A high-resolution gastroenterology clinic in Andalusia: What is it, and how should it work?


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ORIGINAL PAPERS

ABSTRACT

Introduction: The present concept in our healthcare system is that medical care should be given on an outpatient basis with hospitalization occurring only when essential. We therefore put forth the development of the “all in one” outpatient office or “high resolution” outpatient clinic. For such purpose we administered a questionnaire to various Andalusian hospitals to define and determine those aspects necessary in the development of the aforementioned outpatient office.

Materials and methods: The questionnaire was filled out by 10 Andalusian hospitals. This is a prospective-descriptive study of responses from all 10 participating hospitals. The 27 questions inquired on the existence of such an outpatient office and the infrastructure needed to develop this service: How many patients are seen, where is it physically located, where do patients come from, criteria for assigning patients to this medical office, conditions in which they are seen, whether ultrasound scans are performed, whether an integrated hospital computer system exists, and how should it work.

Results: of all 10 hospitals, 5 of them had this type of clinic. All of them considered this type of outpatient service essential. The number of patients treated should be “10”, in the hospital itself. There are differences as to whether patients should come from the emergency room or a primary care physician. It seems logical to assume that only patients who can be diagnosed via ultrasound or endoscopy should be chosen. To allow an ultrasonogram the patient should visit the outpatient office in a state of "fasting" and with standard blood counts from the primary care physician.

The outpatient clinic should have a computer system and its own nurse. According to participating hospitals this type of outpatient visits is very useful in our present healthcare system, as it allows higher levels of collaboration between Primary Care and the specialist; it also provides a rapid orientation regarding patient pathology, and acts as a “filter” for the rest of the healthcare system.
INTRODUCTION

The present concept in our health system is that medical care should be ambulatory and hospitalization is to occur only when essential and for as brief a period of time as possible. An outpatient service has advantages for the patient as well as the health system: A higher degree of comfort for the patient and lower costs for the health system.

Keeping this in mind, we highlight the development of alternatives like the “all in one” or high-resolution outpatient office. The use of “care activities” in outpatient services should be presently considered indispensable and necessary for the proper functioning of our health system, so that most patient caring takes place in outpatient services. Only patients who need hospitalization are admitted.

The idea is to induce an efficient use of the hospital by decreasing the number of admissions, trying to diagnose and treat patients on an outpatient basis.

This all relates to the topic of inappropriate hospital admissions, for which various identifiers were used, the best known being Appropriateness Evaluation Protocol (AEP). In one Spanish study AEP was used in an acute hospital setting. The objective was to measure the reproducibility of AEP, to quantify the extent of inappropriate hospitalization in an acute hospital setting, and to determine the possible causes that justify it. A 15% (CI 95%: 11-19) inappropriateness of hospitalization rate was found, with a 20% (CI 95%: 16-24) of hospital stays considered inappropriate. The principal cause of inappropriate admissions was unnecessary admissions for services that could be provided on an out patient basis. In hospital stays factors for inappropriateness included: Conservative treatment by physicians and availability of adequate treatment on an outpatient basis. The authors thus conclude that AEP is a useful instrument in quantifying inappropriate hospitalization and establishing interventionist programs directed at reducing inappropriate hospitalizations.

Gastrointestinal outpatient services presently suffer from overburdening numbers of visits due to the high frequency of gastrointestinal disorders and the need to perform complimentary tests (endoscopy), which in turn contribute to wait lists. There is no extractable population data from official organizations about the proportion of patients that actually visit specialized gastrointestinal outpatient services. Functional diseases (dyspepsia and irritable bowel syndrome) make up for 40% of the total. Several of the following diagnoses are most often reached by gastrointestinal specialists: Acid reflux, functional dyspepsia, irritable bowel syndrome, hemorrhoids, gastric acid lesions, biliaryolithiasis, etc.

In most cases these diagnoses are reached by endoscopy, ultrasounds, or blood tests.

Therefore, establishing a high-resolution gastrointestinal outpatient office could fit well into our health system.

