

Is franchising in health care valuable? A systematic review

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Background Franchising is an organizational form that originates from the business sector. It is increasingly used in the healthcare sector with the aim of enhancing quality and accessibility for patients, improving the efficiency and competitiveness of organizations and/or providing professionals with a supportive working environment. However, a structured overview of the scientific evidence for these claims is absent, whereas such an overview can be supportive to scholars, policy makers and franchise practitioners.

Methods This article provides a systematic review of literature on the outcomes of franchising in health care. Seven major databases were systematically searched. Peer-reviewed empirical journal articles focusing on the relationship between franchising and outcomes were included. Eventually, 15 articles were included and their findings were narratively synthesized. The level of evidence was rated by using the Grading of Recommendations Assessment, Development, and Evaluation scale.

Results The review shows that outcomes of franchising in health care have primarily been evaluated in low- and middle-income countries in the reproductive health/family planning sector. Articles about high-income countries are largely absent, apart from three articles evaluating pharmacy franchises. Most studies focus on outcomes for customers/clients and less on organizations and professionals. The evidence is primarily of low quality. Based on this evidence, franchising is predominantly positively associated with client volumes, physical accessibility and some types of quality. Findings regarding utilization, customer loyalty, efficiency and results for providers are mixed.

Conclusions We conclude that franchising has the potential to improve outcomes in healthcare practices, but the evidence base is yet too weak for firm conclusions. Extensive research is needed to further determine the value of healthcare franchising in various contexts. We advocate more research in other healthcare sectors in both low- and middle-income countries and high-income countries, on more types of outcomes with attention to trade-offs, and on what factors produce those outcomes.

Keywords Franchising, outcomes, literature review, organization

KEY MESSAGES

- Franchising has the potential to be a valuable strategy in the healthcare sector for clients, society and organizations, but the evidence base is yet too weak for firm conclusions.
- There is a need for stronger evaluative research designs and more scientific studies on outcomes of franchising in a larger variety of health services to justify continued investment in franchises.
- Scholars should also focus on how franchise systems can best be designed and managed to create value for clients, society, professionals and organizations.

Introduction

Franchising is increasingly applied in the healthcare sector in both low- and middle-income countries¹ and high-income countries. Franchising comprises a contractual arrangement between one firm (the franchisor) and a second firm (the franchisee), whereby the franchisee has the right to market goods or services under the franchisor's brand name (Combs *et al.* 2004; Blair and Lafontaine 2005). In business format franchising, the most common form of franchise, franchisees also obtain the right to use a business format. This consists of the brand name, support systems and a specification of products and services that need to be delivered (Falbe and Welsh 1998; Komoto 2005). Currently, 42 franchises in various Asian and African countries were documented at the end of 2009 (Montagu *et al.* 2009). Websites and trade magazines document the existence of approximately 50 franchise systems in the USA in various types of care (elderly and home care, eye and hearing care, dental care, paramedical care and pharmaceutical care).² In the Netherlands, approximately 30 care franchises exist in, among others, home care, hospital care, mental health care and care for the disabled. Websites report the existence of at least 15 franchises in the UK³ and 19 in Canada.⁴

Franchising is increasingly explored in low- and middle-income countries as well as high-income countries as an organizational model to overcome several challenges in the healthcare sector. Many countries are confronted with inequalities in access and health outcomes (Institute of Medicine 2001; Montagu 2002; Dzau *et al.* 2010), unreliable quality (Institute of Medicine 2001; Hussey *et al.* 2008; Knott *et al.* 2008; Dzau *et al.* 2010), an increasing scarcity of healthcare professionals and continuously rising healthcare costs (Shortell *et al.* 2000; Institute of Medicine 2001; Dzau *et al.* 2010). Increasing market competition and privatization of health care in various developed countries (Cutler 2002; Schut and Van de Ven 2005) also force care providers to search for organizational models that can help create competitive advantages and increase their survival chances.

However, does franchising help to overcome these challenges? Various authors argue that in low- and middle-income countries, the clearly defined products and services, delivery standards, training, quality monitoring and the donor-funded or subsidized system in many of the franchises in these countries should, in theory, lead to a rapid expansion of accessible, high-quality care for all citizens, subsequently resulting in health improvements at local and societal levels (Montagu 2002; Lönnroth *et al.* 2007). Those same elements—except for the donor-funded or subsidized system—can also

allow for the geographical dispersion of high-quality and efficient care in high-income countries (Hogan *et al.* 2006; Knott *et al.* 2008). Franchising could provide a better working environment by offering training to improve the quality of care (Agha *et al.* 2007b; Bishai *et al.* 2008), stimulating interaction and knowledge-exchange among care professionals in the same field (Agha *et al.* 2007b), increasing efficiency through economies of scale (Christensen and Curtiss 1977; Montagu 2002), providing access to innovations originating from franchisor headquarters and other franchisees (Knott *et al.* 2008) and offering other types of management and operational franchisor support (Christensen and Curtiss 1977). Furthermore, some authors hypothesize that the use of a brand name and other marketing strategies can pull more patients to the franchise practices by signalling the presence of high-quality providers, which will subsequently result in higher revenues (Agha *et al.* 2007b; Bishai *et al.* 2008).

Authors also theorize about the possible disadvantages of franchising. Knott *et al.* (2008) and Montagu (2002) predict difficulties in controlling the quality of services provided by franchisees—especially in the case of highly educated professionals who provide complex medical services—while the quality of the brand name depends on the quality of services provided by those franchisees. Furthermore, Montagu (2002) expects trade-offs between quality and social goals on the one hand and competitive prices and patients' demands on the other hand. There is also a risk of a contradiction in interests between the franchisor and the franchisee, especially in developed countries where some franchisors are more profit-oriented than quality-oriented (Pozniak 2006). Finally, mandatory fees (Christensen and Curtiss 1977) and a reduction in professional autonomy (Montagu 2002; Dobson and Perepelkin 2011) are potential drawbacks for care providers who become franchisees.

