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SERMENT D'HIPPOCRATE

En présence des Maîtres de cette Faculté,
de mes chers condisciples
et selon la tradition d'Hippocrate,
je promets et je jure d'être fidèle aux lois de l'honneur
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Exploration du point de vue des médecins généralistes sur l'utilisation des scores cliniques : étude qualitative.

Résumé

Introduction : Les Scores Cliniques (SC) sont des outils d'aide décisionnelle. Certains d'entre eux font l'objet de recommandations d'utilisation en soins premiers par diverses autorités de santé. Le développement des SC nécessite de connaître les attentes des MG pour leur appropriation en pratique réelle. L'objectif de notre étude était d'explorer le point de vue des MG sur leur utilisation des SC dans leur pratique quotidienne.

Méthode : Nous avons réalisé une étude qualitative par théorisation ancrée à partir de Focus Group (FG). L'analyse des verbatims a été menée par 2 investigateurs, selon le principe de la triangulation des données. Après chaque FG, les investigateurs ont réalisé un étiquetage expérientiel en double aveugle puis une catégorisation inductive afin de conceptualiser l'utilisation des SC.

Résultats : 21 MG exerçant en Indre-et-Loire ont participé lors de 5 FG. Nos résultats montrent que les MG se soucient plus de la pertinence et faisabilité des SC que de leur validité. Les MG critiquaient l'approche centré-organe induite par les SC. Ils regrettaient que les SC n'intègrent pas les éléments contextuels ni les préférences du patient que nécessite une pratique efficiente correspondant à l'Evidence-Based Medicine. Les SC étaient appréciés pour leur efficacité : ils permettaient d'assurer une pratique correspondant aux données actuelles de la science et pouvaient rapidement aider à prendre une décision en situation d'incertitude. Certains étaient utilisés pour justifier des cotations spécifiques. Différentes propositions restaient débattues comme l'utilisation des SC via la e-santé, ou l'attente d'une liste de SC validés par les sociétés savantes de MG.

Discussion : Cette étude propose une théorisation de l'utilisation des SC en soins premiers par une balance efficacité-efficience. Pour certains MG les SC apportaient une aide rapide permettant d'assurer une prise de décision, pour d'autres ils étaient loin d'une approche centrée-patient prenant en compte tous les aspects du modèle bio-psycho-social.

Mots clés

Aide décisionnelle, score clinique, soins premiers, étude qualitative.

Abstract

Background: The Clinical Scores (CS) are tools that help the decision-making process. Some of them are recommended by diverse health authorities for primary care. The increasing number of CS calls for an acknowledgment of the general practitioners (GP)' expectations for their in-practice appropriation. The aim of this study was to explore the GP's point of view about the CS' use in their daily practice.

Method: We undertook a qualitative study with the grounded theory method based on focus groups (FG). Verbatim' analysis was led by two investigators, accordingly to the data triangulation principle. After each FG, the investigators did a double-blind experiential labeling, in order to finish with an inductive categorization that conceptualize the CS' use in practice.

Results: 21 GPs practicing in the Centre-Val-De-Loire area participated to 5 FG. CS were appreciated for their efficacy: they offered a chance for a practice that corresponded to science' current data and were able to promptly help with the decision-making in an indecisive situation. But their efficiency was not appropriate for primary care settings. GPs criticized the organs-centered approach induced by the CS. They were sorry about the fact that the CS does not include contextual elements, nor the patient's preferences that are required by an efficient practice corresponding with the Evidence-Based Medicine. Some of them were used to justify specific remunerations. Other propositions remained challenged like the CS' use through e-health, or the expectation of a list of CS approved by the learned societies.

Discussion: This study offers a theorization of CS' use in primary care through an effectiveness-efficiency prism. For some GP, CS were a fast help allowing a decision-making, for others they were far from a patient-centered approach taking into account every single aspects of the bio-psycho-social model.

Key words (MeSH Terms)

Decision aids, psychometrics, primary health care, qualitative research.

Background

The general practitioner (GP) is “primarily responsible for the provision of comprehensive and continuing care” integrating “physical, psychological, social, cultural and existential dimensions”(1). Requests are numerous with an average of 2.26 reasons per consultation in 2009 (2). To answer those demands, GPs have to use efficiently the resources offered by the health system, taking decisive decisions while in indecisive situations.

