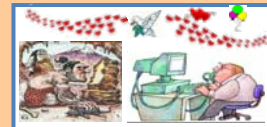


Growing demand by patients to communicate electronically with their physicians in the world

Resistance by physicians and health institutions

The physician might seize the opportunity to optimize his or her work

The health institution might jump at the chance to rationalize its service's supply



EMAIL IN GENERAL PRACTICE: PERTURBING INSTRUMENT OR STIMULUS FOR THE IMPROVEMENT OF THE SERVICE'S QUALITY IN ITS CLINIC, PSYCHORELATIONAL AND ORGANIZATIONAL DIMENSIONS ?



Setting



San Martino Surgery, Italy

- Old part of a university and executive town (Trento)
- Presence since 1984
- 6 GPs, 2 secretaries, 1 nurse
- Territory: about 6.000 people 14 to 100 aged



Background



- On one hand, there are widespread fears to introduce the email in the clinical practice (safety, reserve, medico-legal concerns, workload, erosion of the physician-patient relationship, induction of disparities on the access, etc).
- Secondly, the initial guidelines appeared in the world seem very strict and poorly transferable to the reality.
- Thirdly, the electronic communication between physicians and patients is a universe where often the separate worlds are not yet investigated individually as it should be.
- Finally, in the setting of General Practice the literature doesn't report the institution of an email service for patients throughout a long period.

Feel, watch, change



This analysis was one of the first step in a longer assessment process taken up to confirm and optimize the email service in our Practice.

After reading the 1.440 emails received between January and June 2008 we drew up a report that displayed the necessity of some changes:

1. To publicize officially the email service and its external/internal running. This conclusion derived from the following considerations:

- In the analyzed period, there were only 528 senders (8,8% of the total patients), with an average of 2,73 emails each (range 1-28). We believed that the service was still susceptible of a notable extension.

• Our perception was that the scales tipped in favour of the advantages:

- **satisfaction** of the patients;
- **reduction of other types of contacts**;
- **improved work place** (less crowd, less phone rings, less things to do at the same time because emails are asynchronous and not urgent);
- **time saving** (emails do not require a disengaged line unlike phone and fax; do not break other activities; do not require more time of the phone to carry out their requests; in our analysis less than half of entering emails required an email reply);
- **improved communication** (usually an email is the result of a reflection and not of an instinct unlike a phone call may be for both patient and physician; it provides calm and more freedom of expression; it provides an higher warranty against misunderstandings being not oral and not handwritten).

• We thought that the only justified worries about the email service, requiring accurate future evaluations, were:

- **inefficacy in the urgencies** (some patients may fail the recognition of urgent and/or serious conditions, choosing the less opportune access way);
- **difficulty in the management of the archives** (in our analysis only 15,69% of the emails contained new clinical information, but did not allow us to remove all the others...).

2. To introduce some rules. Observing the phenomenon in its almost-natural state, we could value empirically in the our setting the probable benefit of the rules recommended by the main guidelines so far available. The main selected one was to indicate the fulfilment time of the requests.

3. To create a mailing list of all users of the service, in order to can use it not only like a reply instrument but also like a support for monitoring and prevention programs. For that, a written consent and the exact email address need strongly to be picked up.

Email service running



External running:

- Setting up of the email service for patients in 2004, still active.
- The email service was not advertised except that informally, face-to-face and not systematically.
- Until this study, the only rule initially required to patients was to use this service mostly for repeat prescriptions.
- The collection of prepared prescriptions had to occur as for the other access ways: in a nominal sealed envelope deposited in an alphabetical filing cabinet in the waiting-room, typically since the day after.
- All patients of the Practice had to send their emails to a single email address, also for any other motive. That email address was the same one given to all no-patient attenders of the Practice (pharmaceutical informants, other health operators, technical consultants, etc).
- The GPs of the Practice could decide to give their personal work email address to a very selected number of patients or no-patient attenders that required a particular reserve.

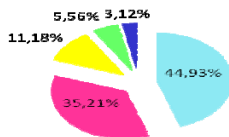
Internal running:

- Safety measures: no specific, because the Italian law protects the email as a closed post.
- From Monday to Friday, 8:30 to 13:00 a.m., in a just-reserved computerized office, a secretary read all the emails arrived to the single email address of the Practice and:
 - > dealt with the requests that she could deal with (e.g. appointments or preparation of repeat prescriptions) (over half, see the graph nearby);
 - > forwarded to the personal work email address of the particular GPs of those patients all the remaining ones.
- All emails, both entering and outgoing, were archived inside several Microsoft Outlook folders for every GP.

Numbers



- In 51 months a total of 8.613 emails arrived to the single email address of the Practice (on average in 4 years: 2.108/year).
- The number of reached emails rose continuously (monthly average from 89,5 in the second semester 2004 to 240 in the first semester 2008); semestral increase rates varying from 6,03% to 43,94%.
- Particularly, in the first semester 2008 well 1.440 email arrived by patients. Through our later classification, we found the following range of requests:



- The considerable number of emails meant that the email service was very welcome by patients.
- The email service was established almost only to repeat prescriptions for chronic therapies, but the patients began to send many other too, especially consultation requests: this was a further popularity rating.
- The arrival of 390 emails (27,08%) by delegates of patients (usually relatives) suggested that the so much feared induction of disparities on the access, especially for the less young and educated patients, may be a false problem.

Thought for the future



• Further studies need to investigate the impact of an email GP service on the mistakes rate, the compliance, the quality of assistance and the clinical outcomes of some high-prevalence pathologies in General Practice.

• Constituting an integrally written contact, the email represents an excellent instrument to investigate the consultation in general and the entire work of a GP.

• Our attention, for example, was captured by some aspects that this instrument highlighted:

- > The repetition of prescriptions for chronic therapies or documents for recurrent exams the is a very

considerable amount of the daily work of a GP surgery. This, like a background noise, may prejudice the overall quality of the service if it is not appropriately disciplined.

> In a remarkable fraction of the consultations, the physician is not asked about an advice, but he or her receives an order due to a decision taken by the same patient or a specialist.

> The email archives can be an important tool for teaching the three core competence of GP: clinic, relationship and organization.



Dr Fabrizio Valcanover, Teaching GP, GP School of Trento and San Martino Surgery, Trento, Italy
fabrizio.valcanover@yahoo.it
secreteria@scuolamgtn.it

Dr Dario Tordi, Specializing doctor, GP School of Trento, Italy
dario.tordi@gmail.com



Dr Daniele Ortolani, Specializing doctor, GP School of Trento, Italy
daniele.ortolani@gmail.com