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Telemedicine for Outpatients: A Case Study of the First Experience with Diabetic Patients in the Local Health Authority of Modena

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Keywords: Telemedicine; tele-visit; outpatient; ambulatory care; diabetes mellitus
Parole chiave: Telemedicina; televisita; specialistica ambulatoriale; diabete mellito

Abstract

Background. *During the COVID-19 pandemic, telemedicine had the opportunity to demonstrate its potential. In Italy, after an initial period of mistrust, it became clear that remote medicine can provide significant benefits for both healthcare professionals and patients. In the Local Health Unit of Modena (Emilia Romagna region, Northern Italy), great importance was placed on developing, promoting, and managing all telemedicine activities. In particular, it was decided to prioritize the activation of tele-visit services in accordance with the guidelines of the Emilia-Romagna region.*

Study Design. *This case study aims to illustrate the activities planned and developed at the Local Health Authority of Modena for the implementation of the first service of this kind, the tele-visit service for outpatients suffering from type 1 diabetes mellitus, and to analyze data from the first 12 months of activity (from May 2023 to April 2024) to share reflections on the strengths and critical points encountered.*

Method. *For the activation of tele-visits at the Local Health Authority of Modena, a dedicated working group was established with the mandate to manage all clinical, organizational, and IT aspects. Before starting the service, various preliminary activities were carried out, including selecting the clinical specialty to be activated, defining patient inclusion criteria, implementing IT systems, assessing clinical risks, preparing and distributing information materials, training healthcare personnel, and planning outpatient activities.*

Results. *During the first year of experimental activation of the service (May 2023–April 2024), a total of 72 patients were enrolled in the project, with 103 tele-visits provided. The patients were predominantly women (67%), and the most represented age groups were 30–39 (26%) and 40–49 (21%). Half of the specialists in the Diabetology Service (9/19) participated in the initiative by providing tele-visits, most of whom were young and all of whom were women. The main issues identified through regularly scheduled meetings with professionals, to which the working group is seeking the most appropriate solutions, include poor adherence by many patients who still have doubts about this modality, the habit of many patients rescheduling appointments multiple times, a habit not diminished by this visit method, the non-uniform adherence of professionals, and uneven territorial diffusion of the service. Lastly, professionals reported various IT difficulties. Although the number of tele-visits was not high, the initiative has sparked the interest of several specialists, some of whom have already proposed activating other telemedicine services, with some even*

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suggesting innovative new projects. The next steps will involve extending diabetes monitoring to pregnant women with gestational diabetes and developing tele-visit services for endocrinology, neurology, hematology, and gastroenterology.
Conclusions. *Implementing a tele-visit service in a Local Health Unit is a complex process. A thorough evaluation of the issues that emerged during the development phases and the initial delivery period can help us to act proactively to prevent the failure of future projects. Our evaluations suggest a need to act on two fronts: on one hand, we must organize further activities to promote telemedicine to both patients and healthcare providers, while on the other hand, we must work to resolve IT issues.*

Background

The World Health Organization defines telemedicine as "the delivery of health-care services where distance is a critical factor, by all healthcare professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment, and prevention of disease and injuries, all in the interests of advancing the health of individuals and their communities" (1).

Digital medicine is used worldwide for multiple purposes. For example, there are projects aimed at patients with diabetes (2-4), cardiac pathologies (5,6), oncology patients (7,8), and patients with chronic (9-11) or multiple pathologies (12,13). Various initiatives are also dedicated to health promotion (14-16), the prevention of oncological diseases (17,18), and even caregiver support (19,20).

In Italy, telemedicine has been discussed for over a decade, as the first national guidelines were published in 2012 (21) and several experimental projects began across the country (22). However, most of these activities did not transition into routine practice.

During the COVID-19 pandemic, Italian healthcare professionals' attitudes towards telemedicine changed: after an initial period of confusion, necessity led them to set aside doubts and leverage the potential offered by remote services (23-25).