Evidence-based medicine has been defined as the integration of individual clinical expertise, patient's values and best available evidence from systematic research in the process of decision making related to patients' health care (3). The Clinical Scores (CS) are tools designed to assist this decision-making process. Relevant clinical or paraclinical items are combined in a score, with respect to a structured and validated approach. This numerical result reflects the probability of a diagnosis or a prognosis, or the intensity of a symptom or a disease (4,5). The CSs theoretical utility is to allow a standardized, replicable, and explicit decision-making process, which should eventually result in harmonized practices (4). The internal validity of a CS is based on its psychometric attributes and reflects its ability to predict an exact result (6). The external validity reflects its replicability and transposability criteria (7).

The number of available CSs has increased dramatically throughout the past few years, with an access to more than 25,000 CSs in 2019 on specialized websites versus 13,500 in 2010 (8). A number of current guidelines support their use, even though for the most part they have not always been validated in general practice (9,10). The CSs' use by GPs is becoming more and more common: 75% in 2010, increasing by 40% in 10 years (11,12). GPs report that they know of at least 6 CSs and use 4 of them (13). Some drawbacks regarding the ambulatory use of CSs have been mentioned: lack of knowledge and training, doubts towards their usefulness, lack of time, issues in accessing them, lack of remuneration, negative impact on the patient-practitioner relationship and poor acceptability from the patient (11,13).

The design of a CS for primary care should take into account all the specificities of this context. GPs expectations regarding their personal use of the CS in their daily practice should therefore be thoroughly explored. The aim of this study was to explore the GPs' point of view regarding their use of CSs in their daily practice.

Method

1) Study design

A qualitative study using a grounded theory approach has been conducted. This method has been chosen because it ensures participants' practice verbalization and representations (14,15). The theorization allowed building a model of the general practitioners' approach of CSs.

2) Participants:

French GPs from the Centre-Val-de-Loire area of France were first recruited according to the predefined variation criteria resulting from the initial analysis of the literature (16): age, sex, way of practicing (alone or within a group), in an urban, suburban or rural area, number of appointments per hour, participation medical meetings or Continuous Medical Education, and complementary activities. We called doctors' offices to organize FG within one of their practice and gather practitioners from the surrounding area. Recruitment was completed all through the research project, using purposive theoretical sampling, with regards to the evolution of the emerging theory.

3) Data collection

Participants' characteristics were collected [appendix 1].

Data collection used focus groups (FG) in order to boost the dynamics of exchange between the GPs about their practice (17). FG were directed accordingly to a framework allowing to discuss the study's subject in the most open way [appendix 2]. The initial framework has been progressively enriched with significant elements from the analysis of previous FG, according to the usual process of an inductive analysis. The meetings were held in the participants' practice settings. Some examples of tests recommended in primary care were shown during the FG in order to enhance discussions (18,19). Each FG has been recorded, fully transcribed and anonymized.

4) Data analysis

Verbatim analysis was led by two investigators, blind to each other, to ensure triangulation of analysis. This double blinded labeling was run after each FG. Individual labels were then mixed into a single label through discussion and arbitration by a third investigator whenever needed. Labelled items would then be categorized in an inductive way using the same double blind and arbitration process. Data collection and analysis used with the QSR NVivo11® software.

5) Ethical aspects

Each participant was given an information letter and signed a consent form [appendix 3]. The study was approved by the "ERERC" (*Espace de Réflexion Ethique Région Centre*) review board (number 2017051) and was registered at the CNIL (*Commission nationale informatique et liberté*) n°2017096 [appendix 4,5].

All audio recordings were destroyed after transcription.

Results

We organized 5 FG between August 2017 and June 2018. Theoretical saturation of data was achieved after the fourth FG. Twenty-one GPs participated. The average time of the FG was 60 minutes. FGs and participants' characteristics are presented in table 1 and figure 1. Results have been laid out according to the usual criteria of an intervention development in medicine (20).

Validity

CSs popularity prevails over their scientific validity

GPs reported using tests because they were well known in the medical community, without checking for their validity: "I have been using it since I'm a medical student and I never really thought twice about it." Some GPs assumed that the fact that they are using CS give credits to their practice: "I found that it puts things in order on paper".

