

## Digital-mediated healthcare: defining a new, emerging and valuable service ecosystem

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**Purpose** – Digital technologies based remote care solutions (i.e. smart devices) emerge as disruptive and transformative technologies that foster the development of new and innovative healthcare services (i.e. remote health monitoring, smart track and analyze health data: Ostrom et al., 2015; Free et al., 2013) and drive the emergence of a more effective and cost-efficient service ecosystem (i.e. self and personalized healthcare; Caulfield, Donnelly, 2013). In such emerging healthcare ecosystems, smart devices effectively connect the emotional, social and physical needs of the actors (patients and their families, physicians, other service providers, etc.) to transform the patient into an active actor who integrates resources and co-creates value (Anderson et al., 2013; Danaher, Gallan, 2016; Anderson et al., 2018).

Therefore, this paper aims to investigate the combinatorial processes of resource integration transforming patients in a resources integrator (Vargo, 2008) and leading new and emerging service ecosystems (e.g., Meynhardt et al., 2016; Peters, 2016; Taillard et al., 2016).

**Design/Methodology/approach** – The study adopts a qualitative methodology based on 30 in depth interviews to patient with different pathologies, using digital health devices useful for their own body and its vital functions and on interviews to key informants, experts of Italian healthcare service ecosystem.

**Findings** – Health technologies transform the patient-provider relationship and lead the emerging of a new and collaborative service ecosystem based on adaptive interactions among actors (i.e. patients, physicians, patients' families, etc.). The emergence of a more efficient and effective ecosystem seems to be driven by actors that usually are not in charge of the evolution in a bottom-up perspective. In such context, digital technologies become an enabling tool that allows the systemic networking and the development of new social practices (i.e. sharing clinical data, patients empowerment, disease self monitoring, etc.) that are perceived by the whole service ecosystem as the best way for improving the collective wellbeing of society.

**Research implications** – This work advances the extant knowledge on the relationship between service ecosystem and technology (Ostrom et al., 2015; Lusch, Nambisan, 2015; Vargo, Akaka, 2012; Akaka, Vargo, 2014). Digital health devices drive the development of an entirely new context that is characterized by technology-enabled actor-to-actor (A2A) service ecosystems without clearly defined contextual boundaries. The technology-mediated healthcare service ecosystem emerges as a valuable entity based on institutional arrangements - new social practices (sharing clinical data, patients empowerment, disease self monitoring, etc) that drive and manage the becoming on new resources and their integration amongst its actors.

**Originality/value** – This research contributes with reflections and suggestions on the emergence of new healthcare ecosystem mediated by digital technologies.

**Key words** Service ecosystem, healthcare, healthcare technologies, resource integration

**Paper type** – Research paper

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