in the clinic. In most cases, decisions were made by the person who is affected by the change.
- Other issues were forwarded to the clinical or team meetings. This applies to situations where important issues were discussed and the EMR committee wanted to ensure decisions were communicated to all staff. Issues were postponed to clinical meetings when the representative doctor did not want to make a final decision independently of all clinical personnel.
- Issues that cannot be solved internally in the clinic were often forwarded to the vendor and support staff.