More distrust than trust regarding their performances

The practitioners were quite critical on CSs that did not seem to be designed for their ambulatory practice: "it is not usable; it's more of an emergency unit thing". They doubted the reliability of their own interpretation of the CSs results: "I think that we can underestimate or overestimate a CS while actually using it". They were also questioning CSs' validity for subjective symptoms, such as depression symptoms: "the HAMILTON scale is up to the interviewer's estimation and not the patient's. You're not going to ask the patient 'have you ever, rarely or never'. It's up to you. But I found it difficult to evaluate this". It is hard to limit a symptom to a number without making losing all its nuances: "The CS item doesn't match with the information you have in the first place. Then you end up mixing things that have nothing to do in the same CS." Practitioner's knowledge of their patients brings forth data that cannot be numbered, including their personal background: "I especially need the context". GPs reported "losing pieces of information" with a number alone. They never have "a blind trust in CSs", "if elements are lacking, I'm going to consider it as invalid and then I cannot rely on it to make a decision".

Acceptability

CSs are robotics; general practice is a human science

For some practitioners, the mere use of a CS was not acceptable: "The very word 'score' tends to get on my nerves...". The idea of replacing a human relationship with pre-defined interactions by an algorithm was unbearable: "This is the antithesis of general practice", "medicine isn't this; it's a human science. It's about our free will, our thoughts, our sensibility and our knowledge... Or else we just turn into computers".

GPs regretted the lack of flexibility in the questions: "in all those questionnaires, the answers are a little bit artificial, because even our very own attitude is artificial. Well, I mean, it's not the practitioner speaking anymore but a person that reads an already prepared text with words that maybe we wouldn't have used". They did not feel at ease with pre-defined questions that stood in the place of their own routine: "it totally rips out the dialogue, patients have the impression to be with a robot", "the patient-practitioner relationship turns into mathematics". The CS "robotic" names also shocked the GPs: "That someone

had the idea to call a CS for depressed patient “PHQ9”... I don’t have the words...”

Patients expect listening, the test expect for a check in a box

“A depressed man needs listening, not questions”. During this listening phase, the attitude appears to be crucial for GPs: “you look at the person, you don’t check boxes”. They dreaded chaining questions with no possible adaptation to the patient answers: “we are asking questions, yes, but, in an order that will go well with the state of the appointment, of the consultation, and not a thing recited monotonously, this question then this one, and this one ...”, “you adapt your speech to the patient!”. GPs didn’t want “it to be a lie detector” or be perceived as such. “If you have to trick the question... Well then I don’t want to do that.”

Affordability

CSs are time; and time is money

GPs weren’t comfortable with the specific remuneration for CSs’ execution: “I didn’t even know that we could do that”, “I just don’t know how to bill for it” and “to search for the billing codes, this... this annoys me”. This remuneration compensating the time spent was debated between the participants: “even if I did a thing, it’s not because of it that I’m going to ask for more” and “If you are at a point where you tell yourself: « well I spent half an hour so if I bill that CS I’m going to earn more »...”, on the other hand “it is still a small reward when you bust your ass for 45 minutes...” and “this is our bread and butter! (laughs) I don’t singularly do it for the fame!”. Apart from this notion of time, some participants reported doing CSs for their remuneration: “The test interest is the money!” and “honestly this is more for the money than for the patients since it is questions that we already ask ourselves”. GPs feared that remuneration would generate too many inspections: “one is bound to be questioned by the social security office. It’s better to keep tracks”.

Feasibility

Practitioners have lost their bearings in regards to the CS

GPs knew few CSs: “I knew 5 that I can quote”. They argued about the CS’s designation which made it hard to remember and claimed that: “it would be easier to find it back on the internet if they didn’t have those silly names”. CSs evolution was too fast for them: “it keeps changing!”, “they are proliferating” and “I already feel lost when it comes to CSs because there is always a new one”. Some were expecting the learned society to sort it out: “I look at it a little bit closely now that there are the recommendations”.

CS is like GPS: it’s when you need it that you forget it

GPs said they didn’t remember CSs that they usually have no need of: “if we don’t use them, then we forget about them” and “there were 4 or 5 that I managed to remember and that I used frequently thus they remained in my practice”. And yet it is in rarer pathologies that the help of a tool was more needed: “With rarer pathologies, CSs can, maybe yes, be more interesting... But precisely I can’t quote any rare pathology CS”.