This shift towards telemedicine was reinforced in 2020 with the publication of Italian guidelines for the provision of telemedicine services (26). This document outlines the characteristics, reporting methods, and pricing of services that can be provided via telemedicine, ensuring uniformity in the initiatives developed across various Italian regions. As emphasized in the guidelines, telemedicine services must not be considered merely IT activities to be implemented on personal computers; these are healthcare services that must be integrated into the patient's care journey, aligned with their needs to ensure appropriateness, effectiveness, efficiency, and safety.

The National Recovery and Resilience Plan (PNRR) (27) represents a strategic blueprint to support the digitalization of healthcare systems. It aims to revitalize the national economy and strengthen public services in the aftermath of the COVID-19 pandemic. A significant focus of the PNRR is on transforming the Italian healthcare system, with telemedicine emerging as a cornerstone of this transformation. The PNRR highlights the necessity for a robust technological infrastructure and digital literacy. Investments have been made to improve broadband connectivity across the country, ensuring that telemedicine services are reliable and accessible, and to develop training programs for healthcare professionals and patients to maximize the benefits of telemedicine. Furthermore, the "Piattaforma Unica per la Telemedicina", a unified telemedicine platform initiative, has been established to consolidate and streamline telehealth services nationwide.

To develop, promote, and manage telemedicine activities, in early 2023, the Local Health Authority (LHA) of Modena (Emilia-Romagna region, Northern Italy) formalized a steering committee aimed at coordinating all organizational telemedicine projects, according to the guidelines of the Emilia-Romagna region (28). The committee decided to prioritize the activation of tele-visits dedicated to chronic patients who do not require physical examinations. The first service made available in the LHA was the tele-visit service for patients with type 1 diabetes mellitus. The steps taken to activate the service are described here, along with the ongoing evaluation results from the first year of the tele-visit service's implementation (May 2023 - April 2024).

Case Report

1. Setting

The Local Health Authority (LHA) of Modena covers the entire provincial territory of Modena (Emilia-Romagna region, Northern Italy), and is divided into seven health districts: Carpi, Castelfranco Emilia, Mirandola, Modena, Pavullo, Sassuolo, and Vignola (Figure 1). The physical configuration of the Modena provincial territory is characterized by a plain area in the north (48% of the overall territory), a hilly area (17%), and a mountainous southern part (35%) (29). With a population of 700,000, the province of Modena is the second largest province by population in the Emilia-Romagna region.

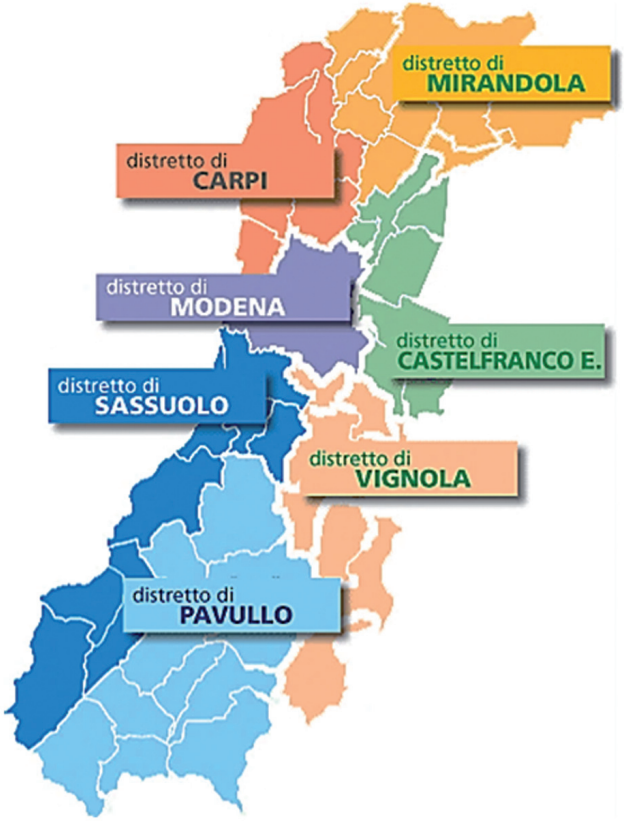

Figure 1 - Health districts of the Local Health Authority of Modena

2. Steering committee and the working group for tele-visits

In February 2023, a steering committee was formalized with the role of coordinating all telemedicine projects. The steering committee set priorities and organized specific working groups for each area of development (tele-visits, tele-consultation between professionals, and tele-monitoring of vital parameters). These working groups were given the authority to manage their activities independently and report their progress during general meetings, which were scheduled monthly.