These potential advantages and disadvantages raise the question of what the actual value of franchising in health care is. Because of the increasing use of healthcare franchising, the public function of health care and the multiple challenges with which the healthcare sector is confronted, answering this question is crucial. However, a systematic overview of the actual outcomes of franchising in health care does not exist. Only Koehlmoos *et al.* (2009) conducted a review of the influence of franchising on access to and quality of health services in middle- and low-income countries. They restricted themselves to a search for high-level evidence and concluded that there was none; however, lower-level evidence can also provide indications of what franchising can effect, particularly when multiple lower-level studies find the same results.

Furthermore, that review did not comprise evidence gathered in high-income countries and did not focus on all types of outcomes. Therefore, we have conducted a systematic literature review, considering two related questions: (1) What is the state of empirical scientific knowledge about outcomes of franchising in health care for patients, healthcare professionals and organizations? (2) Which outcomes of healthcare franchising have been identified in these studies?

Methods

Before starting a review of the evidence about outcomes of healthcare franchising, we determined our inclusion criteria, definitions, search strategy, selection procedure and a standardized data extraction form to retrieve data from the eventually included studies. We referred to various guidelines for reviews (Cochrane; Campbell Collaboration; Petticrew and Roberts 2006; Popay *et al.* 2006), other systematic reviews (e.g. Johns and Torres 2005; Lemmens *et al.* 2009; Buljac-Samardzic *et al.* 2010) and more experienced colleagues in reviews to do this adequately.⁵

Inclusion criteria and definitions

We included empirical studies on the outcomes of healthcare franchising for customers (patients), franchisees (care professionals and organizations) and franchisors. The term 'health care' includes all preventive, diagnostic and treatment activities (related to both curing and caring) for those who are injured, ill, mentally or physically impaired, or at risk to be so in the future. 'Outcomes' are defined as the results of an activity, plan or process; we included all types of outcomes. Consistent with the basic definition of business format franchising, franchises considered in studies needed to include a brand name accompanied by a contract between a franchisor and a franchisee that regulates the provision of goods or services by the franchisee under that brand name, with standard supplies, delivery standards, training and/or management (Combs *et al.* 2004; Blair and Lafontaine 2005).

To be included in our review, studies had to compare franchise and non-franchise, pre-post franchise or different franchise systems. Qualitative and quantitative empirical academic peer-reviewed journal articles were included. Reviews were excluded because they are not empirical, but their references were checked to identify additional primary studies eligible for inclusion.⁶ Other materials, such as policy documents, opinion papers, books and case reports without detailed illumination of the research design were excluded for quality reasons because the rigour of their methods cannot be verified, they are not empirical scientific and/or they are not certainly peer-reviewed. To ascertain that this criterion resulted in a representative overview of evidence not distorted by publication bias, a quick scan was conducted of the results presented in other materials (see search strategy and article selection). Studies about franchises in all healthcare sectors and in all countries were eligible for inclusion. Studies were excluded when they only used franchising as a case to examine a research question not related to franchising itself or when they used franchising only as one of many examined variables without detailed consideration of franchising. We did not use

the research design itself as an exclusion criterion for this review. Multiple weaker studies that yield similar results also provide an indication of what franchising can effect and high-quality studies are more difficult to conduct in this field. Reviewing high-quality studies only would, therefore, impede our aim of providing a comprehensive overview of the state of evidence on outcomes of franchising so far.

Search strategy

To be sure that all relevant articles were identified, we searched seven different major databases. PubMed/MEDLINE, the Cochrane Library, ABI/INFORM, Scopus, PsycINFO, Science Direct and Web of Science (Social Sciences Citation Index) were searched till July 2011. The searches did not include any limitations in dates of publication, geographical region or language, but search terms were only in English. We developed our search strategy in PubMed/MEDLINE by combining MeSH terms (e.g. delivery of health care, health, aged and physicians) and free text (e.g. care, patient*, hospital*, treatment, mental, pharmac*, illness, nursing home*, cure, specialist*) related to health care AND the truncated free text term franchise* (relevant MeSH terms not available). This strategy was adapted for use in other databases. Our search procedure was checked by a university librarian. In addition to this database search, the references of included articles and other reviews on similar and related subjects were hand searched to identify additional relevant empirical studies. We also searched for grey literature to ascertain that our inclusion of peer-reviewed empirical journal articles only would not result in skewed conclusions because of publication bias. We searched for non-published or non-peer-reviewed materials by checking references, searching Google, Google Scholar and Scopus, reviewing some of the personal websites of authors of included articles, contacting some of the authors and searching the websites of Global Health Sciences and PSI for reports about social franchises in low- and middle-income countries.

Study selection and data extraction

To achieve a high-quality and unbiased review, two researchers were involved in the study selection and data extraction process. The selection process started with a preliminary search in PubMed/MEDLINE and a first rough selection of potentially relevant titles and abstracts by one reviewer. All articles that were obviously not relevant as they had another subject were excluded, whereas abstracts with any potential relevance were included. The resulting 68 abstracts were independently assessed by two reviewers using the predetermined selection criteria, and the resulting inclusion ($n=29$) and exclusion of abstracts was discussed. After this testing round, all the databases were searched by one reviewer ($n=1482$ hits), duplicates were removed ($n=438$), and all obviously irrelevant titles and abstracts were excluded. Abstracts with any potential relevance were independently assessed by a second reviewer ($n=79$), and doubts regarding inclusion were discussed. The resulting 35 abstracts were included for full-text review. Three articles that could not be found in full-text format were excluded.⁷ The other 32 full-text articles were reviewed and summarized using a semi-structured data extraction form predetermined by two reviewers. The form

included information about the aim, subject, focus and background of the article, the methodology (outcomes, intervention, definitions and research design) and the results of the study. In cases of exclusion or doubt regarding inclusion, a second reviewer was involved. The references of the included articles were checked for additional relevant studies, resulting in one additional study that was summarized by the data extraction form. In the end, 15 articles were included in the final analysis (see Figure 1).

