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An innovative COPD early detection programme in general practice: evaluating barriers to implementation

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In the Netherlands an innovative programme for early detection of chronic obstructive pulmonary disease (COPD) in primary care among patients aged 40–70 years has been evaluated in both an effect study and a pilot implementation study. Health-care providers identified four obstacles for successful implementation of a COPD early detection programme. This Brief Communication describes the most important results of a qualitative study using in-depth interviews.

The Dutch programme for early detection of chronic obstructive pulmonary disease (COPD) in primary care among patients aged 40–70 years consists of the Respiratory Health Screening Questionnaire[1] followed by spirometry. The effect study[2] showed that this approach would lead to 20% more known COPD cases in Dutch general practices, and the implementation study[3] showed that it was feasible for general practices to adopt this programme. However, a validated written questionnaire among five clusters of 39 health-care professionals[4] also identified four potential obstacles for success: two perceived barriers were related to the provider (need for assistance and financial compensation). The two others were related to the patient (socio-economic status (SES) and ethnicity) (Table 1).[3] As the Dutch College of General Practitioners intends to implement this programme nation-wide, it is important to have more insight into these barriers, so we explored them in depth in a qualitative study. We conducted semistructured face-to-face interviews[5] with five doctors and four practice nurses who were involved in the already-mentioned implementation study.[3] The interviews were audiotaped and parsed through directed content analysis.[6] In this Brief Communication we share the results of this unpublished study.

PROVIDER-BOUND BARRIERS: WORKLOAD AND FINANCIAL COMPENSATION

Health-care providers were confident of having enough knowledge to work out preventive activities, but expressed their need for a work-up protocol to follow the consecutive steps of the programme and for helpdesk support. Most of them perceived preventive activities as a challenging task and as an intrinsic part of their responsibility. Contracting out COPD prevention was no option. They considered COPD early detection as part of a stepwise integrated care approach next to other activities such as case finding. If revenues would remain low, however, they feared that the burden of extra effort and stress to reach programme deadlines over a longer period might cause feelings of frustration among health-care providers. They preferred a 5-yearly early detection programme, in which activities are concentrated in 3–6 months. They wished to be facilitated by receiving information in advance about current and expected new COPD cases, expected patient response, revenue, workload, cost and financial compensation. Extra workload should be accompanied by an increase in supportive staff and should be financially compensated. Some respondents expected that such measures would work as a stimulus for adopting the programme. Others were not certain if the programme would be reimbursed, since health-care insurance companies take the position that preventive activities in primary care should not be compensated. Yet, most interviewed doctors prompted that general practices are the most appropriate place for implementation of the early-detection programme, because all required facilities are available (such as rooms, tools and instruments). Practice nurses perceived potential barriers among the administrative procedures, such as customising invitational letters and administering questionnaires with login codes and registration numbers. Other inconvenient experiences were ill-timed over-the-desk question handling and unplanned efforts to persuade patients to have spirometry.

PATIENT-BOUND BARRIERS: SOCIOECONOMIC STATUS (SES) AND ETHNICITY

Health-care providers felt that patients basically appreciated early-detection activities. Their perceptions of non-compliant behaviour among low-SES patients, however, varied. Providers from practices with predominantly moderate and high-SES patients showed more scepticism and doubt about the return on investment of the programme for low-SES patients. They noticed less compliance from this group, while investing more time with them for explanation and counselling. Providers from practices with predominantly low-SES patients, on the other hand, were less pessimistic and showed more compassion regarding this low compliance. They were more motivated and creative in finding alternative ways to keep these patients aboard. Providers of moderate–high SES practices other than these of low-SES practices stated that their low-SES patients 'don't show up'; 'are often very difficult to deal with'; 'say yes and do no'; and 'are difficult to treat because they refer to their unhealthy peer group'. Such statements suggest that doctors in moderate–high-SES practices have lower outcome expectancy and lower self-efficacy towards low-SES patients than doctors in low-SES practices. This is a reason for concern, as when a physician does not believe that a recommendation will lead to an improved outcome (s)he will be

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Table 1. Barriers and Facilitators Assessment Instrument

Domain		Aspect
Innovation characteristics		
1	Innovation	Compatibility
2	Innovation	Time investment
3	Innovation	Specificity/sensitivity
4	Innovation	Didactic benefit
5	Innovation	Attractiveness
Care provider characteristics		
6	Care provider	Attitude/roll perception
7	Care provider	Knowledge motivation
8	Care provider	Doubts innovation
9	Care provider	Life/working style
10	Care provider	Education
11	Care provider	Involvement
Patient characteristics		
12	Patient	Age
13	*Patient*	*Ethnicity*
14	*Patient*	*Financial situation/SES*
15	Patient	Number patient contacts
16	Patient	Health status
17	Patient	Motivation to change
Context characteristics		
18	Context	Group norms/socialisation
19	*Context*	*Reimbursement/ insurance system*
20	Context	Law/regulations
21	Context	Opening hours of practice
22	*Context*	*Supporting staff*
23	Context	Facilities
24	Context	Practice building

In gray: significant barriers indicated by the responding health-care providers.
Abbreviation: SES, socioeconomic status.

less likely to adhere to the guideline.[7] Within the group of low-SES patients, heavy smokers were considered the most reluctant to respond to the programme, although these patients appeared to be aware of the bad consequences of smoking. Some health-care providers explained this reluctance by the suggestion that heavy smokers were inclined to lose self-confidence and assume a victim role. Care providers commented on low-SES smokers as a separate risk group because 'they have been more reluctant to show up', while contrastingly 'they like to learn about their health status'. Low-SES doctors, other than moderate–high-SES doctors, mentioned they felt commitment to deal with this specific group. All care providers were proposing that low-SES smokers show 'a frail motivation to quit smoking' and also that 'their motivation decreases in case of lesser complaints or symptoms'. Care providers think that low-SES smokers seem to be well aware of the bad consequences of smoking because 'they think they even will die because of this'. Most of them are also aware of 'not being able to quit and think they fail when they are not successful in quitting smoking'. Providers proposed 'they rather choose the victim role than quit smoking and subsequently refrain from practice visits because of feeling guilty'. In literature we can find similar statements: 'Current smokers feel ashamed and guilty about their disapproved lifestyle where social exclusion increases defensive actions and no show'.[8] Subsequently, doctors proposed to refrain from short separate quit smoking warnings during consultations. It was observed that compliance problems accumulated among ethnic patients, due to the frequent combination of low SES, heavy smoking and low literacy. There were doctors who suggested treating this whole group as high risk for COPD,

recommending direct spirometry testing without the preceding questionnaire.

To the best of our knowledge no such studies as the one presented here and the ones published earlier in this Journal[2,3] have been published before. Therefore it is difficult to compare different implementation strategies of early detection of COPD in the Netherlands with other countries. However, we believe that this subject is highly relevant, also in countries with developing economies. Especially in the latter countries we know that the exposure to indoor pollution due to the use of biomass fuel is leading to high incidences of COPD in women.[9–11]

Conclusion

Although it has been demonstrated that an early detection programme for COPD in primary care is feasible and effective, it is not a guarantee for successful implementation. Our study shows that qualitative exploration of experiences from a pilot implementation yields valuable information about barriers that may hamper its introduction or flaw its effect. We suggest that policymakers take into consideration the solutions brought forward by the interviewees in our study.

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