What is too short is incomplete but what is too long is unusable

GPs preferred short CSs: “it has to be 3 or 4 questions long”, “yes or no questions, closed questions...”, “rapidly interpretative” with simple questions: “and still, us, we are doctors so it is understandable, but there are some sentences, as you said, that are incomprehensible [for the patient]”. They were aware that short CSs couldn’t possibly integrate all the elements of the context “there is also the family background. You can have a patient that ends up at 1, but leaves alone, and he is... we are Friday evening...”. More complete CSs seemed impractical to them: “after [by adding the context] it is going to give you the other [FINE] which is going to be more complete but unusable” and “the ideal CS is the one that is easy to use” and not those “where we don’t have the results in general practice” such as “blood gases in general practice”.

CSs are less time consuming when they are done by someone else

CSs weren’t a priority: “I’d rather spend more time doing other things”. For those who use CSs they took the habit to organize themselves: “I make them come just for that”, “it’s an appointment [...] I book them at a specific time”.

The self-questionnaire was a solution proposed by some practitioners. The interest was to have the patient face his own responsibility: “this way he can look in the mirror, and that can make him realize a few things”. It was time-saving: “it also allows me to defer a consultation, in order to not overload one that is already [long]”. The way to make self-questionnaires acceptable has been debated: “either you give it to everyone in the waiting room as you used to do it with alcohol, either you don’t, or else it’s a little bit of a facial discrimination”. Targeted screenings: “such as the blood pressure self-measurements” were also suggested. Others considered the development of the e-health as a solution: “After on [an app] you would have a form, a kind of questionnaire, a form for new patients which brings them to ask themselves several questions”. Doctors wondered how the patient would react: “mostly they are not going to get it” being afraid that patients “end up alone versus all those questions”. The patient implication in this type of CS was doubted by the participants, which is confirmed by a participant who already had implemented the self-questionnaires: “I have a less than 1% feedback”. Some practitioners delegated CSs to other health professionals: “I prefer to delegate to someone else”, “me I save time, I don’t do it [myself]”. Some CSs could be delegated: “I send them towards the specialized nurse” or “you give them to the social worker”.

Relevance

CSs are for doctors what Morse code is for sailors

CSs were considered by practitioners as a communication tool between professionals: “it’s difficult to relay written information”, the point was “to have a standardized measure, numbered, something that can be understood on the line”. GPs used CSs as simple tools to give informed information to the patient in a split decision situation: “he didn’t make a decision, it was the patient that had to make it, so we showed him his CS results and there you go”. Other practitioners saw CSs as a way to tackle delicate issues: “the aim is to open the discussion [...] on questions that we might not ask”, including through self-questionnaires: “they fill them up, then if they end up with the result: “big problems” maybe it’s going to push them towards their GP one day”.

Young doctors trust CS while experimented doctors trust their clinical sense

GPs were blaming CSs for not taking into account the context, worrying for younger practitioners: “you’re already very organs centered [when coming out of medical school]. You’re organ-centered as we say. And yet you put CSs on top of this...” Recently learned CSs were frequently used: “you have a new grid to fill up, you’re happy, you add this in your professional credentials...” then it falls into oblivion: “I did none this year, I forgot about it”, “and then in practice, time flies, you tend to smooth your thing out and reproduce the old patterns”. CSs were progressively added to consultations without being formally implemented: “FAGERSTROM I’m going around it, I don’t really do it anymore” and “you’re starting to know the questions so well that you’re using them during your consultation without putting any result number at the end”. Practitioners relied their own experience rather than on CSs: “the perception, remains the best thing for those cases”, “in the decision making process we are going to rely on our clinical sense, and not on a CS, it’s not going to tell us what to do” and “we have a certain semiology in our head, one, a much-vaunted «*sense of alarm*» [...], clinical experience and we don’t need to check boxes or to rate, well to calculate”. This feeling seemed to grow over time: “I asked myself, in the end, what do we want from the tests? What is their use? And then I think that I realized, with time, that I didn’t really need those in the end because they weren’t of much use”.

No treatment, no test!

GPs used CSs that “change something in the end”: “If we already know what’s need to be done then we don’t do the test” and “if we take a memory loss problem, either way, in the end, scaling or not, the evolution will be what it is, and the scales won’t change a thing”. When asked what they are expecting from a CS, GPs answered: “[a CS] that brings something more to the table, an added value in comparison with the daily practice”.

CSs give way to catastrophism.