The search on grey literature did not result in a significant number of studies eligible for inclusion. Most of the identified materials were case reports of single franchise networks without detailed illumination of research strategy, did not focus on a comparative evaluation of outcomes of franchising or were not empirical. Two unpublished studies did fit in our inclusion criteria (Plautz *et al.* 2003; Tsui *et al.* 2006). However,

they did not show diverging results from our other studies, both were conducted in the same sector as the majority of the other included articles (reproductive health), and both found positive effects of franchising on utilization, hence providing no indication for publication bias. We therefore choose to keep only the empirical peer-reviewed academic journal articles in our results section.

We also determined the levels of evidence for identified outcomes of healthcare franchising. The quality of investigation of each single outcome in each study was independently appraised by two reviewers using the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) scale. This scale distinguishes four levels of quality of evidence: high (A), moderate (B), low (C) and very low (D) (see Box 1). In cases of doubt or disagreement, a third reviewer was consulted to reach consensus.

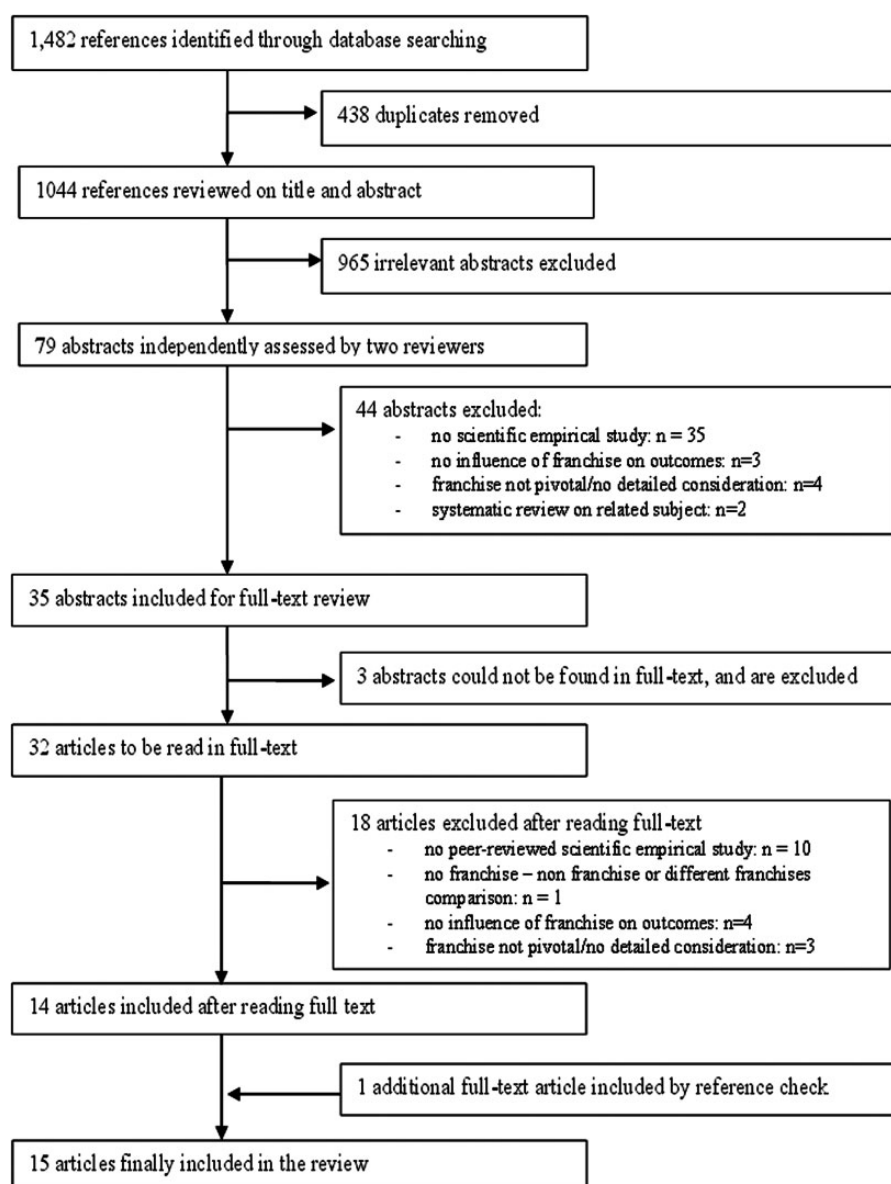


Figure 1 Selection process for systematic review.

Box 1 Levels of quality of evidence using the GRADE rating scale

Level A: high
Level A consists of several high-quality studies with consistent results. Further research is highly unlikely to change the confidence in the estimated effect. This category comprises high-quality pre- and post-surveys, multi-centre randomized controlled trials (RCT) and, in special cases, one large, high-quality multi-centre trial.
Level B: moderate
Level B consists of several studies with some limitations and consistent findings or one high-quality study. Further research is likely to have an impact on the confidence of the estimated effect and may change the estimated effect. This category comprises one-centre RCTs, RCTs with severe limitations and pre- and post-surveys.
Level C: low
Level C consists of one study with acceptable quality or inconsistent results of several studies focusing on the same outcome. Further research is very likely to change the estimated effect and has an important impact on the confidence of the estimation. This category comprises high-quality qualitative studies, quasi-experimental designs and pre- and post-surveys with limitations.
Level D: very low
Level D evidence implies that the estimated effect is very uncertain. This category comprises low-quality qualitative studies and pre- and post-surveys with severe limitations.
Limitations and strengths for determining evidence level (upgrade or downgrade)
Quality of evidence is lower for studies with limitations in study design and execution (risk of bias), unexplained inconsistency/heterogeneity in outcomes, indirectness or imprecision of estimates. The quality of evidence is higher when effects are large and all plausible confounders would reduce the effect.
Adapted from Buljac-Samardzic <i>et al.</i> (2010) and GRADE Working Group (2004).

Data analysis

Statistical data could not be pooled for meta-analysis purposes due to the heterogeneity of franchise design, outcome conceptualizations and the presence of both qualitative and quantitative research designs. We therefore conducted a narrative synthesis of the data (Popay *et al.* 2006). Following the recommendations of Popay *et al.* (2006) for such a synthesis, our analysis comprised the following steps.

