

Provider Sponsored Insurance: A Scoping Review

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The passage and implementation of the American Patient Protection and Affordable Care Act (ACA) has ushered in an era of new reimbursement methods and a heightened focus on population health management, which has stimulated U.S.-based health care organizations to contemplate health plan ownership as a logical strategy. The popular industry press regularly reports on health care organizations that are entering and re-entering (and occasionally exiting) the health insurance market. As little research is available on the reasons why a hospital, health system, or physician group would pursue ownership of a health plan in the post-reform era, this article, through a bibliographic scoping review, seeks to shed light on the drivers and obstacles to sponsoring a health plan, as well as the performance implications for health plans and their sponsoring organization in terms of cost, quality, access, and satisfaction.

INTRODUCTION

The rise and fall of managed care in the 1980s and 1990s saw many hospitals and health systems in the United States (U.S.) enter and exit the health insurance market in the form of provider sponsored insurance. Due to changes in the U.S. health care industry brought about by passage and implementation of the Affordable Care Act, new payment structures, and an increasing focus on population health management, organizations may be revisiting health plan ownership as a viable strategy. The trade press in health care has reported on numerous systems that are either entering or re-entering the health insurance market. However, little research has been conducted on the motivations, facilitators and barriers for a health system or hospital to pursue ownership of a health plan in the post-reform era. Similarly, little research has been conducted to understand the performance of these health plans and their sponsoring hospitals along cost, quality, access and satisfaction dimensions in the post-reform era. The primary goals of this paper are to summarize the current body of literature on provider sponsored insurance (PSI), and to identify gaps in research needed to understand the possible resurgence of this phenomenon in the rapidly changing health care landscape.

SEARCH STRATEGY

The bibliographic search strategy used to identify articles for review can be found in Figure 1. We first conducted a search in PubMed for English articles with various combinations of the following terms in the title or abstract: provider sponsored insurance, integrated delivery systems, insurance, health plan, vertical integration, hospital, and provider. The specific search terms and results can be found in Table 1. This step yielded 500 unique articles. Additionally, we searched for the term “provider sponsored insurance” in google scholar, yielding 28 additional citations for a total of 528 unique citations.