In a doubtful situation, practitioners did not feel reassured by CSs: “I don’t believe they would reassure me that much”, “the test will still leave me alone with my uncertainty”, and “even if there were a reassuring test, I would still call saying that okay I’ve done the test and it looks reassuring but I still don’t feel good about it...”. An alarming CS led to more screenings: “if the result number is really high, I tell myself that I’m missing something”. In the end, for the doctor: “from a juridical point of view it can protect us” but for the patient: “I don’t see how, well, you’d just say that you’re sorry he is dead but he had a 1 at the result number [...] it wouldn’t change a thing”.

CS is to monitoring what picture is to the melanoma

Participants used CSs in order to monitor their patients: “I found it sometimes interesting for the monitoring; because people would tell you that things are no getting better but then when you do the test a second time you figure out that there has been an improvement”. They stressed out the fact that: “the scale needs to be reproducible” and “it allows you to measure the evolution”. The interest is increased when several medical professionals are monitoring the same patient: “it is not always the same person that sees the patient in the hospital”.

No pathways specialization without research, no research without CS.

GPs thought that research in primary care needed CSs: “someone who’s going to study or something, then, these tests, they have all their significance, to evaluate”. The tool brought forth necessary numbered data: “it can be biostatistics. It’s good, because it can give you pointers on populations’ health conditions and their practices”. This good side was well perceived for the discipline influence, but less for their own practice: “it’s true that if they want us to make researches in general medicine, CSs won’t help us with clinical sense but it can allow them to boost up some indicators”. Nevertheless, GPs did not feel involve in this process: “If it’s for research purposes then we are not directly in it”.

Discussion

This study explored GPs point of view on their use of CSs in their current practice. It appears that the CSs’ pertinence and feasibility in primary care prevail over questions about scientific validity. GPs blamed especially the fact that CSs do not take into account clinical circumstances and patient preferences, which are, however, essential to EBM practice.

What is CSs place in EBM?

On the one hand, CSs efficiency was appreciated as a good communication tool, or a reference for current scientific data. On the other hand, their very efficiency in primary care was questionable. Patient preferences would not be taken into account with a robotic-like approach. Circumstances would not be integrated by just checking boxes. These elements are nonetheless necessary to the Engel’s model of bio-psycho-social approach (21,22). The practitioner is thus constrained to moderate CSs efficiency and efficacy, before considering using it. This study offers to conceptualize an efficiency-efficacy balance which would guide CSs use by GPs in their current practice.

Feasibility and pertinence are the reflection of the efficiency-efficacy balance

Answers to the question: “what would an ideal CS be for you?” were “efficient” CSs “short” of “3 to 4 questions”, “quick” and “that changes things”. These elements might help for GPs’ easier appropriation of the CS, and boost its utilization by a good feasibility. Two CSs have been mentioned as meeting all the needs: the Ottawa’ CS which points to an X-ray prescription or not in only three questions for a twisted ankle, and the BITS test which points in four questions to suicidal risks for a teenager (23,24). Both CSs have in common that they have been developed by primary care practitioners which enhance their pertinence. A CS like the CHA₂DS₂VASC, allowing to evaluate the necessity of an anti-coagulant treatment in the auricular fibrillation, is not really longer (25). However, it is seen as an “issue for hospitals specialists” which is inefficient in primary care: “in the end the patient will still always end up at the cardiologist”.

Validity, affordability, and acceptability are once again recalled

Some results of this study can be found in literature. Questions about measure’s variability are known, especially for cognitive evaluation tests (26). The GPs’ wish to maintain a human relation, not a standardized, reflects the acceptability factor is a tackled theme within different studies (11). Remuneration is often considered as an encouraging factor for CSs’ use at European Level (27).

Professional experience reduces the interest given to CSs

This study corroborates other works about expectations of helpful tools for the decision-making process (diagnostic, complementary explorations, therapeutics) from the GPs (28). Our results are nevertheless nuanced: more experienced GPs seemed less inclined to appeal to those helpful tools, especially in situation that they think mastering: the reassuring feeling gets stronger over time and experiences, just like the Gut feelings concept (29). Other practitioners feel the need for such a tool in situation that they are not at ease with. However, they still admit that for those rarer situations, they don't know any suitable CS.