The specific working group for tele-visits is composed of:

- Clinical specialists
- Outpatient Management Service
- Clinical Governance and Health Technology Assessment Service
- Risk Management Service
- Data Protection Officer (DPO)
- Communication Service
- Information & Communication Technology (ICT) Service
- Clinical Engineering Service.

This working group met at least monthly and was responsible for managing all clinical, organizational, and technical aspects related to the implementation of tele-visit services, in accordance with current regulations, the indications provided by the national guidelines of 2020 (26), and the deliberations of the Emilia-Romagna Region (30-32). Once all necessary activities were defined, a company procedure was written (Figure 2).

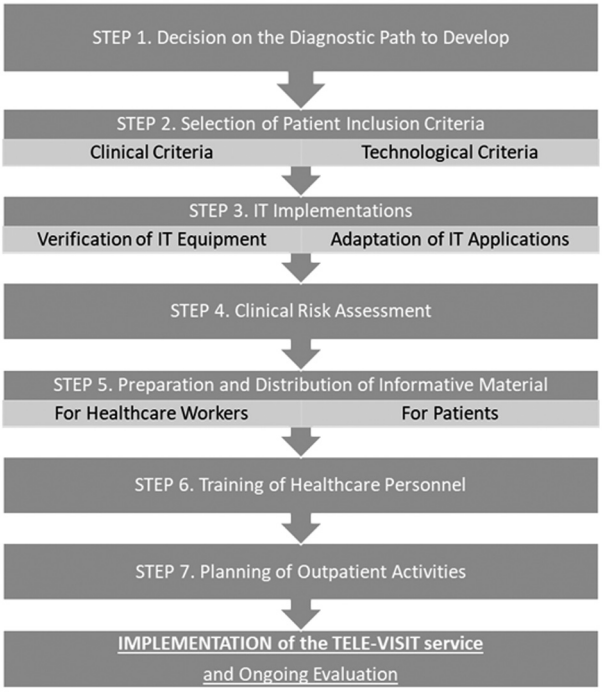

Figure 2 - Schematic flow of the activities for development of tele-visit services

3. Steps of the tele-visit service activation

Step 1. Decision on the diagnostic path to develop

It is estimated that 6% of the population of the province is affected by diabetes (approximately 44,000 patients, 56% male) with an estimated incidence of the disease equal to 3,500 new cases each year (33). The committee, therefore, decided to begin planning tele-visit activities with the Diabetology Service, this service is a single territorial service distributed across the province of Modena that manages adult patients with type 1 diabetes mellitus (juvenile diabetes) and type 2 diabetes mellitus (adult diabetes). The service consists of 9 clinics located in all 7 districts of the province, and the 19 specialists working within the service operate in multiple districts to ensure uniformity across the provincial territory.

In 2023, the Diabetology Service provided more than 26,000 visits, including over 7,000 first visits and almost 19,000 follow-ups.

In agreement with the working group, the diabetologists decided to begin with patients suffering from type 1 diabetes mellitus. This cohort consists primarily of younger individuals who are able to manage home therapy, generally do not require physical examinations, and are typically able to use digital devices.

Step 2. Selection of patient inclusion criteria

Patients eligible for this project had to have both clinical and technological requirements.

The diabetologists identified the following clinical criteria for patient selection:

- Patient with type 1 diabetes mellitus
- Patients already being followed by the professionals involved in the tele-visit services
- Clinical stability
- Good adherence to injection therapy.

The working group defined the technological criteria as follows:

- Availability of a device capable of connecting to the internet and with a webcam (computer or smartphone)
- Good IT skills, or having a caregiver who can assist
- An active email address
- A stable Internet connection
- An activated electronic health record (Fascicolo Sanitario Elettronico, FSE).