**FIGURE 1
ARTICLE SEARCH AND SELECTION PROCESS**

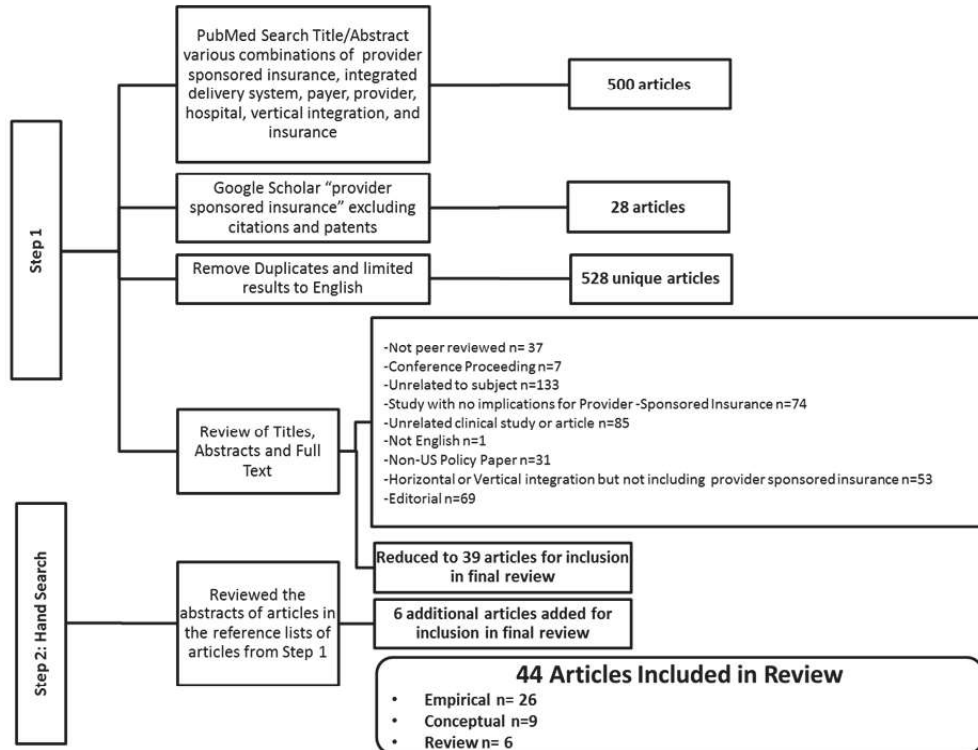


TABLE 1
SEARCH TERMS FOR PUBMED AND GOOGLE SCHOLAR

Search Term	Items Found	
	Pub Med	Google Scholar
Search (Provider sponsored Insurance [Title/Abstract]) Filters: English	10	
Search (integrated delivery system[Title/Abstract]) Filters: English	304	
Search (((integrat*[Title/Abstract]) AND payer[Title/Abstract] AND hospital [Title/Abstract]))) Filters: English	41	
Search (((integrat*[Title/Abstract]) AND payer[Title/Abstract] AND provider [Title/Abstract]))) Filters: English	40	
Search (((integrat*[Title/Abstract]) AND payer[Title/Abstract])) Filters: English	152	
Search (((("integrated delivery system"[Title/Abstract]) AND payer[Title/Abstract]))) Filters: English	1	
Search (((("integrated delivery system"[Title/Abstract]) AND insurance[Title/Abstract]))) Filters: English	13	
Search (((vertical integrat*[Title/Abstract]) AND health[Title/Abstract])) AND insurance[Title/Abstract]	10	
Search (vertical integrat*[Title/Abstract]) AND health[Title/Abstract] Filters: English	151	
Search (((vertical integrat*[Title/Abstract]) AND hospital[Title/Abstract])) Filters: English	68	
Search (((vertical integrat*[Title/Abstract]) AND health[Title/Abstract])) AND payer[Title/Abstract] Filters: English	2	
Search (((vertical integrat*[Title/Abstract]) AND health[Title/Abstract])) AND hospital[Title/Abstract]	46	
(Provider sponsored Insurance [Title/Abstract]) (exclude patents and citations)		28
Total Unique Citations (N=528)	500	28

Restricting the search terms to those specifically related to insurance would have provided a more parsimonious list. However, we favored a broader search strategy to capture all possible articles, knowing that this approach would result in greater manual elimination of irrelevant works produced by the search. For example, including broad terms such as “integrated delivery systems” resulted in a large volume of works which ended up being irrelevant to the exploration of provider sponsored insurance. One example includes clinical studies conducted within an integrated delivery system. While our interest in integrated delivery systems is primarily the degree to which a health plan is involved in the system, our broad search terminology including integrated delivery systems captured articles on unrelated studies within the context of an integrated delivery system.

Additionally, though an integrated delivery system may include a health plan, this terminology is often used for other health systems that are integrated along the continuum of care but without the presence of a health plan (McCarthy & Mueller, 2009; Shortell & McCurdy, 2010). An Organized Delivery System, which is synonymous for an Integrated Delivery System, has been defined as a “a network of organizations that provides or arranges to provide a coordinated continuum of services to a defined population and is willing to be held clinically and fiscally accountable for the outcomes and the health status of the population served” (Gillies, Shortell, & Young, 1997, p. 301; Shortell, Gillies, Anderson, Mitchell, & Morgan, 1993). However, other scholars clarify that while most of these systems

own an insurance product, ownership is not a prerequisite for being considered an integrated delivery system or organized delivery system (Zuckerman & Kaluzny, 1991).

This organized delivery system could theoretically take place through vertical integration between providers and payers as is the focus of this paper, or through “virtual integration” through alliances and contracting (Goldsmith, 1994). Unless these studies contained information about how the health plan was incorporated into the integrated delivery system or had specific information that could apply to managing the clinical or financial risk for a population that would be relevant to the success of an owned insurance product, they were excluded. Several articles focused on collaborative projects between providers and payers, such as pay for performance or accountable care organizations and various permutations of that concept with private insurers. However, these studies were largely excluded as they differ from an organization that has ownership of a health plan, especially in terms of the level of risk the organization takes on for its patients and the increased difficulty of divestiture relative to virtual, alliance, or contractual types of arrangements.