Participants thought that CSs could land a helpful hand for the decision-making process for practitioners lacking experience such as newly named doctors or medical student: "it's interesting in training, it's true that it can help you asking yourself the good questions, remembering the priorities..."

What responsibilities to CSs?

A CSs' use to justify a medical decision has been frequently stated during FGs. CSs' interest in case of disagreement hasn't met unanimity. Their psychometric features are never perfect, but are they better than the doctor's? GPs were asking "an irrefutable proof that CSs improve care quality". A 2002 study about the systematic use of Numeric Pain Rating Scale in primary care concluded that they were no effect on chronic pains relief (30). GPs were afraid of committing mistakes by just relying on CSs. The CNIL underlined in its reports about artificial intelligence that "algorithmic systems' development went with an erosion of individuals vigilances" or also that "these technologies' development can affect one of the human identity and dignity components, that is to say its liberty and its responsibility" (31). We found those same preoccupations.

Limits of this study

Undertaking a qualitative study with a grounded theory approach using FGs was a preferred choice compared with individual interviews in order to stimulate the emergence of all opinions from the GP community and the pooling of all their current practices. Though it is possible that some practitioners did not report faithfully their practice by fear of others judgment. In order to minimize this social desirability bias, FGs have been prepared in a way to assure maximum conviviality. Most of the participants came from nearby cabinets. Most of them already knew each other before and the exchanges appeared to be free and cordials. The exchanges quality level especially during the FGs allowed registering unexpected data, a sign that all the participants felt sufficiently at ease to free their speech. For example, we recorded results reporting a conspiracy theory centered on a health data deviant utilization gathered through CSs in profit of big pharmaceutical companies, government or assurance companies: "it's information, big data, it's a society issue, not a medical one. The sprawling society is sucking up data from everywhere...from our smartphones, and those things. You have to be really careful about this" and "It's a little bit like the conspiracy theory! You have to watch out". These unexpected results echo current societal preoccupations which led to a CNIL report about it in December 2017 (31). Two principles were brought out: one of loyalty stipulating that the algorithms needed to serve users, and the other of vigilance notifying the surveillance of algorithms, their use and trust placed in it.

We did not use a CSs restricted list to offer us access to the most global GPs' point of view in their regards independently to the different situations met. Other studies have depicted GPs' curbs on their CSs use with a restricted list which tighten exploratory fields (10,13). They were studies by questionnaires or individual interviews with thematic analyses, or literature review. Our choice of an analysis by grounded theory method gave us the opportunity to reach a conceptualization of a general CSs use in primary care.

Perspectives

The imperious necessity to sort CSs out

Participants told us that they did not take the time to check the level of proof of tools they had, but just to reproduce current practices within their professional network. Our results show that they are relying on learned society to select among the wide variety of available CSs, the ones that are relevant and to give them use recommendations. This claim for a relevant CSs selection was already raised in other studies and is conditioning CSs future: accumulation of useless tools makes it impossible to find the one that could actually help, and leads GPs to drop their use once and for all (32). This selection can also come from research in primary care, such as it has been done in 2015 for cardio-vascular pathologies: among the 26 CSs inventoried, only 10 were validated in general medicine (10).

E-Health in rescue of efficiency?

In order to facilitate access to CSs, solutions have been offered during FGs: development of computing tools such as medical software, apps for smartphones or websites. But CSs appropriation is also needed: "you don't have those in the profession software? Well maybe, but I'll have to check..." Those results echo different articles about the fact that we need to train doctors to CSs' use in real practice (33). Propositions have been moved forward such as self-questionnaires targeted on consultation motives while filling up the online appointment form. CSs could then bring data before the actual appointment without interfering with its dynamic. A study suggested also using the waiting room to collect data through self-questionnaires; patients would then be willing to fill them up (34).

CSs' efficacy still need to be optimized in order to be used in primary care. Their efficiency will always be discussed, new technologies won't be able to fully solve it. Thus CSs' use in current primary care remains a challenge as it relies on an efficiency-efficacy scale.

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Appendices

1) Appendix 1 :

Participants' characteristics

Circle the right choice or complete			
Sex	Man		Woman
Age			
Activity	Alone		Within a group
Practice area	Rural	Sub-urban	Urban
Participation Continuous Medical Education	Yes		No
Participation medical meetings	Yes		No
Number of appointments per hour			

2) Appendix 2:

Initial outline of Focus Group

Presentation:

Subject and method

1) Tell me the last time you used a clinical score ?