Step 3. It implementations

Both hardware and software availability had to be carefully assessed before starting the tele-visit service. An evaluation of the IT equipment in the medical offices was carried out, and some computers that lacked webcams were provided with them. Regarding software, while awaiting the implementation of the "Piattaforma Unica di Telemedicina," IT applications made available by the Emilia-Romagna region for healthcare units were used. In particular, the regional platform for tele-visits (C4C Meeting) was selected, as it provides a "virtual room" where the patient and specialist can conduct a video call and securely exchange data (34). Local applications were used for reporting the visit and consulting previous information, and they were updated by adding:

- The IT connection between the company applications and C4C Meeting;
- A specific field for the collection of informed consent for this remote modality;
- A tool to assist doctors in filling out the additional fields required in the tele-visit report. Indeed, Regional legislation requires that the medical report for tele-visits include additional information about the people present during the visit (relatives, caregivers, or healthcare workers) and the quality of the visit itself.

Step 4. Clinical risk assessment

Before starting the tele-visit service, a proactive clinical risk assessment was conducted to identify potential critical issues and possible areas of human error, and to provide timely remedies. The tool used for this analysis was the FMECA method (Failure Mode and Effect Criticality Analysis).

The most critical issues identified were:

- The incorrect identification of the patient and consequent reporting on the wrong patient. To address this problem, specialists received instructions to verify the patient's identity before starting the visit by asking for personal information (surname, first name, and date of birth).
- The failure to integrate data recorded by glucometers with the applications used by professionals. All patients with type 1 diabetes mellitus use glucometers capable of transmitting recorded data to the cloud. Unfortunately, diabetologists are unable to access this information directly. To correct this problem, a guide was created to instruct patients on how to make this information available to specialists. The guide must be emailed to patients before the tele-visit.

Following the FMECA results, other minor corrective actions were also implemented. Subsequently, as required by the FMECA, the risk

was reassessed to ensure that the corrective actions led to risk mitigation.

Step 5. Preparation and distribution of informative material

The working group focused on preparing informative materials for both operators and patients.

Two types of documents were designed for operators. The first set of documents provided general information on telemedicine and on tele-visits, while the second set included IT guides for use during tele-visits.

The material for patients was developed with health literacy principles in mind. In particular, the patient materials were reviewed jointly with a group of citizens.

The materials for patients were made available on an internet page (www.ausl.mo.it/televisita), and a printable version (in PDF format) was prepared and provided to professionals in case patients requested it. The informative materials for healthcare workers were made available on an intranet page, thus accessible only within the company network.

Step 6. Training of healthcare personnel

After completing all the preliminary activities, the committee proceeded with training doctors and nurses. Two online training events were organized (ECM accredited) to ensure the highest possible participation. During these meetings, information was provided on the entire process, including regulatory and IT issues.

Step 7. Planning of outpatient activities

The committee decided to involve all 19 professionals active in the provincial service on a voluntary basis, rather than starting with a "pilot district." The duration of the tele-visits was intended to be the same as that of in-person visits, approximately 30 minutes. Diabetologists chose not to allocate specific hours or days exclusively for the tele-visit service. Therefore, each diabetologist could independently schedule tele-visits according to their own and the patient's needs.

4. Implementation of the tele-visit service and on-going monitoring

Final verification tests were carried out in April 2023 and yielded positive results. Therefore, the diabetes tele-visit service of the Modena LHA officially began in May 2023.

Regular ongoing monitoring of tele-visit provision was conducted during the first year of the service to evaluate the numbers and characteristics of both patients and diabetologists involved in telemedicine visits, as well as to identify potential critical issues or strengths emerging during service provision.

From May 2023 to April 2024, a total of 72 patients were enrolled in the project (Table 1). The majority of patients were female (67%), with the most represented age groups being 30-39 years (26%) and 40-49 years (21%). Patients came from across the provincial territory, although districts located at the far ends of the province, such as Mirandola and Pavullo, were underrepresented. Seven patients residing outside the province were also included in the tele-visit service, as they were followed by professionals from the Carpi and Vignola districts.