OBJECTIVES

For this reason, as well as for orientation on the functionality of this new type of outpatient service, we administered a survey-questionnaire in various Andalusian hospitals with the intent of defining, configuring, and determining the necessary aspects to develop an all-in-one outpatient service.

MATERIALS AND METHODS

The questionnaire was filled out by these 10 hospitals: —Hospital Virgen Macarena, Seville.
—H. Virgen del Rocío, Seville.
—H. Virgen de Valme, Seville.
—H. Costa del Sol, Marbella, Málaga.
—H. Puerta del Mar, Cádiz.
—H. Juan Ramón Jiménez, Huelva.
—H. Reina Sofía, Córdoba.
—Hospital Carlos Haya, Málaga.
—Hospital Puerto Real, Cádiz.
—Hospital Virgen de las Nieves, Granada.

**STATISTICAL STUDY**

This was a prospective study in which a merely descriptive statistical study of responses was performed.

**Survey-questionnaire**

Each hospital responded to the following questions:

1. Is there an “HRC” in your institution?
   - Yes.
   - No.

2. Do you think there should be one?
   - Yes.
   - No.

3. If so... how many patients are seen?
   - Fewer than 10.
   - Between 11 and 15.
   - Between 16 and 20.
   - More than 20.

4. How many do you believe should be seen?
   - Fewer than 10.
   - Between 11 and 15.
   - Between 16 and 20.
   - More than 20.

5. Where does the consultation occur?
   - At a specialized facility.
   - At a hospital.

6. Where do you believe it should take place?
   - At a specialized facility.
   - At a hospital.

7. Where do patients come from?
   - From a primary care physician.
   - From other specialists (non-GI).
   - The emergency room.
   - All of the above.

8. Where do you think they should come from?
   - From a primary care physician.
   - From other specialists (non-GI).

9. Do criteria to direct patients to these services exist?
   - Those most in need of treatment or acute.
   - Chance.
   - Suspected functional pathology.

10. Do you believe there should be criteria for directing patients to these services?
    - Most in need of treatment or acute.
    - Chance.
    - Suspected functional pathology.
    - Patient presenting with a specific illness.

11. In what condition does the patient attend the visit?
    - Fasting.
    - With bloodwork done by a primary care physician.
    - Both.
    - With no special conditions.

12. In what condition should the patient attend the visit?
    - Fasting.
    - With bloodwork done by a primary care physician.
    - Both.
    - With no special conditions.

13. Are there ultrasounds performed in the same office?
    - Yes.
    - No.

14. Should they be done?
    - Yes.
    - No.

15. Is there an integrated hospital computer system?
    - Yes.
    - No.

16. Should there be an integrated hospital computer system?
    - Yes.
    - No.

17. Does the office have its own nurse?
    - Yes.
    - No.

18. Should the outpatient office have its own nurse?
    - Yes.
    - No.

19. In general, how many visits are required for a diagnosis?
20. In general, how many visits should be required for a diagnosis?
☐ 1.
☐ 2.
☐ 3 or more.

21. Who gives the patient another appointment?
☐ Nurse.
☐ Physician.
☐ Clerical personnel.

22. Who should give the patient another appointment?
☐ Nurse.
☐ Physician.
☐ Clerical personnel.

23. In case the patient cannot be fully treated in this office due to more elaborate needs...
☐ The patient to be sent to another outpatient office.
☐ The patient to continue treatment in this office.

24. What should be done in the previous case?
☐ The patient to be sent to another outpatient office.
☐ The patient to continue treatment in this office.

25. Is this outpatient office useful?
☐ Yes.
☐ No.

26. If “yes”..... why?

27. If “no”.....why?

RESULTS

—Question 1: Is there an HRC in your institution?
• 5 hospitals did have them and 5 did not.

—Question 2: Do you think there should be one?
• All said yes.

—Question 3: If so... how many patients are seen?
• 4 hospitals between 16 and 20; 1 fewer than 10.

—Question 4: How many do you believe should be seen?
• All hospitals said fewer than 10.

—Question 5: Where does the consultation occur?
• 4 in the hospital, 1 in CEEM.
Question 19: In general, how many visits are required for a diagnosis?
- 3 responded “2”, 2 responded “1” or “2”.