Revival:

- Why this one?
- Do you use others for this same situation?
- In what context?
- Do you do it systematically?
- Do you use other clinical prediction rules?
- How did you know this score?

Items to discuss:

- Number of scores used
- Frequency of use

2) What benefits do you get from using clinical prediction rules?

Items to discuss and associated revival:

- Follow-up:

- Diagnosis:
- Screening / prevention: Begin a discussion?
- Guide patient: justify a therapeutic management?
- Standardizes the clinical examination?
- Do you use scores in case of follow-up for subjective symptoms, like the pain VAS?
- Do you use scores to consolidate a difficult diagnosis, as cognitive disorders?
- Do you use screening scores? As the Fagerström?
- Do you use severity score? Like the CRB65?

3) What are the barriers to using the scores you quoted?

Items to discuss and associated revival:

- Time
- Knowledge: You know a lot of score?
- Known impact: scores influence your decision-making?
- Relationship: What can think the patient about achieving clinical score in consultation?

4) What do you think of the future of clinical scores in general practice?

- With the emergence of the EBM, what is the future of the scores?
- With the multiplicity of tests, how to find your way?
- With the judicialization of medicine, could you be blamed for not having used a score?

5) How could we improve the scores?

1. In terms of feasibility?

Shorter, adapted to the general practice, paid...

2. In terms of integration in our activity?

3. Dedicated time?

4. Specific compensation?

5. Delegate the realization (speech therapist for dementia...)?

6. Integrate into medical software?

7. Another?

6) What would it be "a perfect score?"

3) Appendix 3:

Consent

I hereby declare that I have been informed of the anonymization of the data to be collected during this interview. I am voluntarily participating in the qualitative study "Exploring the general practitioners' point of view about clinical scores: a qualitative research" conducted by R.Palluau under the direction of Doctor M.Pautrat, and give my consent for an audio recording to be made.

Date:

First and Last Name:

Signature:



**GROUPE ETHIQUE D'AIDE A LA RECHERCHE CLINIQUE POUR LES PROTOCOLES DE
RECHERCHE NON SOUMIS AU COMITE DE PROTECTION DES PERSONNES
ETHICS COMMITTEE IN HUMAN RESEARCH**

AVIS

Responsable de la recherche : Dr Maxime PAUTRAT

Titre du projet de recherche : Les outils en médecine générale : qui utilise quoi ?

N° du projet : 2017 051

Le groupe éthique d'aide à la recherche clinique donne un avis

☒ FAVORABLE

☐ DÉFAVORABLE

☐ SURSIS A STATUER

☐ DÉCLARATION D'INCOMPÉTENCE

au projet de recherche n° 2017 051

A Tours, le 10 novembre 2017

Dr Béatrice Birmelé
Directrice ERERC

5) Appendix 5:



Traitements mis en œuvre au sein du C.H.R.U. de Tours

Date de déclaration :	01/07/2017
Nom du traitement :	
Document de référence CNIL :	
Date de mise en oeuvre:	Aout 2017
Finalité principale:	Explorer la pratique de l'utilisation ou non des tests de dépistage/repérages/pronostic/diagnostic par les médecins généralistes
Pôle :	Médecine Générale
Service chargé de la mise en œuvre :	DUMG TOURS
Personne chargée de la mise en œuvre :	Maxime PAUTRAT
Personne référente de ce dossier au service informatique :	
Contact CNIL :	Eric TRIPAULT Pôle Finances, Facturation, Système d'Information 2 Boulevard Tonnellé 37044 TOURS CEDEX 9 Tel : 02 47 47 84 46 Email : cil@chu-tours.fr ou e.tripault@chu-tours.fr Eric TRIPAULT Pôle Finances, Facturation, Système d'Information 2 Boulevard Tonnellé 37044 TOURS CEDEX 9 Tel : 02 47 47 84 46 Email : cil@chu-tours.fr ou e.tripault@chu-tours.fr
Catégories de personnes concernées par le traitement :	Médecin généraliste