As a first step, we examined each included study with regard to the following factors as described on our data extraction form: country, sector, methods, franchise design, type(s) of outcome(s), operationalization of each outcome, pivotal actor/stakeholder for each outcome, whether significances of outcomes were tested, and GRADE rating. At the second step in our analysis, we clustered outcomes that were directed towards the same type of result. This clustering led to seven outcome categories: quality of services, accessibility of services, utilization of services, results for providers, client loyalty, client volumes and efficiency. As a third step in our analysis, we described similarities and differences in outcomes found within each of the outcome categories. In the final step, we used the variables from step 1 to search for explanations for the

Table 1 Outcomes investigated in included studies

Outcome	Times investigated (n)
Quality of services	9
Utilization of services	7
Accessibility of services	4
Results for professionals	3
Client loyalty	3
Client volumes	2
Efficiency	2

differences we found. In this step, we also made a judgment of the overall quality of evidence (see Box 1 GRADE) and overall results for each type of outcome.

Results

State of empirical research

Around half of the fifteen studies have focused on quality and utilization. A few studies have considered results for providers, client loyalty, client volumes and efficiency (see Table 1). Most studies have investigated outcomes for customers/clients. Outcomes for professionals and organizations have received less attention.

With regard to the methodologies used, studies have rarely employed qualitative ($n=1$) or mixed methods designs ($n=1$); rather, quantitative research dominates ($n=13$) (see Table 2). Many of the outcomes are subjective (opinions) or self-reported measures, not objective numbers. The majority of studies have presented low levels of evidence (C or D on the GRADE scale).

Twelve of the fifteen studies have been conducted in low- and middle-income countries in Asia and Africa. Because many franchises in low- and middle-income countries have primarily social goals (health improvement) instead of financial goals, they are called social franchises (Qureshi 2010). Three studies have investigated outcomes in high-income countries, all in a pharmacy context.

The research covers a few healthcare sectors. There is an overrepresentation of research conducted in reproductive health/family planning services ($n=11$). The other investigated sectors are pharmacy ($n=3$) and tuberculosis care ($n=1$).

Regarding the design of the investigated franchise systems, the research is skewed towards fractional franchises ($n=10$). Fractional franchise means that 'a targeted package of goods and services is added to the services of the provider who maintains additional unfranchised product lines and services' (Bishai *et al.* 2008, p. 193). The rest are stand-alone franchises ($n=5$). A stand-alone franchisee exclusively provides franchised products/services (Stephenson *et al.* 2004). The precise franchise design is not always described in the articles.

Some studies have investigated the same franchise network. Both studies by Agha *et al.* (2007b) investigated the same franchise network in Nepal; both studies by Ngo *et al.* (2009, 2010) investigated the same franchise network in Vietnam; Bishai *et al.* (2008), Qureshi (2010), Shah *et al.* (2011) and Stephenson *et al.* (2004) investigated the same franchise

Table 2 Studies on outcomes of healthcare franchising

Authors	Healthcare sector	Country	Methods	Franchise design			Type of outcomes investigated	Stakeholder
				Fractional/stand-alone	Contractual responsibilities	Business format: support		
Agha <i>et al.</i> (2007a)	Reproductive health services/family planning	Nepal	Pre-post non-experimental design, survey. Sample: 491 persons of 24 facilities pre-test, 617 post-test.	Fractional	• Fee • Follow standards • Recruitment requirement	• Training • Marketing • Protocols • Contact with providers	Quality Access Loyalty	Customer Organization
Agha <i>et al.</i> (2007b)	Reproductive health services/family planning	Nepal	Pre-post quasi-experimental design with non-equivalent control groups, survey. Sample: 35/32 providers, 491/435 franchise clients, 480 household, 394/298 control clients.	Fractional	• Fee • Follow standards • Recruitment requirement	• Training • Marketing • Protocols • Contact with providers	Quality Utilization Loyalty	Customer Organization
Bishai <i>et al.</i> (2008)	Reproductive health services/family planning	Pakistan	Cross-sectional survey. Comparison private franchise to non-franchise forms. Sample: 19 801 clients, 2667 providers, 1718 facilities.	Fractional	• Fee • Follow standards • Serve low-income clients	• Training • Supplies and equipment • Marketing	Quality Access Efficiency	Customer Organization
Christensen and Curtiss (1977)	Pharmacy	USA	Cross-sectional survey. Comparison three franchises. Sample: 43 pharmacies.	Stand-alone	Not described	• Training • Marketing • Management and operational support	Results for providers	Professional
Decker and Montagu (2007)	Reproductive health services/family planning	Kenya	Cross-sectional survey of structured interviews, comparison non-franchise and franchise providers and clients. Sample: franchise: 295 clients, 102 providers. Non-franchise: 138 clients, 50 providers.	Fractional	• Fees • Follow standards • Recruitment requirements	• Training • Supplies and equipment • Low-interest loans	Utilization	Customer
Dobson and Perepelkin (2011)	Pharmacy	Canada	Cross-sectional survey. Comparison franchise, independent, corporate. Sample: 646 pharmacies.	Stand-alone	Not described	Not described	Results for providers	Professional
Evans <i>et al.</i> (2009)	Pharmacy	Canada	Longitudinal analysis of archival data, comparison franchise, independent, corporate. Sample: 8699 patients.	Stand-alone	Not described	Not described	Quality Loyalty	Customer Organization
Hennink and Clements (2005)	Reproductive health services/family planning	Pakistan	Quasi-experimental study. Sample: 4 study and 2 control sites. 5338 baseline, 5502 endline respondents.	Stand-alone	• Follow standards	• Subsidized treatment fund for poor	Utilization	Customer

(continued)

