# Report from a European symposium on how health-care system factors influence referral decisions in patients who may have cancer.

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Received Date: November 16 2021 Accepted Date: November 19 2021 Published Date: December 22 2021

## Abstract

Objective: to spot the system and different non-clinical factors could|which will|that will} influence a General Practitioners' call on whether or not to refer a patient World Health Organization may have cancer. Study design: skilled word and accord formation. Methods: a bunch of eight GP (GP) researchers from Hrvatska, England, Slovenia, Spain, Sverige and Schweiz used group action to spot the non-clinical factors that would have an effect on GPs' decision-making once roundfaced with patients which may have cancer. The cluster refined and came to a accord on these factors. Results: several non-clinical factors ar seemingly to possess a big impact on referral selections. These embody levels of gatekeeping responsibility, funding systems, access to special investigations, worry of proceedings, and relationships with specialist colleagues. Conclusions: several patients with cancer gift while not red-flag symptoms, however nonetheless still cause a sense of concern in their GPs. however a health system is union is probably going to influence on however GPs act on those issues.

## **Keywords**

health care systems; primary health care; cancer; decision making; early detection of cancer

## Introduction

There is wide variation within the cancer survival rates across Europe [1], and this ends up in substantial excess mortality. as an example, in nice Great Britain over half-dozen,000 deaths a year that occurred at intervals five years of designation would are avoided if survival in Great Britain had matched the mean for Europe [2, 3]; this represents 6-7% of its cancer-related mortality.

The variation in 1-year survival rates is even higher. AN analysis of EUROCARE-4 [4] results by 1-year survival [1] shows a gaggle of nations (including Swiss Confederation and Sweden) with systematically high survival estimates and

symptoms [7, 8]. However, the challenge of wherever and the way to realize additional timely designation could be a goodish one [9]. A GP (GP) can see solely a few of recent cancers in anyone year. GPs could go a few years, or so a period, while not seeing sure rare cancers. additionally, most patients gift with evolving and uniform symptoms

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Various factors will trigger GPs to return to think about cancer during a clinical encounter [10]. Awareness of a risk of willcer can arise from: practising basic data, for example familiarity with "red-flag" symptoms; social

another cluster of nations (including European nation, Slovenia

and Croatia) with lower estimates. Spain lies close to the center of the table. Poor 1-year survival rates area unit usually taken to be AN indicator of additional advanced unwellness at designation [3]. For those patients that survive a minimum of a year when their initial cancer designation, there's less national variation. whereas recent overall cancer survival trends show improvement [5], there's very little narrowing within the variations between countries [6].

International variations in cancer outcomes square measure associated with variations in stage at diagnosing, and this might flow from to variations in diagnostic delay and awareness of symptoms [7, 8]. However, the challenge of wherever and the way to attain additional timely diagnosing may be a wide one [9]. A MD (GP) can see solely a couple of recent cancers in anyone year. GPs might go a few years, or so a lifespan, while not seeing bound rare cancers. additionally, most patients gift with evolving and dedifferentiated symptoms that square measure additional doubtless to be understood as one thing apart from cancer.

Various factors will trigger GPs to return to consider cancer in an exceedingly clinical encounter [10]. Awareness of a risk of willcer can arise from: practising basic information, for example familiarity with "red-flag" symptoms; social awareness, as an example being tuned in to patients' verbal cues; intuitive knowing, e.g. a silent feeling of alarm; worry of cancer, which might have an effect on the thoughts of each doctor and patient. However, there's conjointly proof that system factors have a control on early diagnosing of cancer. attention systems with a gatekeeper system have a considerably lower 1-year relative cancer survival than systems while not such gatekeeper functions [11]. it's going to even be that the means within which totally different attention systems support medical aid in cancer diagnosing by fast and simple access to investigations may be a think about delayed cancer diagnosing [12].

There has been a incorporate higher understanding of interactions between single health system factors and skilled behaviour in order that outcomes may be improved [13]. However, there has been very little analysis to elucidate in that means totally different national systems influence a GP's referral selections, and the way these might lead to such a variable survival rate [9].

The aim of the conference was to spot the system and alternative non-clinical factors {that might|which will|that will} influence a GP's call on whether or not or to not refer a patient World Health Organization may have cancer. The agreement findings square measure bestowed during this paper.

## Methods

Eight doc researchers from six countries were invited to require half in an exceedingly conference designed to research however medical aid

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factors influence the speed of cancer diagnosing. There was purposeful choice of delegates from the Örenäs analysis cluster (a European medical aid analysis cooperative that investigates the factors influencing the speed of cancer diagnosing in primary care) to represent northern, southern, central and japanese European countries. The conference materialized in Barcelona throughout the 2014 European General observe analysis Network (EGPRN) Congress. Participant MH expedited the 2 half-days of the conference. PF began session one with a presentation summarising the prevailing proof on 1-year cancer survival rates and therefore the potential role of system factors. every participant then gave a brief presentation of the referral roles of GPs in their health systems. focus is seemed to get on the way to save prices by reducing the quantity of referrals (Croatia, Slovenia, UK). advanced referral processes may additionally be an element in deterring referrals (Slovenia, Spain, UK).

Waiting lists for investigations or specialist appointments conjointly have an effect on MD decision-making. Access to a fast-track specialist appointment system for patients with suspected cancer may be accustomed encourage referrals (Croatia, Slovenia, Spain, UK), whereas in a number of these jurisdictions GPs as a full are criticised for supposedly overusing that system, and asked to use it less (Croatia, Slovenia, UK). Long waiting times could end in early referrals, wherever the MD desires to urge patients into the "queue" quickly. Conversely, long waits could discourage referral till the patient has clear red-flag symptoms or signs, or positive investigation results.

