A new method for analyzing diagnostic delay in gynecological cancer

OBJECTIVE:
The aim of this article is to present a new methodology to illustrate, understand, and measure delay in health care. The method is inspired by process mapping tools as analytical framework and demonstrates its usefulness for studying diagnostic delay in gynecological cancer.

MATERIALS AND METHODS:
Six women with a diagnostic delay of 6 weeks or more before treatment of gynecological cancer at a specialized regional department (the Department of Gynecology and Obstetrics, Odense University Hospital, Denmark) were included in the study. Maps of existing processes were performed for each patient reflecting the patients’ pathway through the course of the disease. We combined 2 process mapping tools, namely, value stream mapping and business process modeling notation. The first method identifies the flow in a process as timelines. The latter introduces a set of easily recognizable graphical elements.

RESULTS:
Detailed information concerning the cancer patients’ pathway was obtained. The method visualized the complexities within the diagnostic pathway. The role of different participants (patient, general practitioner, and local hospitals) became clear by arranging activities according to responsibilities and was shown to recurrently influence and contribute to the delay in the diagnostic process. Some important contributors to diagnostic delay in gynecological cancer, such as lack of cancer suspicion, competing diseases, negative test results, inexpedient referral patterns, and referrals without cancer suspicion, were found.

CONCLUSIONS:
Our results point out process mapping tools as a potential analytical framework to illustrate, understand, and measure delay in health care. Furthermore, the method was able to identify important contributors to the diagnostic delay in gynecological cancer patients.