Table 1 - Socio-demographic characteristics of patients adhering to the tele-vist sercive, Local health authority of Modena

	Total Sample (N=72)	**%**
Age		
Mean (SD)	48.2 (20.2)	
20-29	12	17%
30-39	19	26%
40-49	15	21%
50-59	5	7%
60-69	4	6%
70-79	9	13%
80-89	8	11%
Gender		
M	24	33%
F	48	67%
District of Residence		
Carpi	13	13%
Castelfranco Emilia	6	8%
Mirandola	-	0%
Modena	14	19%
Pavullo	2	3%
Sassuolo	14	19%
Vignola	16	22%
Outside the province	7	10%

A total of 103 tele-visits were provided. Most patients (55, or 76%) received only one tele-visit, 11 patients (15%) received two visits, and 6 patients (8%) received three or more tele-visits.

As shown in Figure 3, tele-visits were not carried out regularly and uniformly across all seven districts of the LHA. However, an overall increasing trend

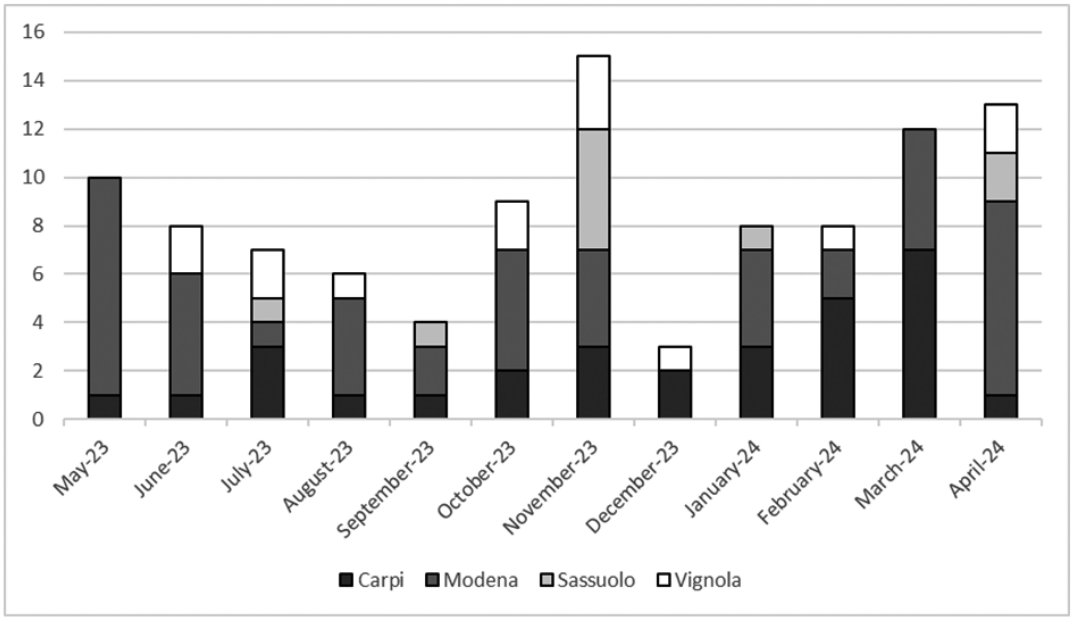

Figure 3 - Distribution of the tele-visits provided (total: N° 103 tele-visits)

can be observed, particularly after the summer, until December 2023, when the LHA experienced a cyber-attack that disrupted the use of all IT applications for several days in the health facilities throughout the province of Modena. Following this critical interruption, the tele-visit trend restarts to increase, reaching in April 2024 a number similar to the highest number recoded in November 2023.

Among the 19 specialists (2 men and 17 women) in the Diabetology Service, half of them provided telemedicine services. The active specialists, all female, tended to be younger (40-49 years) than their non-adhering colleagues.

Even after the service began, the working group for tele-visits remained available to support the specialists' activities. Additionally, official meetings were scheduled every two months to assess the progress of the service and address any critical issues.

Actions implemented to mitigate the critical issues identified during the FMECA analysis proved effective, as no errors in patient identification or failures in integrating glucometer data were reported. However, the scheduled meetings were crucial in identifying other potentially critical issues that might have otherwise remained unnoticed. For instance, diabetologists reported that many patients were hesitant about this modality, preferring in-person visits. Additionally, it was found that many patients habitually rescheduled their appointments multiple times, with no improvement observed using the tele-visit service. Finally, professionals noted that using different IT applications was troublesome from an IT perspective.

