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Out of sight, out of mind? Does terminating the physical presence of a geriatric consultant in the community clinic reduce the implementation rate for geriatric recommendations

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ABSTRACT

Aim: To assess the effect of moving the geriatric consultation from the primary care clinic to another setting, on the rate of implementation of geriatric recommendations by family physicians.
Methods: A retrospective review of the computerized medical records of elderly patients in four primary care clinics. The rate of implementation of geriatric recommendations was compared between clinics in which a geriatric consultant was physically present (control clinics) and a clinic where the consultation took place elsewhere (study clinic). In addition, the results of the present study were compared to a previous study in which the geriatric consultation was carried out in the study clinic and the family doctor was an active participant.
Results: 127 computerized files were reviewed in the study clinic and 133 in the control clinics. The mean age of the patients was 81.1 ± 6.3 years and 63.1% were women. The overall implementation of geriatric recommendations by family doctors in the study clinic was 55.9%, a statistically significant decrease compared to the previous study where the rate was 73.9% ($p < 0.0001$). In contrast, there was no change in the implementation rate in the control clinics at 65.0% in the present study and 59.9% in the previous one ($p = 0.205$).
Conclusions: Direct, person-to-person contact between the geriatric consultant and the family doctor has a beneficial effect on the implementation of geriatric recommendations. This should be considered by healthcare policy makers when planning geriatric services in the community.

1. Introduction

Comprehensive geriatric assesment (CGA) is "a multidimensional, interdisciplinary diagnostic process designed to determine the medical, psychological and functional capabilities of frail elderly individuals in order to develop a coordinated and integrated plan for treatment and long term follow up" (Rubenstein, Stuck, Siu, & Wieland, 1991).

Different models for geriatric assessment have been developed over the years. These include in-hospital models, ambulatory models (Ellis, Whitehead, Robinson, O'Neill, & Langhorne, 2011; Stuck, Siu, Wieland, Adams, & Rubenstein, 1993), models based on a small number of professional providers (doctor, nurse, social worker), and "richer" models in which occupational therapists, physical therapists, dieticians, speech therapists, dentists, psychologists, and others, may also be involved (Wieland & Hirth, 2003). The success of the geriatric assessment depends, to a great extent, on the implementation of recommendations, in particular when the geriatric team itself is not responsible for the implementation of its own recommendations (Reuben, Maly, & Hirsch, 1996; Siu, Morishita, & Blaustein, 1994). Much effort is

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being invested in improving the implementation of geriatric recommendations given to family physicians (Allen et al., 1986; Reuben et al., 1996; Siu et al., 1994). In spite of these efforts the rate of implementation of the recommendations is still far from 100%, ranging from 83% of the recommendations that were defined as "most important" (Reuben et al., 1996) to 54% for the recommendations related to preventive medicine (Reed, Kligman, & Weiss, 1990).

Successful communication between geriatricians and family physicians is important for the implementation of geriatric recommendations (Allen et al., 1986; Jogerst & Kligman, 1996; Kenis et al., 2014; Siu et al., 1994). In a previous study (Press, Biderman, Peleg, Tandeter, & Dwolatzky, 2012), we presented a model in which family physicians were active participants in the geriatric consultation. The design of that study has been described elsewhere (Press et al., 2012). In brief, clinic A served as the study clinic in which the family physician participated actively in geriatric consultations given to elderly patients within the clinic. The family doctor was present throughout the consultation, participated in the examination and in the discussion about the intervention plan. Clinics B and C served as control clinics in that study. The process of geriatric consultation as well as instruments and tests used during consultation, were described previously (Press et al., 2012). In that model the implementation rate for geriatric recommendations was 73.9% in clinic A, compared with 59.9% for clinics B and C.

At the end of 2012 an administrative change was carried out in clinic A. In January 2013 geriatricians stopped coming to this clinic and elderly patients who needed geriatric assessment were sent to a nearby center. The geriatric recommendations were still received by family doctors as part of the discharge letter given to the patient and sent to the family physician through the computerized electronic medical record. The aim of the present study was to evaluate the effect of this change in the consultation system on the implementation of geriatric recommendations.