Table 2 Continued

Authors	Healthcare sector	Country	Methods	Franchise design		Business format: support		Type of outcomes investigated	Stakeholder
				Fractional/stand-alone	Contractual responsibilities	Business format: support	Business format: monitoring		
Kozhimannil <i>et al.</i> (2009)	Prenatal care	Philippines	Pre-post analysis of archival data of survey on population level + 15 interviews. Comparison pre-post + franchise and national insurance programme. Sample: 4968/4802 pre-post.	Stand-alone	Follow standards	Various support	Not described	Quality Utilization	Customer
Lönnerth <i>et al.</i> (2007)	Tuberculosis care	Myanmar	Analysis of archival case notification data + baseline and follow-up survey of patients. Baseline—follow-up comparison + non-franchise control group. Sample: 243 patients.	Fractional	- Keep clinical records - Follow standards - Follow price structure - Recruitment requirements	- Training - Marketing - Products - Knowledge sharing	Yes	Quality Access Utilization	Customer
Ngo <i>et al.</i> (2009)	Reproductive health services/family planning	Vietnam	Pre-post (3 months) qualitative study with interviews, focus groups with 7–10 staff and clients each, observations.	Fractional	- No fee required - Follow standards	- Upgrade equipment and infrastructure - Training - Quality standards - Marketing	Yes	Quality Results for providers	Customer Professional
Ngo <i>et al.</i> (2010)	Reproductive health services/family planning	Vietnam	Quasi-experimental design with comparable control group, pre-post surveys, analysis of longitudinal archival data. Sample: 1181 users.	Fractional	- No fee required - Follow standards	- Upgrade equipment and infrastructure - Training - Quality standards - Marketing	Yes	Utilization Client volumes	Customer Organization
Qureshi (2010)	Reproductive health services/family planning	Pakistan	Cross-sectional survey with controls. Comparison private franchise to non-franchise forms. Sample: 822 providers and their clients.	Fractional	- Fee - Follow standards - Serve low-income clients	- Training - Supplies and equipment - Marketing	Yes	Utilization	Customer
Shah <i>et al.</i> (2011)	Reproductive health services/family planning	Pakistan and Ethiopia	Cross-sectional survey with controls. Comparison private franchise to non-franchise forms. Sample: 993/1305/369 facilities, 1113/1944/525 staff, 7431/4905/1537 clients in, respectively, Pakistan, India, Ethiopia.	Fractional	- Pakistan: fee, follow standards, serve low-income clients - Ethiopia: not described	- Pakistan: training, supplies, equipment, marketing - Ethiopia: training	- Pakistan: yes - Ethiopia: not described	Quality Access Efficiency	Customer Organization
Stephenson <i>et al.</i> (2004)	Reproductive health services/family planning	Pakistan, India, Ethiopia	Cross-sectional survey with controls. Comparison private franchise to non-franchise forms. Sample: 993/1305/369 facilities, 1113/1944/525 staff, 7431/4905/1537 clients in, respectively, Pakistan, India, Ethiopia.	Fractional	- Pakistan: fee, follow standards, serve low-income clients - India: not described - Ethiopia: not described	- Pakistan: training, supplies, equipment, marketing - India: various support - Ethiopia: training	- Pakistan: yes - India: not described	Quality Client volumes	Customer Organization

network in Pakistan and Shah *et al.* (2011) and Stephenson *et al.* (2004) investigated the same franchise network in Ethiopia. However, at least 20 different franchise networks were analysed in the 15 studies.

Outcomes of franchising in health care

Quality of services

Eight of the nine studies on quality of services were conducted in low- and middle-income countries. The studies focus on a wide range of quality types: medical quality, quality of facilities and supplies, quality of the provider, client satisfaction and overall quality. Most of these studies measured perceived or 'subjective' quality rather than 'objective' quality, and most used process indicators of quality rather than actual medical outcomes. Except for results on the quality of the provider, the level of existing evidence is low (see Table 3). The evidence to date shows that franchising predominantly has either a positive effect or no effect on quality.

The two studies on quality of facilities and supplies show positive results of franchising (Agha *et al.* 2007b; Ngo *et al.* 2009).

Franchising has at least the same results for the quality of the provider and medical quality. In regard to the quality of the

provider, the study with a moderate evidence level found that clients were handled just as well in non-franchised systems (Agha *et al.* 2007b), whereas two studies with slightly lower evidence levels found positive results (Agha *et al.* 2007a; Ngo *et al.* 2009). Also in regard to medical quality, only the studies with lower levels of evidence found a positive effect. Lönnroth *et al.* (2007) found franchising to have a positive effect on reducing treatment delays. Evans *et al.* (2009) found that franchises had higher adherence rates than corporate pharmacies; however, when compared with independent pharmacies, adherence rates were similar. Also in regard to other medical quality indicators, no differences were found between franchise and non-franchise (Agha *et al.* 2007b; Lönnroth *et al.* 2007; Kozhimannil *et al.* 2009).

Studies on client satisfaction and overall quality have more mixed and sometimes even negative results. Regarding client satisfaction, Ngo *et al.* (2009) and Agha *et al.* (2007b) found positive results. However, Stephenson *et al.* (2004) found better results for franchises compared with non-franchises in Pakistan, similar results in India and negative results in Ethiopia. In regard to overall quality, only a low-quality study (D) found an overall positive effect (Bishai *et al.* 2008). Studies with a slightly higher level of evidence (C) found either no