Discussion

The analysis of the process of developing the first tele-visit service at the LHA of Modena, along with the evaluation of the initial monitoring data on the volume and main characteristics of the activities provided, can be very useful for planning and developing additional telemedicine services within this or similar Local Health Authorities. Several potentially critical issues emerged during both the planning and implementation phases of the service. However, various solutions were identified and implemented to improve the service.

1. Working group planning activities

Before starting a new tele-visit service, clinical, organizational, IT, and regulatory assessments and evaluations need to be carefully conducted to identify potential system critical issues and possible areas of human error, and to provide timely and proactive remedies. Thorough and accurate planning and development are crucial to setting up an effective

and efficient service, as integrating telemedicine into healthcare activities requires the collaboration of multiple professional skills.

Furthermore, to reduce potential critical issues when implementing a telemedicine service in an LHA for the first time, it is important to carefully choose the type of service and the patient group to start with. At the LHA of Modena, we chose to begin with the Diabetology Service because it covers the entire provincial area and manages clinically stable patients over a long period. Additionally, this service uses more IT applications than other disciplines, which helps reduce problems in IT implementation.

The definition of the clinical inclusion criteria was also straightforward, as professionals are familiar with their patients and found it easy to identify the group that would benefit most from tele-visits.

The activity that most engaged the working group was the clinical risk assessment. Several close meetings were necessary to draft the specific FMECA for tele-visits in diabetology. Once the specific document was prepared, a "standard FMECA" was developed, which will be used for implementing tele-visits in other disciplines.

Finally, according to our experience, external communication needs to be addressed with particular attention. It is important to promote the service from the start and provide enrolled patients with all necessary information. Therefore, the working group made both printable material and a dedicated website page available. However, after several months of experience, the group decided to review the information material, reducing the content of printed materials and increasing the information available on the website. On the other hand, as patients and/or caregivers are familiar with using technology, printed materials are likely to be superfluous.

2. Patients features

As expected, most patients adhering to the tele-visit service are under 50 years old (46 out of 72, or 64%). However, some older patients were also able to benefit from the tele-visit service, thanks to the support of a caregiver. In particular, the 8 patients over 80 years of age who participated in the tele-visit service are patients treated at home by diabetes specialists. This highlights the importance of including caregivers and/or home care specialists in the process to avoid excluding older patient groups from telemedicine services, as physically going to the clinic can be challenging for them.

Seven patients residing outside the province of Modena utilized tele-visits. However, when analyzing the patients' districts of residence, we observed poor adherence among patients (2 patients) residing in districts located at the far ends of the province. This finding is puzzling, especially considering that this type of service is known for its potential to reach patients who are far from health services or have physical or logistical difficulties in traveling. This phenomenon cannot be attributed to poor promotion of the service by the professionals working in these districts, as they also work in neighboring districts showing higher adherence. Further evaluations are needed to better understand this issue and find effective solutions.

Most patients (76%) participated in only one tele-visit. This data is not surprising and is not considered a dropout from the service. Given that these patients are characterized by clinical stability (as per the inclusion criteria) and the short period examined (as these patients generally undergo checks annually or even less frequently), we believe this feedback is normal. When data from a longer period are available, it will be possible to verify whether patients enrolled will prefer this modality again. Of the 72 patients enrolled, six patients (8%) had three tele-visits or more. These are patients who were stable at the time of the initial proposal, but the need for more frequent checks subsequently emerged.

Finally, it is interesting to note that most patients (67%), as well as all of the professionals participating in the project, are female.

3. Use of technology

Several IT issues can act as barriers during the implementation and expansion phases of tele-visit services. For all telemedicine services, a stable connection capable of supporting data exchange is essential. In Italy, high-speed internet is available in only 44.2% of households (35). Additionally, the province of Modena includes 35% mountainous terrain (29), where connections do not always meet the required standards, especially during adverse weather conditions. When selecting patients, it is necessary to consider the quality of the internet service, which inevitably limits the pool of potential enrollees. Unfortunately, this issue affects the most disadvantaged areas where telemedicine could be most beneficial for ensuring access to healthcare.