Similarly, articles may have been eliminated if they were not peer reviewed, unrelated to the subject, conference proceedings, editorials, and non-US based policy papers, or papers studying vertical integration between providers and physicians or post-acute care. Though we believe editorial pieces can hold valuable insight, we chose to focus on empirical or theoretically grounded conceptual pieces, and related systematic reviews. The primary reason for elimination is demonstrated in Figure 1. After elimination, this step yielded 39 articles for inclusion in the review.

A second step was conducted to review articles cited within the reference section of the articles selected for inclusion from the PubMed and Google Scholar searches. We reviewed the abstracts of articles with relevant titles in the reference lists of our selected articles, which resulted in an additional 6 articles for inclusion in the review. Overall, we had 44 articles for final review. There were 26 empirical articles, 9 conceptual articles and 6 review articles.

TERMINOLOGY AND DEFINITIONS

One issue that became quickly evident was the variety of terms used to describe the phenomenon of a provider such as a health system owning a health insurance product. For example, Evans (1983) makes an important distinction about the difference between providers who have integrated backwards into the insurance business, versus insurance providers who have integrated forward into the ownership of their own hospitals. For the remainder of the paper, we will default to the term “provider sponsored insurance” (PSI) used by a number of authors (Bazzoli, 2004; Bazzoli, Shortell, Ciliberto, Kralovec, & Dubbs, 2001; Conniff, 1998; Hirshfeld, 1996; Kemper, Tu, Reschovsky, & Schaefer, 2002). However, various terms can be applied to this same concept (See Table 2). It is important to note that many of the terms do not always mean that the health system or provider owns an insurance product, but merely that they *may* own an insurance product. Therefore, great caution and attention to detail must be used when analyzing prior literature to understand this phenomenon.

TABLE 2
TERMS USED TO DESCRIBE OWNERSHIP OF AN INSURANCE PRODUCT BY A PROVIDER ORGANIZATION

Provider-sponsored insurance Integrated organizations assuming financial risk Provider-owned HMO products Provider-owned insurance Hospital-sponsored HMO Provider-sponsored networks Backwards integration into insurance Provider dominated plans Forwards integration of insurers into physician networks and owning their own hospitals Vertical integration Hospital initiated vertical integration Network and system owned HMO or PPO Provider-based insurance Provider-sponsored organization (PSO) Its own insurance company Provider-sponsored PPO Organized delivery system (ODS) Integrated delivery system (IDS) Transference of risk System owns a health plan Health plan focused multi-business firms Full-risk accountable health plan IDN

There are six proposed types of vertical integration between providers and payers: insurer initiated vertical integration, hospital initiated vertical integration, HMO-initiated vertical integration, insurer joint ventures, insurer-provider joint ventures, and insurer-HMO joint ventures (Higgins & Meyers, 1987; Patricelli, 1986). Despite this classification, these terms were sparsely used in subsequent literature. It is also important to note that there are several different types of payment models a health system might pursue that involve taking on risk, such as value-based payment models, accountable care, bundled payments, or shared savings/shared risk (Grauman, Harris, Elizondo, & Looby, 2014). While these arrangements are made between providers and payers, they do not necessarily correspond with provider sponsored insurance in the sense that the provider may not have any ownership in the arrangement. However, they do provide an opportunity to understand the spectrum of various ways in which a health system might take on more responsibility and risk associated with managing the health of a population, perhaps culminating in provider sponsored insurance.

THEORETICAL ARGUMENTS

Various theories have been used to support the notion of provider sponsored insurance in health care. These include agency theory (Cors, 1997), transaction cost economics (Burns & Pauly, 2002; Burns & Thorpe, 2000; Cors, 1997), contingency theory (Bazzoli, Shortell, & Dubbs, 2006), organizational life cycle theory (Bazzoli et al., 2006), and organizational learning (Paulus, Davis, & Steele, 2008; Psek et al., 2015).. Complex adaptive systems (CAS) was also proposed, which suggests that the ability to learn and make sense of a changing and uncertain future is more important than a specific structure (Evans, Baker, Berta, & Barnsley, 2013). In addition to the formal theories listed above, a broad range of theoretical