Table 3 Quality of services

Type of quality	Indicator	Score	Significance tested	GRADE	Author
Medical quality	Satisfaction quality service: medicine	0	Yes	B	Agha <i>et al.</i> (2007b)
	Adherence to therapy	+/0	Yes	D	Evans <i>et al.</i> (2009)
	Achievement of care standards	0	Yes	C	Kozhimannil <i>et al.</i> (2009)
	Reducing treatment delays	+	No	D	Lönnroth <i>et al.</i> (2007)
	Treatment success	0	No	C	Lönnroth <i>et al.</i> (2007)
Quality of facility and supplies	Satisfaction quality service: physical look	+	Yes	B	Agha <i>et al.</i> (2007b)
	Satisfaction quality service: privacy	+	Yes	B	Agha <i>et al.</i> (2007b)
	Satisfaction quality service: range of services	+	Yes	B	Agha <i>et al.</i> (2007b)
	Satisfaction quality service: cleanliness	+	Yes	B	Agha <i>et al.</i> (2007b)
	Satisfaction quality service: equipment	+	Yes	B	Agha <i>et al.</i> (2007b)
	Appearance and facilities	+	No	D	Ngo <i>et al.</i> (2009)
Quality of provider	Provider's caring manner	+	Yes	C	Agha <i>et al.</i> (2007a)
	Provider's expertise/reliability	+	Yes	C	Agha <i>et al.</i> (2007a)
	Satisfaction quality service: good handling clients	0	Yes	B	Agha <i>et al.</i> (2007b)
	Provider's expertise/reliability	+	No	D	Ngo <i>et al.</i> (2009)
	Provider's caring manner	+	No	D	Ngo <i>et al.</i> (2009)
Satisfaction of client	Satisfaction clients	+	No	D	Ngo <i>et al.</i> (2009)
	Fewer complaints	+	No	D	Ngo <i>et al.</i> (2009)
	Intention to return	+/0/–	Yes	C	Stephenson <i>et al.</i> (2004)
	Are you overall satisfied with quality?	+	Yes	B	Agha <i>et al.</i> (2007b)
	Average score quality of provider, facilities and supplies, client satisfaction	+/0/–	Yes	C	Shah <i>et al.</i> (2011)
Overall quality	Is quality better than elsewhere?	0	Yes	C	Stephenson <i>et al.</i> (2004)
	Average score quality of provider, facilities and supplies	+	No	D	Bishai <i>et al.</i> (2008)

+, positive; 0, no difference; –, negative.

effect (Stephenson *et al.* 2004) or mixed results depending on the organization of comparison and the country of study (Shah *et al.* 2011). In both Pakistan and Ethiopia, franchise providers yielded more positive results than private non-franchise providers and less positive results than governmental organizations. The effect differed in a comparison with non-governmental organizations: in Pakistan, franchises performed better on overall quality; in Ethiopia, no difference was found between them.

Accessibility

Studies on the accessibility of care services have only been conducted in developing countries and have focused on two types of access (Table 4): physical access, which implies that those who are in need of care can reach the facility, and socio-economic access, which means that all socio-economic groups are able to access care. To date, the level of evidence on access is relatively low.

Franchising has a positive effect on physical access according to one C-level study (Agha *et al.* 2007a). The effects on socio-economic access are unclear. Only the two studies with the lowest evidence level showed a positive effect on socio-economic access (Lönnroth *et al.* 2007; Bishai *et al.* 2008). A study with a slightly higher evidence level (C) reported similar or even negative results for franchises compared with other organizational forms. In both Pakistan and Ethiopia, franchises yielded less socio-economic access than governmental organizations and yielded similar access to non-governmental organizations. The effect when compared

with private non-franchise providers differed: in Ethiopia, franchises performed significantly worse on access; in Pakistan, no significant difference was found (Shah *et al.* 2011).

Utilization of services

All seven studies on utilization have been conducted in developing countries and have focused on the use of both early preventive care and health care (Table 5). 'Preventive care' is defined as services provided to prevent the occurrence of an undesirable medical condition, i.e. primary prevention, or to detect and diagnose those individuals with an existent disease who need care to prevent more significant morbidity, i.e. secondary prevention. 'Health care (or tertiary prevention)' is defined as care for those who have a revealed (diagnosed) medical condition (e.g. Simeonsson 1991). All but one of the studies presented a low level of evidence.

Based on two very low-quality studies, franchising seems to have no relation with the utilization of 'health care' (Agha *et al.* 2007b; Kozhimannil *et al.* 2009). The evidence so far shows that franchising has positive or no effects on the utilization of 'preventive care'. The three studies with the lowest levels of evidence all showed positive effects on the utilization of primary (Decker and Montagu 2007; Qureshi 2010) and secondary preventive care (Lönnroth *et al.* 2007). The two studies with a slightly higher level of evidence (C) found either positive effects on the utilization of primary preventive care or none at all. The franchise network studied by Agha *et al.* (2007b) showed a positive effect on utilization of preventive care. Depending on the franchisee site investigated in the

Table 4 Accessibility of care services

Type of access	Indicator	Score	Significance tested	GRADE	Author
Physical access	Proximity of location	+	Yes	C	Agha <i>et al.</i> (2007a)
	Convenient location	+	Yes	C	Agha <i>et al.</i> (2007a)
Socio-economic access	Access for the poor	+	No	D	Bishai <i>et al.</i> (2008)
	Ability to reach the poor	+	No	D	Lönnroth <i>et al.</i> (2007)
	Access for the poor	0/–	Yes	C	Shah <i>et al.</i> (2011)

+, positive; 0, no difference; –, negative.

Table 5 Utilization of care services

Type of utilization	Indicator	Score	Significance tested	GRADE	Author
Use of preventive care (primary and secondary prevention)	Use of family planning methods	+	Yes	C	Agha <i>et al.</i> (2007b)
	Use of family planning methods	+	Yes	D	Decker and Montagu (2007)
	Use of family planning methods	0	Yes	C	Hennink and Clements (2005)
	Unmet need	+/0	Yes	C	Hennink and Clements (2005)
	Use of family planning methods	+	Yes	D	Qureshi (2010)
	Notification (detection) of tuberculosis	+	Yes	D	Lönnroth <i>et al.</i> (2007)
Use of health care (tertiary)	Use of birth facility	0	Yes	D	Kozhimannil <i>et al.</i> (2009)
	Use of antenatal care	0	Yes	D	Agha <i>et al.</i> (2007b)
Preventive care and health care	Use of reproductive health and family planning care	+/0	Yes	B	Ngo <i>et al.</i> (2010)

+, positive; 0, no difference; –, negative.