Furthermore, it is important not to overestimate the IT skills of both patients and professionals. The digital divide, which primarily affects elderly or underprivileged patients (36), poses a significant

obstacle to the spread of telemedicine. In the LHA of Modena, we chose to start with a project involving mainly younger patients; however, future projects cannot exclude the portion of the population with the greatest health needs.

IT skills of caregivers also need to be addressed. Even among healthcare professionals, there are high levels of digital illiteracy (37-39). While all professionals use digital devices in their daily practice, their expertise often pertains only to specific tasks. Therefore, considerable effort must be devoted to creating informational materials, both online and in print, and organizing multiple training sessions. Many specialists have reported discomfort with using various IT applications. For instance, diabetologists must use four different IT applications simultaneously during visits for analyzing and recording parameters, drafting medical reports, and compiling treatment plans. Additionally, for tele-visits, they need an extra application for video calls, which they find cumbersome.

This issue is expected to be resolved by the new IT applications and the regional telemedicine platform, which will be implemented soon. All new IT applications are designed to integrate telemedicine services effectively.

4. Adherence of specialists and tele-visit Volumes

Despite efforts to promote adherence among professionals, only half of the diabetologists (9 out of 19) began performing tele-visits. This indicates that there is still much work to be done to address the existing doubts about telemedicine. In addition to the previously discussed IT issues, other factors could explain this phenomenon and need to be carefully investigated in future monitoring. During the first official meetings scheduled emerged that, first of all, despite the experience gained during the COVID-19 pandemic, skepticism about the potential of telemedicine still remains. This is especially true for older specialists, who tend to have a generally low propensity for change. Additionally, there is a widespread fear among specialists of having and overload of activities due to need to repeat visits in case of troubles with communication and relationship with patients.

A non-proactive attitude among doctors could also explain why many eligible patients are reluctant to use this delivery method, preferring in-person visits instead. The volume of tele-visits provided over the 12-month period was likely less than expected, even though no minimum volume targets had been set. Unfortunately, performance was affected by a cyberattack on the LHA in December 2023, which rendered tele-visit services unavailable for approximately 15-20 days, interrupting the positive trend observed in October and November.

Since this service was new to the organization, the working group was unable to estimate the number of tele-visits to schedule. Consequently, specialists decided not to allocate specific days for telemedicine activities. This decision proved to be prudent, as it helped avoid periods of unused time due to a lack of patients.

Tele-visits were conducted in only four districts of the province. However, this can be partly justified by the fact that specialists work across multiple districts and had the flexibility to schedule tele-visits where they prefer. This flexibility is in line with the purpose of telemedicine: to provide services to patients who are far away from healthcare facilities.

Regarding potential enrollment issues, unfortunately, we have not tracked proposals for tele-visits, so we cannot currently calculate the refusal rate. This aspect will be thoroughly addressed in the next monitoring evaluation. The working group is also working on identifying different process indicators that are essential for a comprehensive and effective evaluation of the service, such as the percentage of specialists involved, the number and percentage of patients enrolled, and the number and percentage of refusals or patients who switch back to in-person visits after their initial tele-visit.

Even though the number of tele-visits was not high, interest in this type of service has grown among other specialists, some of whom have already proposed new telemedicine services and innovative projects. The working group has begun exploring new areas that could benefit from telemedicine, such as providing services to prisons, which are often situated in particularly challenging contexts.

Upcoming actions will also include expanding diabetic check-ups to pregnant women with pregnancy-related diabetes and developing tele-visits in endocrinology, neurology, hematology, and gastroenterology.

Conclusions

Implementing a tele-visit service for the first time in an LHA is not an easy process. Several critical issues can emerge during both the planning and implementation phases of the service, but these should

not deter the improvement of existing services or the development of new telemedicine initiatives. In fact, a thorough and in-depth evaluation of these critical issues can enable proactive measures to prevent known problems from leading to the failure of future projects.