Catégories de données traitées :	Entretiens en groupe, enregistrés, retranscrits et anonymisés. Données déclaratives : données d'identification (nom, prénoms, sexe, lieu d'exercice,...)	
Catégories de destinataires:	Destinataires	Données concernées
	Médecins chercheurs	Ensemble des données
	Sujets d'étude	Résultats issus de leur entretien
	Revue scientifique	Résultats principaux
Durée de conservation:	Données	Durée de conservation
	Médecin chercheur	Jusqu'à publication
	Médecin interrogés	5ans
Mise à jour (date et objet):		
Nom / Prénom du déclarant :	PAUTRAT Maxime	
Signature du déclarant (en cas de déclaration papier) :		
N° d'enregistrement (à remplir par le contact CNIL) :		2017_096

Document à envoyer à : cil@chu-tours.fr

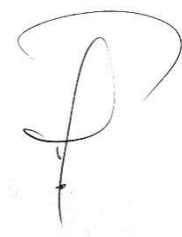
6) Table 1 :

		Focus 1	Focus 2	Focus 3	Focus 4	Focus 5	Total
Duration		00:58:11	00:49:13	00:56:16	01:00:03	01:18:41	05:01:24
Number of participant		4	5	4	4	4	21
Men/Women		2/2	3/2	3/1	2/2	2/2	12/9
Average age [Min - Max]		42 [30-62]	38 [27-66]	44 [33-58]	44,5 [34-52]	41,5 [29-62]	41,8 [27-66]
Number of consultations per hour		3,5	4	3,5	3,37	3,25	3,55
Participants in conferences		1	3	2	0	1	7
Activity	Established	4	4	4	4	3	19
	Locum tenens	0	1	0	0	1	2
Way of practice	Group	4	3	4	4	1	16
	Single	0	1	0	0	2	3
Location	Rural	4	4	0	0	0	8
	Peri-urban	0	0	0	4	1	5
	Urban	0	0	4	0	2	6

7) Figure 1 :



Vu, le Directeur de Thèse

A handwritten signature in black ink, consisting of a large, stylized capital letter 'P' with a vertical stroke extending downwards from the center.

Vu, le Doyen

De la Faculté de Médecine de Tours

Tours, le

PALLUAU Rémy

35 pages – 1 tableau – 1 figure – 5 annexes

Résumé :

Introduction : Les Scores Cliniques (SC) sont des outils d'aide décisionnelle. Certains d'entre eux font l'objet de recommandations d'utilisation en soins premiers par diverses autorités de santé. Le développement des SC nécessite de connaître les attentes des MG pour leur appropriation en pratique réelle. L'objectif de notre étude était d'explorer le point de vue des MG sur leur utilisation des SC dans leur pratique quotidienne.

Méthode : Nous avons réalisé une étude qualitative par théorisation ancrée à partir de Focus Group (FG). L'analyse des verbatims a été menée par 2 investigateurs, selon le principe de la triangulation des données. Après chaque FG, les investigateurs ont réalisé un étiquetage expérientiel en double aveugle puis une catégorisation inductive afin de conceptualiser l'utilisation des SC.

Résultats : 21 MG exerçant en Indre-et-Loire ont participé lors de 5 FG. Nos résultats montrent que les MG se soucient plus de la pertinence et faisabilité des SC que de leur validité. Les MG critiquaient l'approche centré-organe induite par les SC. Ils regrettaient que les SC n'intègrent pas les éléments contextuels ni les préférences du patient que nécessite une pratique efficiente correspondant à l'Evidence-Based Medicine. Les SC étaient appréciés pour leur efficacité : ils permettaient d'assurer une pratique correspondant aux données actuelles de la science et pouvaient rapidement aider à prendre une décision en situation d'incertitude. Certains étaient utilisés pour justifier des cotations spécifiques. Différentes propositions restaient débattues comme l'utilisation des SC via la e-santé, ou l'attente d'une liste de SC validés par les sociétés savantes de MG.

Discussion : Cette étude propose une théorisation de l'utilisation des SC en soins premiers par une balance efficacité-efficience. Pour certains MG les SC apportaient une aide rapide permettant d'assurer une prise de décision, pour d'autres ils étaient loin d'une approche centrée-patient prenant en compte tous les aspects du modèle bio-psycho-social.

Mots clés : Aide décisionnelle, score clinique, soins premiers, étude qualitative.

Jury :

Président du Jury : Professeur Jean-Pierre LEBEAU

Directeur de thèse : Docteur Maxime PAUTRAT

Membres du Jury : Professeur Laurent FAUCHIER
 Professeur François MAILLOT

Date de soutenance : le 19 septembre 2019