arguments from the strategic management literature involving competitive advantage, organizational forms, strategy, structure and processes were also used (Inamdar, 2007). The strategic management literature suggests that vertical integration makes sense if it increases the value of the firm, offers a competitive advantage, or helps minimize risk by reducing competition, creating technological leadership, or creating synergy among related businesses (Burns & Thorpe, 2000). Industrial organization theory suggests that vertical integration is used to gain power over buyers and suppliers, overcome low competition in supply markets, block access to competitors, and achieve economies of scale (Burns & Thorpe, 2000). Though not explicitly stated, components of the resource based view, dynamic capabilities and absorptive capacity theories were also suggested (Burns & Pauly, 2002; Burns & Thorpe, 2000; Paulus et al., 2008).

Yet, Burns and Pauly (2002) noticed a contrast between the reasons for integration cited by academicians versus those of practitioners (Burns & Pauly, 2002). The stated goals for vertical integration through the formation of an insurance arm often include better management of capitation, larger and more diversified risk pooling, minimizing payer contracting costs, better coordination along the continuum of care, and providing better population health management (Burns & Pauly, 2002). In contrast to the theories above, Burns suggests that the reason providers may also launch health plans is for other goals such as community benefit or bettering the continuum of care, or to gain experience with capitation or risk management (Burns & Thorpe, 2000). Academics, however, tend to favor the transaction cost economics argument (Burns & Pauly, 2002).

HISTORY

Many of the articles included in this review sought to offer an account of the history of provider-sponsored insurance. During the 1980s and early 1990s, provider-sponsored insurance in the form of an HMO was expected to become a dominant organizational strategy under the assumption that the purchasers of health care (namely government and employers) would put increasing pressure on provider organizations to contain costs (Bazzoli, 2004; Starr, 1982). However, given the consumer backlash against restricted choices offered by HMOs, poor utilization management, subpar payments from payers, and diminishing financial opportunities as systems reached their limit to further reduce costs, as well as failure to manage capitated payments (Hurley, Grossman, Lake, & Casalino, 2002; Lesser & Ginsburg, 2000), the organizational form lost traction by the early 2000s (Bazzoli et al., 2001; Hurley et al., 2002). Evidence from as early as 1985 suggested that PPOs were moving away from being provider-sponsored to becoming payer-sponsored (Gabel, Ermann, Rice, & de Lissovoy, 1986). Overall, health system involvement in the ownership of HMOs fell from 21.3% in 1998 to 15.2% in 2003, and PPO ownership fell from 22.2% in 1998 to 14.9% in 2003 (Bazzoli, 2008). Between the years of 1996 and 2000 using data from the Community Tracking Study, a decline in risk arrangements was noted in almost all markets (Hurley et al., 2002).

Contrary to the idea that there was uniform disintegration of vertical arrangements during the mid to late 1990s, the time period was one of experimentation with various organizational forms (Bazzoli et al., 2001). However, as the decade continued, further reductions were noted in provider-sponsored insurance as plans were sold to private health plans, and organizations failed to achieve the financial or operational benefits they had originally anticipated from these arrangements (Bazzoli, 2008). Research from this time period noted that systems and networks engage in provider-sponsored insurance differently and that trends may differ between HMOs and PPOs, and thus these differences should be considered in future empirical work (Bazzoli et al., 2001; Bazzoli, Shortell, Dubbs, Chan, & Kralovec, 1999; Bazzoli et al., 2006).

It also appears the providers' approach to risk in general changed during this time, not only in the form of PSI. Providers saw acceptance of risk as an important future, and many providers did accept varying levels of risk, but they found profitability more difficult in practice and experienced initial losses. Insurance premiums remained relatively flat despite growing costs, making a margin on risk sharing more difficult to achieve (Hurley et al., 2002). Utilization management was not as successful as many had

hoped in reducing costs, and in many instances prior reductions in cost and utilization left little room for improvement and additional savings (Hurley et al., 2002). As a result of these dynamics, many health systems began to demand higher payments from health plans while also refusing global risk, and reducing overall risk exposure. Risk arrangements were found to vary as a function of relationships between physicians and health systems, health plan diversity, and varied past experiences with risk arrangements (Hurley et al., 2002). Various changes occurred in a provider's risk assumption, from altering an existing risk agreement to rejecting risk completely (Hurley et al., 2002). This trend was described by one leader as "a more thoughtful approach to risk, as opposed to the huge stampede towards risk five years ago" (Hurley et al., 2002, p. 151).

