Mechanisms of Innovation Improvement in the Primary Healthcare Centers

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ABSTRACT

Trends such as aging populations, excess costs, rising public expectations, and progress in medical science and technologies point out necessity of adoption and development of innovation in the healthcare systems particularly in developed countries. The main objective of this article is to review diffusion of innovation improvement in the healthcare sector. Different types of innovation, diffusion characters, and adoption mechanisms are the subjects that are discussed as the key items in a selected case study, Finland.

Keyword: Adoption Mechanism, Diffusion of Innovation, Finland, Healthcare Centers, Progress

1. INTRODUCTION

Although governments have different policies and strategies to develop their healthcare systems (HCS), equal access, equity, and delivering good quality services are the main targets of all policies. The level and quality of a HCS depend on the factors such as population, GDP, governmental budget, and the country’s age pyramid (Gray, 2012; European Commission, 2010). In recent decades, Finland’s HCS has rapidly developed and stood among top HCSs in the world (Rantanen et al., 2001). However, some health-economic indicators show that the growth of health indicators has recently been slow compared with other developed countries in Finland. For example, although the total health expenditure as a share of GDP in Finland had 25% growth compared to 2006, it was less than OECD the average in 2010 (OECD, 2011; OECD, 2012). This indicator (8.9%) is 8.5% lower than Nordic average (9.66% for Finland, Sweden, Norway, Denmark, and Iceland) (OECD, 2012). Further, an indicator called “inequalities in doctor consultations” shows that Finland has one of the highest inequalities among OECD countries (OECD, 2011).

In 2010, there were over 9.6 nurses per 1000 population in Finland. This amount is almost 21.5% more than EU27 average, but...
26% less than Nordic average (OECD, 2012). Indeed, while the number of nurses per capita has only increased 0.4% in Finland since 2000, this percent is 1.44 for Nordic (OECD, 2012). As the growth rate of the aging population and expectations are faster than increasing nurses, this brings concerns about shortages of nurses, patients’ dissatisfactions and decreases the quality of the health care.

Our study shows that reasons such as excess cost, long waiting periods, geographical distances, lack of knowledge, and incentive affect health inequalities in Finland. Indeed, concerns and trends such as aging population, shortage of local healthcare manpower, advances in medical science, and increasing expectations along with budget limitations threat Finnish HCS and make improvements imperative. To overcome the challenges, Finnish policy makers have tried to create value and use healthcare resources more effectively. The value in a HCS is the result of quality and costs:

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\text{Value in the HCS} = \frac{\text{Quality of HCS}}{\text{Costs}}
\]

Prevention and incentives strategies among population, technological development in the healthcare systems, diffusion of integrated IT systems, privatization of the healthcare systems, and increasing public awareness via social media are the effective factors of value creation in a HCS (Winblad et al., 2010). Innovation in the healthcare centers (HCC) is also one of the important policies for value creation to improve Finnish HCS. Innovation is a driving force to speed value creation and balance cost containment with healthcare quality in HCSs (European Commission, 2010). Despite enormous investments on HCC’s innovation in developed countries, outcomes are not effective and even in some cases fail (Teperi et al., 2009). In most cases, the failures of HCCs innovation programs are because of the complexity of innovation in the healthcare sector (Plsek, 2003). The complexities show themselves especially in administrative process of innovation in primary HCCs where personnel should be more innovative in their daily works. As the primary HCCs provide a wide range of services such as GP services, physiotherapy, maternity and child welfare in the municipality levels, personnel have important role in improving the quality of HCS. While by innovation we mean an idea or practice that is new by a person or unit of adoption, it is difficult to identify and even understand the creative and innovative ways in the administrative level of HCCs (Aslani & Naaranoja, 2013a).

Given the importance of diffusion of innovation in the healthcare sector, this article tries to create a comprehensive study in adoption of innovation in the primary healthcare centers. The work starts with brief review of healthcare system and role of primary healthcare centers in Finland. Then, different types of innovation in the primary healthcare centers are introduced. The focus of the current work is administrative innovation. Therefore, the important factors of diffusion of innovation among the Finnish HCC’s personnel are discussed by using system-thinking approach. After that, the general framework of ideation and innovation process in the Finnish HCCs is described from three aspects of enablers, processes, and outcomes. Finally, the adoption mechanisms of ideation and innovation among the personnel of the HCCs are introduced and discussed.

2. BRIEF REVIEW OF THE FINNISH HEALTHCARE CENTERS

Finland has almost similar model of HCS used in other Nordic countries. This model consists of three main levels: goals, structural issues, and policy application (Figure 1) (Magnussen et al., 2009). The goals of the Finnish HCS form the basis of structural and institutional arrangements. The second level concerns the specific structures and institutions that characterize HCS. Level 3 that is in the scope of the current work is policy application within the structural dimensions where systemic and
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