Table 6 Results for providers, client loyalty, client volumes and efficiency

Outcome	Indicator	Score	Significance tested	GRADE	Author
Results for providers	Franchisee satisfaction with franchise and services offered	+/-	No	D	Christensen and Curtiss (1977)
	Perceived authority [control (stress, satisfaction, workload), decision-making ability] and autonomy	+/-	Yes	D	Dobson and Perepelkin (2011)
	Effectiveness in dealing with complaints, concerns, objections of customers	+	No	D	Ngo <i>et al.</i> (2009)
Client loyalty	First visit or return visit?	0	Yes	C	Agha <i>et al.</i> (2007a)
	First visit or return visit?	+	Yes	C	Agha <i>et al.</i> (2007b)
	>75% medicines dispensed from same pharmacy	-/0	Yes	D	Evans <i>et al.</i> (2009)
Client volumes	Clinic-reported client volumes	+	Yes	B	Ngo <i>et al.</i> (2010)
	Monthly client volume	+	Yes	C	Stephenson <i>et al.</i> (2004)
Efficiency	Costs of care per client	+/0/-	No	D	Bishai <i>et al.</i> (2008)
	Costs of care per client	0/-	Yes	D	Shah <i>et al.</i> (2011)

+, positive; 0, no difference; -, negative.

franchise network studied by Hennink and Clements (2005), the unmet need for family planning successfully declined or remained the same. The use of family planning methods did not increase significantly after franchising occurred (Hennink and Clements 2005). The study with the highest evidence level among them (B) examined the total use of preventive care and health care and showed that results depended on the measurement method used: the citizens did not report a change in use, but the franchise clinics reported an increase in use (Ngo *et al.* 2010).

Results for providers

The results for providers have been investigated in three studies: two in developed countries and one in a developing country. They focus on very different indicators, and the results among these studies differ. The level of evidence generated by these studies is very low (D) (Table 6).

Healthcare professionals in Vietnam felt more effective in managing their relationships with clients because of training offered by the franchisor (Ngo *et al.* 2009). Franchisee pharmacists in Canada perceived themselves as having less authority and autonomy compared with independent pharmacists but more authority and autonomy than corporate pharmacists (Dobson and Perepelkin 2011). Pharmacists in the USA varied in their levels of satisfaction with their franchise system and the support services offered by their franchisors. Their overall satisfaction with the franchise system varied among systems, but it was predominantly medium to low. The same rule applies to reported satisfaction with different types of support services (Christensen and Curtiss 1977).

Client loyalty

The impact of franchising on client loyalty has been analysed in Nepal and Canada in studies of low quality (C and D). The results differed between the countries, between different organizations of comparison and between studies with different quality levels (see Table 6). Only the study with a very low-quality level showed a negative effect: in this Canadian study, customers were less loyal to franchised pharmacies than to independent pharmacies, but equally loyal to corporate

pharmacies (Evans *et al.* 2009). The studies with a slightly higher quality of evidence (C) in Nepal found either a positive or similar effect: Agha *et al.* (2007b) found customers to be significantly more loyal to new franchise clinics than to non-franchised clinics, whereas Agha *et al.* (2007a) found customers to be just as loyal after franchise implementation as they were before. This last study, however, showed that the increased quality after implementation of the franchise network significantly predicted an increase in loyalty (Agha *et al.* 2007a).

Client volumes

Studies on client volumes have only been conducted in developing countries, but in four different ones. All the studies presented evidence of moderate to low quality. In all the four countries, a positive association between franchising and client volumes was found (Stephenson *et al.* 2004; Ngo *et al.* 2010) (Table 6).

Efficiency

The impact of franchising on efficiency—defined as costs of care per client—has only been studied in Pakistan and Ethiopia, and only with methodologies of low quality. In Ethiopia, franchising was less efficient than other studied organizational forms (Bishai *et al.* 2008; Shah *et al.* 2011). In Pakistan, franchises were just as efficient as non-governmental organizations; however, compared with governmental organizations, Shah *et al.* (2011) found franchises to be just as efficient, whereas Bishai *et al.* (2008) found franchises to be more efficient.

Discussion

In this article, we have provided a systematic overview of outcomes of franchising in health care to determine the state of empirical scientific knowledge on the subject and the outcomes that have been found.

The review shows that the body of empirical knowledge is quite undeveloped. Only 15 peer-reviewed empirical studies

were identified, the variety in healthcare sectors and types of outcomes studied is limited, research in developed countries is underrepresented, and the focus has been mainly on the customer and far less frequently on healthcare professionals or organizations. Given this existing body of knowledge, we cannot make strong conclusions or generalizations about what the actual value of franchising is. Some interesting patterns do, however, emerge. The evidence to date suggests that franchising can be valuable to healthcare practices, particularly in low- and middle-income countries. The results of studies so far show that healthcare franchises predominantly perform better or at least as well as non-franchised healthcare entities on physical accessibility, utilization, client volumes and quality of services as it relates to facilities and supplies, the provider and client satisfaction. Franchising seems less positive for the efficiency of care delivery and results for providers (less autonomy, less authority, dissatisfaction with support services offered). With regard to the healthcare sector, negative outcomes were only found in the reproductive health/family planning and pharmacy sectors. With regard to countries, negative results were only found in Canada, the USA, Pakistan, and, especially, Ethiopia; in all other low- and middle-income countries, franchises had similar or better results compared with non-franchises. The achieved outcomes did not seem to be different for fractional and stand-alone franchises.

We do not really know why some studies yielded positive results whereas others did not. This is partly due to the absence of detailed franchise design descriptions in some studies and to the small number of articles. In addition, the empirical knowledge gathered so far gives little insight into the reasons behind the comparative outcomes of healthcare franchising. Only Ngo *et al.* (2009) and Qureshi (2010) identified a contributive role of training. Training helped improve the quality of services and results for providers (Ngo *et al.* 2009) and also contributed to increased utilization of services (Qureshi 2010).