2. Materials and methods

2.1. Study design

A retrospective study of the computerized medical records of elderly patients treated in four clinics (A, B, C, and D) affiliated with the Clalit Healthcare Services in Beer-Sheva, Israel who underwent geriatric consultations between January 2013 and November 2015. The study was approved by the Helsinki Committee of the Meir Medical Center (Approval # 024/2015K).

2.2. Settings and participants

The participants were patients from three clinics (A, B and C) that participated in our previous study conducted in 2007–2009.

In short, patients that were referred for geriatric assessment underwent an initial evaluation by a nurse using a computerized preventive primary care outreach (PPCO) instrument that we developed (Press, Hazzan, Clarfield, & Dwolatzky, 2009). This instrument includes various imaginary questions in the medical, functional, cognitive, social, and preventive medicine domains. For each domain the patient was asked one or two questions. A negative response to at least one question in each domain necessitated a full assessment in that domain. For example, if the patient reported an inability to get dressed on his/her own the computerized instrument recommended that the nurse conduct a basic functional assessment using the Barthel Index (Mahoney & Barthel, 1965) and if the patient gave a positive response to a question relating to cognitive problems the computer opened the Mini-Mental State Examination (Folstein, Folstein, & McHugh, 1975) and so forth. Thus, based on the responses to screening questions the patient underwent different degrees of assessment by the nurse. In more complex cases the nurse used many assessment instruments possible including the Older Americans Resources and Service Instrumental Activity of Daily Living (OARS-IADL) (Doble & Fisher, 1998), the Timed Get Up and Go test (Podsiadlo & Richardson, 1991), the Clock Drawing Test, (Sunderland et al., 1989) the Mini-Nutritional Assessment–Short Form Instrument (Cohendy, Rubenstein, & Eledjam, 2001), the Geriatric Depression Scale (Yesavage et al., 1982).

Following the visit with the nurse the patient saw the geriatrics physician, who had the results of the nurse's assessment available. During the geriatrician's assessment the patient underwent comprehensive history-taking, the Montreal Cognitive Assessment (Nasreddine et al., 2005), a physical examination, and other tests as appropriate. For example, medications were compared between the medical record and the drugs that the patient was asked to bring to the meeting. Following the assessment a summation note was written presenting the main findings and recommendations with an emphasis on the importance of implementation of the recommendations. The patient and the accompanying party received a comprehensive explanation on the findings and the recommendations. During the course of a consultation day at clinic A the patients of two or three of the family physicians were examined (45 min per patient) and at the end of the consultation day the cases were discussed again at a staff meeting with the geriatric consultant and all clinic physicians present.

Two additional clinics (B and C) served in our previous study as control clinics in which the geriatric consultation took place in the clinic, but the family physicians were not present. Similar to clinic A, at the end of the consultation day a staff meeting took place in which the geriatrician and the clinic staff discussed the cases that were seen by the geriatrician that day.

As explained above, for reasons that were not related to the geriatric staff, the geriatric consultations within clinic A were terminated at the end of 2012 and elderly patients who were in need of consultation were sent to another clinic several kilometers away. The patients' records continued to be entirely accessible to the geriatric staff and the patients underwent a geriatric assessment that was not different in substance from the consultations in their own clinic, except for the difference in communication between the geriatrician and the family physician, i.e., the geriatrician did not come to the study clinic, did not meet with the study clinic staff and the summaries of the geriatric consultation were sent to the family physician by email and through the patients themselves who brought summary letters from the consultation to the family physician. There was no change in the control clinics (B and C) in either the manner in which the consultation took place in the clinic or the mean of communication with the clinic staff.

Over the course of recent years the geriatric staff that provided consultations to the Clalit Healthcare Services in Beer-Sheva increased in size with two new geriatricians (EK and BP) joining it. One of them (EK) is responsible for the majority of consultations in clinic A. To control for the effects of the change in geriatric personnel on the results of the study we decided to add clinic D to control clinics B and C since the consultation service is also provided by EK in clinic D. The geriatric consultations are conducted in clinic D using exactly the same method as those given in clinics B and C, i.e., consultation in the clinic itself and a meeting between the geriatrician and the clinic staff at the end of the consultation day.

All four clinics, A, B, C, and D are busy clinics that treat patients from low to middle socioeconomic levels. Each clinic has board-certified family physicians that also train family medicine residents and educate medical students. Clinic A serves over