Our evaluation suggests that we need to focus on two main areas: first, it is essential to organize additional activities to promote telemedicine to both patients and healthcare professionals; second, it is crucial to address IT issues, including the integration of IT systems.

Riassunto

Telemedicina nell'ambito della specialistica ambulatoriale: case study della prima esperienza con i pazienti diabetici presso l'Azienda USL di Modena

Introduzione. Durante la pandemia da COVID-19, la telemedicina ha avuto l'opportunità di mostrare il suo potenziale. In Italia, dopo un primo periodo di diffidenza, si è compreso che la telemedicina può rappresentare un valido vantaggio sia per gli operatori sanitari che per i pazienti.

Nell'Azienda Unità Sanitaria Locale di Modena (Regione Emilia-Romagna), è stata data grande importanza allo sviluppo, alla promozione e alla gestione di tutte le attività di telemedicina, in particolare si è deciso di dare priorità all'attivazione di servizi di televisita, in linea con le linee guida regionali.

Disegno dello studio. Questo *case study* ha lo scopo di illustrare le attività pianificate e sviluppate presso l'Azienda USL di Modena per l'implementazione del primo servizio di questa tipologia attivato, il Servizio di televisita per pazienti ambulatoriali affetti da diabete mellito di tipo 1, e di analizzare i dati dei primi 12 mesi di attività (da maggio 2023 a aprile 20214) allo scopo di condividere riflessioni sui punti di forza e di criticità riscontrati.

Metodi. Per l'attivazione delle televisite presso l'AUSL di Modena è stato istituito uno specifico gruppo di lavoro con il mandato di gestire tutti gli aspetti clinici, organizzativi e informatici. Prima dell'avvio del servizio sono state svolte diverse attività preliminari, quali la scelta della specialità clinica da attivare, la definizione dei criteri di inclusione dei pazienti, le implementazioni informatiche, la valutazione del rischio clinico, la predisposizione e distribuzione del materiale informativo, la formazione del personale sanitario e la pianificazione delle attività ambulatoriali.

Risultati. Durante il primo anno di attivazione sperimentale del Servizio (maggio 2023-aprile 2024) sono stati arruolati nel progetto complessivamente 72 pazienti per un totale di 103 televisite erogate. I pazienti erano prevalentemente donne (67%) e le fasce d'età più rappresentate erano 30-39 (26%) e 40-49 (21%).

Metà degli specialisti del Servizio di Diabetologia (9/19) ha aderito all'iniziativa erogando televisite, questi erano perlopiù giovani e tutte donne.

Le principali criticità rilevate dagli incontri regolarmente programmati con i professionisti, alle quali il gruppo di lavoro sta cercando di trovare le più adeguate soluzioni, sono state la scarsa adesione di molti pazienti che nutrono ancora dubbi su questa modalità, l'abitudine di molti pazienti di riprogrammare più volte l'appuntamento, che non risulta diminuita con questa modalità di visita, la non uniforme aderenza dei professionisti e diffusione a livello territoriale del servizio. Infine, i professionisti hanno segnalato diverse difficoltà di tipo informatico-tecnologico.

Anche se il numero delle televisite non è stato elevato, l'attività ha suscitato l'interesse di diversi professionisti e alcuni hanno già proposto di attivare altri servizi di telemedicina, alcuni addirittura proponendo nuovi progetti innovativi. Le prossime azioni riguarderanno l'estensione dei controlli diabetologico alle donne incinte con diabete gestazionale e lo sviluppo di televisite endocrinologiche, neurologiche, ematologiche e gastroenterologiche.

Conclusioni. Implementare un'attività di televisite in un'Azienda Sanitaria è un processo complesso. Una valutazione accurata e approfondita delle criticità emerse nelle fasi di sviluppo e nel periodo iniziale di erogazione può consentire di agire proattivamente per evitare che i problemi possano portare al fallimento dei progetti futuri. Dalle nostre valutazioni emerge la necessità di agire su due fronti: da un lato occorre organizzare ulteriori attività per promuovere la telemedicina rivolte sia ai pazienti che agli operatori, dall'altro occorre lavorare anche per risolvere le problematiche informatiche.

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