## Ease of access to investigations

In some jurisdictions (Spain, Svizzera, Germany) several GPs will perform in-house specialist investigations themselves (for instance diagnostic ultrasound), and in some cases they're purchased providing those facilities (Switzerland, Germany). this might lower their threshold for transcription such investigations alternative medical systems solely have those investigations obtainable to GPs outside their practices. there's variation in what quantity direct access GPs need to such investigations, with some solely being obtainable via specialist referral.

# Relationship with specialist colleagues

The relationship with specialist colleagues is another key issue. Whereas in some health systems specialists area unit seen to welcome referrals (Switzerland, and to some extent in Sweden), in others they're perceived as discouraging them (Croatia, Slovenia, Spain, UK). the benefit of having the ability to phonephone or email a specialist for casual discussion and recommendation facilitates the care of patients UN agency might have cancer (Sweden, Svizzera, and to some extent in Spain), as is that the ability to check with a specialist that the MD is aware of in person (Sweden, Switzerland). Having a system that forestalls the MD from pertaining to a named specialist could have associate degree inhibiting result on referrals (Croatia, Slovenia, Spain, UK).

# Fear of proceeding or grievance

Fear of proceeding, or grievance over a failure to refer, is a major think about several countries (Croatia, Slovenia, Spain, European nation, UK). additionally, some GPs could also be influenced in their decision-making by previous expertise of criticism from patients or colleagues once a heavy diagnosing was delayed thanks to a late referral. the other expertise is additionally doable, with criticism from patients or colleagues World Health Organization suppose that the medico ought to have managed a presenting downside while not referral (UK).

## Effect of intensity of work

A high work might build GPs additional probably to refer, in a shot

to scale back follow-up appointments (Croatia, Slovenia, Spain, UK). However, if there's associate degree expectation that the medico can write an in depth, comprehensive referral letter, the time taken to try and do that will discourage the medico from creating a referral at that appointment (UK). In Sweden, wherever a typical medico appointment is half-hour, there's longer for patients to say symptoms that concern them, and longer for the medico to contemplate whether or not investigation or referral is required.

# Clinical tips will have an effect on referral selections

Clinical tips will facilitate a GP's call to refer, by giving recommendation on that patients want referral thanks to a risk of cancer. However, some delegates according referral tips that principally gave recommendation on the way to avoid inappropriate referrals (Croatia, Slovenia, Spain, UK).

## **Discussion**

The readiness of GPs to act consists of non-public attributes (e.g. data and attitudes concerning cancer, further as perceptions of the role of GPs) and system factors [15]. This conference known several system and alternative non-clinical factors that area unit probably to possess a big impact on referral choices. These includelevels of gatekeeping responsibility, funding systems, access to special investigations, worry of proceedings, and relationships with specialist colleagues. A recent narrative review was unable to ascertain a causative correlation between aid system characteristics and cancer outcomes [13]. However, the authors conceded that some system factors may have associate degree influence on patient and skilled behaviour, and consequently contribute to variations in cancer outcomes. there's proof that, even once high level options counsel similar aid systems, there is right smart variation within the approach that aid is delivered [16].

The symposium's findings area unit per studies that show that waiting times for tests and lack of referral tips area unit among the foremost necessary problems associated with system delay [17, 18]. there's a transparent distinction in decision-making between the systems that have some special investigations done by GPs, and people that solely have them as a part of secondary care. within the former, doing the investigation is expedited as a result of it's seen as a fast, easy, and presumably income-generating approach of creating (or ruling out) a sinister identification.

While there's a link between European health systems wherever GPs act as gatekeepers and poorer 1-year cancer survival rates [11], this conference found that the degree of GPs' gatekeeping roles varied significantly between the participants' countries. additionally, it's going to be that gatekeeping encourages GPs to use alternative diagnostic methods, like the 'test of time' [19], that may contribute to longer diagnostic intervals [13].

The right smart variations in aid funding systems were additionally seen by participants to possess a transparent impact on the referral choices, notably wherever a referral will have an effect on the GP's own financial gain, budget or referral quota. Some health systems specifically encourage GPs to refer patients UN agency might have cancer, even within the absence of red-flag symptoms. Conversely, some implicitly discourage referrals, for instance through monetary penalties or waiting times

GP decision-making is tormented by what proportion native specialists welcome, or discourage, referrals. the extent of rapport between GPs

and people specialists is taken into account to be a crucial issue, still as easy access to specialists for recommendation before a referral call is formed.

# Strengths and weaknesses of the approach

This conference allowed experienced medical practitioners from six European countries to get hypotheses, by examination and different their experiences of however their own health systems have an effect on cancer referral decision-making. The countries painted ar geographically numerous and show a good variation in their 1-year cancer survival rates.

The findings draw attention to many factors that would feasibly contribute to key variations within the speed of cancer identification in those countries. The results might inform the look of large-scale comparative European studies of cancer delay, since they highlight several of the variables that such a study should take into account if meaningful comparisons ar to be created.

However, this was atiny low piece of qualitative work that Drew on the expertise of eight MD researchers. the tiny variety of participants concerned implies that system variations in different countries, or inside the delegates' own countries, can't be accounted for, and this could have restricted the breadth of the findings.

#### Conclusion

Although several patients with cancer gift while not red-flag symptoms, the GP's expertise or "gut feeling" could cause a sense of concern. however the health system is unionised is probably going to own a powerful influence on however the MD acts thereon concern. The multitude of things poignant decision-making makes it seemingly that, even within the presence of red-flag symptoms, system factors area unit extremely seemingly to have an effect on whether or not or not a MD refers directly. Reducing the time from presentation to specialist referral or investigation—is a very important step in rising cancer survival. The findings of the conference propose vital hypotheses on the factors that influence that point, and these warrant additional analysis.

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