The Impact Of A Web Based Diagnosis Checklist System On Specialist Referrals From Primary Care: Results Of A Survey Of General Practitioners

- Jason Maude, Isabel Healthcare Haslemere, United Kingdom
- Padmanabhan Ramnarayan, Great Ormond Street Hospital, London, United Kingdom
- Amanda Tomlinson, Isabel Healthcare, London, United Kingdom

isabel
the diagnosis checklist

Overview

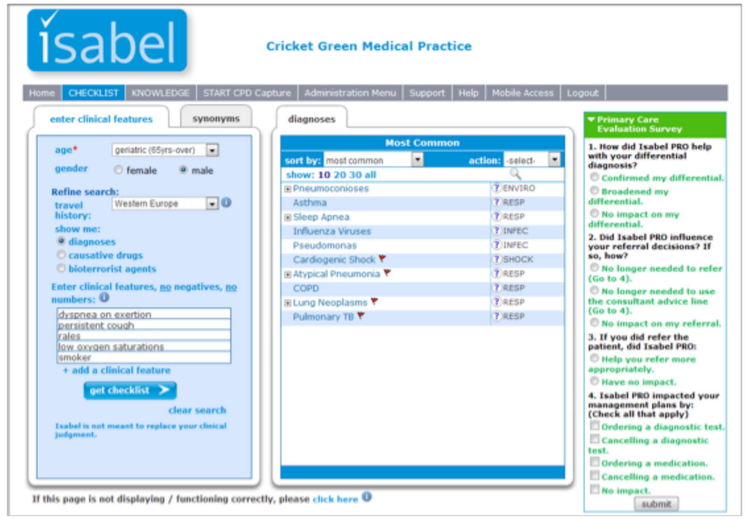
It is generally estimated that 30-50% of patient referrals for specialist care from primary care setting are inappropriate leading to inefficient use of specialist resources and delays in patient care. One potential strategy to reduce inappropriate referrals is to provide primary care physicians with tool to assist with diagnosing patients correctly and therefore reduce the occurrence of inappropriate referrals. This study looks at the impact of a web based diagnosis checklist system (Isabel) on referrals for specialist care in a UK primary care setting.

Methods: Subjects and Locations

The study was conducted over a six month period in four (4) general practice facilities in Southwest London, UK. The Isabel system was used by 25 general practitioners after a brief introductory training session. The general practitioner used the Isabel system when there was a question about the certainty of the diagnosis for that patient. The general practitioner entered patient demographic and clinical features using free text into the Isabel system. The Isabel system provided a set of up to 20 diagnostic possibilities as a checklist for consideration.

Methods: Study Protocol

General Practitioners used the Isabel diagnosis checklist system to assist with diagnosing patients. Data was collected using a voluntary survey form that consisted of 4 questions. The questions were designed to collect the user's views on the diagnostic advice provided by the Isabel system and how the advice impacted their differential diagnosis, referral choices and care management.



Isabel screen with the survey questions as seen by the general practitioners.

Findings

During the six month period of the study general practitioners entered 335 queries into the Isabel system. During that same period 49 surveys were entered and captured. The responses are summarized below:

1. How did Isabel PRO help with your differential diagnosis?
In 47% of cases Isabel helped confirm the GPs' differential and
In 36% it broadened their differential.

2. Did Isabel PRO influence your referral decisions? If so, how?
In 29% of cases they no longer needed to either refer a patient to a specialist or use the consultant advice line.

3. If you did refer the patient, did Isabel PRO:
In 36% of cases it helped them refer the patient more appropriately.

4. Isabel PRO impacted your management plans by:
(Check all that apply)
In 40% of cases they ordered an additional test, in 4% of cases they ordered a Medication
In 6% of cases they cancelled a medication
In 2% they cancelled a diagnostic test.

Over the period of the pilot the average monthly number of referrals made by the practices fell by 15%.

Conclusions

These preliminary results show that a diagnosis checklist system, such as Isabel, could be a useful tool to improve the appropriateness of referrals from primary care to hospital-based specialists. This is especially relevant since a number of other strategies in this area, such as referral management centers, have failed to show significant effects.