The question is whether the results of franchising shown in this review will also apply to other healthcare sectors and to high-income countries. It is possible that the effects of franchising on quality, accessibility, utilization and client volumes in low- and middle-income countries are not primarily due to the organizational form of franchising per se, but rather to the extension of good quality healthcare supply as a consequence of the structural involvement and control of private-sector providers in the fulfilment of public goals (Montagu 2002; Lönnroth *et al.* 2007). In an environment in which there are many unmet needs and in which the access to and quality of services is relatively low (Hennink and Clements 2005), other organizational forms that consist of partially similar interventions, such as voucher systems (e.g. Prata *et al.* 2005), may also provide positive outcomes. Similarly, it may not be a coincidence that negative results for providers have only been found so far in developed countries, where professionals regularly have more access to equipment, resources and learning opportunities.

The scientific evidence to date seems to provide only a partial overview of the outcomes of healthcare franchising. The current empirical evidence pinpoints only now and then to some possible drawbacks of and difficulties with franchising, whereas

both theory (see 'Introduction' section) and practice reports mention them. Practice reports of single franchise networks in low- and middle-income countries tell that the franchisor only has limited ability to force compliance with service standards of the franchise and to control quality, whereas the quality of care is highly variable across clinics. It is also reported that provider skills range from excellent to poor, with some of them falling below minimum standards of the franchise, and that some franchisees ask higher than recommended prices for their services (e.g. McBride and Ahmed 2001; Montagu and Kinlaw 2009). There is no systematic insight in the actual scope of these problems and their effect on the comparative outcomes that franchises yield. Case reports and theory also highlight positive results for healthcare professionals that have not yet been confirmed in peer-reviewed academic studies. Moreover, the number of franchises in high-income countries (see 'Introduction' section) as well as low- and middle-income countries is far larger than the ones that have been studied scientifically (see e.g. Schlein and Montagu 2012). This all suggests that the current evidence base needs to be extended to get a comprehensive and representative scientific overview of the value of franchising in health care.

Our data analysis in this report also has a limitation due to the state of materials included. We selected outcomes as the starting point for our analysis, but we do not know whether and to what extent the case mixes, countries, health systems and franchise systems investigated in different studies are comparable. However, this limitation is inherent to the limited information that has been provided on these aspects in the individual studies.

Research agenda

This review has shown that franchising in health care has largely been disregarded by scholars. More exploration and detailed investigation are therefore needed.

First, research should be conducted in other healthcare sectors beyond reproductive health/family planning and pharmacy. Outcomes may differ not only because of institutional and cultural differences between sectors but also because it is more difficult to standardize and monitor in healthcare sectors that require a high degree of (medical) professional knowledge (Montagu 2002).

Second, research is needed on more types of outcomes for all stakeholders because we do not know yet whether franchising can meet health demands in an efficient way to contain costs and enhance the health status of the society, provide a better working environment for the increasingly scarce healthcare professional or improve the competitiveness of care providers. Researchers are advised to include the outcomes for all stakeholders in their studies to make trade-offs visible because there can be conflicts of interest between stakeholders, e.g. financially driven franchisors and quality-driven healthcare professionals (e.g. Dobson and Perepelkin 2011).

Third, scholars should proceed with comparing franchise with non-franchise forms that may partially meet similar challenges (e.g. voucher systems) to investigate whether, how and when franchising is the most suitable organizational form to beat the challenges in the health sector all over the world.

Fourth, future research should also focus on franchising in higher income countries. It is rather surprising that franchising—originating from an Anglo-Saxon context—has been investigated so little in the healthcare sector in high-income countries. The outcomes in these countries might differ from those in low- and middle-income countries not only because of differences in cultural, institutional and economic environments but also because of differences in franchise design. In the social franchises established in low- and middle-income countries, the donors or franchisors frequently assume the largest risk in opening new units or establishing healthcare services, instead of the franchisees that normally assume risks in franchise organizations (Stephenson *et al.* 2004; Lönnroth *et al.* 2007; Bishai *et al.* 2008). This incentive difference may have an impact on outcomes.

Finally, future research should investigate the causes of outcomes of healthcare franchising. Attention should be paid to the combined roles of franchise design (e.g. stand-alone vs fractional, type of support being offered to franchisees), the conduct of actors in the franchise system (e.g. the adherence to service protocols, provider skills) and the external context in which franchising is implemented.

In assuming this research agenda, scholars can build on the extensive knowledge that exists about franchising in sectors outside health care. Scholars should also guard for sound measures and designs in their research because, as this review showed, different studies on the same outcome in the same franchise network may yield different conclusions if they have different measures (Ngo *et al.* 2010), different research designs (Agha *et al.* 2007a,b) or the presence/absence of testing of significances (Shah *et al.* 2011 vs Bishai *et al.* 2008).

Conclusion

Franchising has the potential to be a valuable organizational strategy to clients, society and organizations, but the evidence base is yet too weak for firm conclusions. So far franchises have been shown to predominantly perform better or at least as well as non-franchised healthcare entities on physical accessibility, utilization, client volumes and some types of quality of care. However, there are also signals of some less positive effects that need further investigation before expansion of franchising is justified. Practitioners could further explore the merits of franchising by developing franchises for various types of health care. These developments should be accompanied with process and outcome evaluations to further assess the actual outcomes of franchising in health care in various contexts so as to justify continued investment in franchising as organizational form.

Endnotes

¹ In low- and middle-income countries, some healthcare franchises are termed 'social franchise', as these franchises are designed to fulfil social instead of primarily financial goals.

² <http://www.entrepreneur.com/franchises/healthcare/indexhlth.html>, http://www.bison.com/Healthcare_Franchises, retrieved 14 October 2011.

- ³ <http://www.franchisesales.co.uk/search/care-services-franchise-health-care-franchises>, retrieved 14 October 2011.
- ⁴ <http://canada.franchisesales.com/search/home-health-care-senior-care-franchise>, retrieved 14 October 2011.
- ⁵ The preparation document is available from the first author on request.
- ⁶ Reviews of Koehlmoos *et al.* (2009, 2011) were identified. Their references were checked to identify possible additional primary empirical studies eligible for inclusion.
- ⁷ Chiguzo *et al.* (2008) (delivering new malaria drugs through grassroots private sector), Parkin *et al.* (2008) (quality of care in a franchised GP group) and Yavner *et al.* (1988) (the failure of the dental franchise industry) could not be found in full text.

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