Question 20: In general, how many visits should be required for a diagnosis?
- All responded “1” or “2”.

Question 21: Who gives the patient another appointment?
- 3 responded physician, 1 responded nurse, 1 responded clerical personnel.

Question 22: Who should give the patient another appointment?
- 8 responded physician, 2 responded nurse.

Question 23: In case the patient cannot be fully treated at this office due to more elaborate needs...
- 4 responded another outpatient office, 1 responded stay at the HRC office.

Question 24: What should be done in the previous case?
- All responded another outpatient office.

Question 25: Is this outpatient office useful?
- All responded yes.

Question 26: If “yes”..... why?
- More cooperation between primary care and FEA, joint protocols.
- Flexibility in outpatient office, filter for other services.
- Permits rapid orientation of the patient’s pathology. Integrate processes like c and dyspepsia, resolution of specific pathologies.
- High resolution capacity, unnecessary admissions avoided.
- Combines all efforts to minimize wait lists.

DISCUSSION

In this study, similar to the recently published study by this group about endoscopy units (2), we tried to analyze how this new system of outpatient services is developing in Andalusia. Specifically an outpatient office that treats patients rapidly and efficiently, maximizing resources to the fullest.

The objectives of HRC are:
1. Treat new patients.
2. Filter for other more specific outpatient offices:
   —Hepatology.
   —Inflammatory bowel disease.
   —Pancreas and bile ducts.
   —GERD.

3. Produce a diagnosis or at least an orientating diagnosis in one or two visits by the patient (first and second visit gathering results).

With respect to these objectives an HRC can be defined as an easy-access ambulatory care process in which a joint diagnosis is established and a treatment indicated after the necessary tests, all with a report in one or two visits and in an acceptable time frame.

With respect to the questions responded to by the various hospitals surveyed we should point out that only 5 of 10 hospitals had a high-resolution outpatient clinics, although all were in agreement upon the necessity of having them. It seems clear that the number of patients treated in this type of office should be low, around 10, and inside the hospital itself. However, the following questions draw diverse answers. It is not well known whether patients should come from the ER or from a primary care physician. It will ultimately depend on the primary objective of the outpatient office: Treatment of acute patients or of any type of patient, offering a diagnosis within two visits. One of the hospitals responded that only patients who could be diagnosed via ultrasounds and/or endoscopy should be directed to these outpatient services.

The patient, according to those surveyed, should attend the office in fasting and with blood work results from the primary care physician, so that ultrasounds can be performed on the first visit. In addition, the office should be equipped with a computer system integrated into the hospital net, as well as its own nurse. Patients should be given appointments by the physician, basing his or her decision on the results of 1 or 2 visits. Finally, the surveyed hospitals determined that this type of outpatient office was very useful in our present healthcare system as it permits a higher degree of cooperation between Primary Care and FEA, and flexibility in the outpatient clinics. This permits a rapid orientation on patient disease and acts as an adequate filter for other services. It has a high-resolution capacity, and avoids unnecessary admissions.

CONCLUSIONS

From the responses to the survey a number of conclusions can be drawn. We believe that the outpatient clinic should be tended to by a FEA specialist with knowledge and experience in ultrasounds and gastrointestinal endoscopy, as well as skills in the use of appropriate computer programs. An outpatient office should have an ultrasounds system, a computer with the corresponding managing software and access to the internet, and a full-time nurse, at least during office hours involving patients.

During the first visit these points should be addressed:
—Fasting state.
—History and exploration.
—Abdominal ultrasounds.
—Same-day bloodwork request.
—Complimentary tests.

The second visit should address:
—Evaluation of complimentary tests.
—Submit a diagnosis and prescribe treatment.
—Prepare report for primary care physician including various tests completed, clinical judgement, and proper treatment.
—In case a potential pathology is detected no further directing by the primary care physician to the outpatient office will take place.

The time estimated between the first and second visit will depend on the suspected pathology, on its urgency, and on the complimentary tests required.

For this reason a standard fixed time frame is not recommended.

REFERENCES