An article reviewing 25 years of academic health care literature on integration internationally tracked the evolution of integration strategies in health care, noting several changes in health care integration strategies over this time period (Evans et al., 2013). These included a movement from horizontal to vertical integration, and an increased focus on community health. Additionally, they noted a transition from economic arguments for integration to better quality and value, an increasing focus on patient-centered care, a transition away from modifying organization structures and the environment to changing work patterns, attitudes and norms, and from integration for patients in a defined region to integration for a defined population (Evans et al., 2013).

FORMATION AND SUCCESS

We now turn our attention to factors influencing the formation, success and collapse of provider sponsored insurance plans. We will first examine the motivations noted in the literature for the formation of PSI. We will then examine market and organizational factors associated with the survival and success of these plans. Lastly, we will summarize the factors highlighted in the literature that resulted in the collapse of many of these arrangements or failure to achieve expected benefits. Our goal in this section is to illuminate various dynamics that need to be considered in the modern study of these arrangements in the post-reform era.

Motivations for Formation

In terms of motivation, one reason for a health system to launch a PSI product is the opportunity to capture the entire premium paid for the health plan instead of a portion allocated by a third-party payer, and the resulting opportunity to pass more of this premium onto its own hospitals and physicians (Burns & Thorpe, 2000). Shortell and colleagues suggest that the primary driver for integrated delivery systems is the economics of managed care, which can be fundamentally summarized by the transition of the provision of care acting as a cost center instead of a revenue driver. Simply put, revenue is earned through the negotiation of contracts or ownership of a health plan and the goal then becomes to deliver quality care while minimizing cost to retain a margin (Shortell, Gillies, & Anderson, 1994; Young & Barrett, 1997). Additionally, hospitals may pursue ownership of an insurance product to cut out the "middleman" while being held responsible for similar risk as a full-capitation contract, or because it can expand its number of enrollees (Shortell et al., 1994, p. 50). This arrangement produces both the greatest risk but also greatest possible rewards for hospital/physician led integrated delivery systems (Shortell et al., 1994).

Facilitators of Formation and Success

Market Factors

Various market factors were found to be associated with the formation of PSI. The degree of ownership in managed care plans was associated with the number of other systems in the market, and the number of physicians practicing in larger groups (25 or greater) (Shortell et al., 1994). This suggests that both competition and physician density and practice patterns might influence a system's ownership of a health plan.

Managed care and HMO competition and penetration were found to be important factors in PSI formation and success (Burns, Bazzoli, Dynan, & Wholey, 1997; Calvaruso, 1999). Additionally, lower

health plan competition combined with rural location resulted in greater profitability as employers had limited choices for insurance plans and were more willing to accept high premiums for the provider-sponsored plans (Burns & Pauly, 2002; Burns & Thorpe, 2000). Burns and colleagues suggest that there are evolutionary stages of health care integration which hinges on the level of HMO penetration, and that markets with greater than 50% HMO penetration are most likely to foster integration of providers and payers (Burns et al., 1997). In addition to the insurance market factors, a health system must also consider its potential market for enrollees prior to launch (Calvaruso, 1999).

Organizational Factors

The success of various provider-sponsored plans has been attributed to several organizational factors, many of which are inimitable. The first is a long history of a large multi-specialty physician group with an established culture, and being a very early adopter of the health plan strategy (specifically in the 1970s and early 1980s) giving organizations more history and experience with managing an insurance product (Burns & Pauly, 2002; Burns & Thorpe, 2000). Interestingly, though this author cites time in the market of insurance as a benefit, they also warn against systems rushing into being early adopters of this strategy in the current market noting that first movers in their respective markets often suffered heavy financial losses (Burns & Pauly, 2002). Similarly, systems with a health plan had slightly higher percentages of managed care contracts relative to other systems, which also supports the notion that these systems have greater experience in managing care (Inamdar, 2007).

Numerous authors highlighted the importance of physician dynamics in the formation and success of PSI. Successes tend to be in physician-led or physician-centric systems with a high degree of physician integration and engagement, and the development of a health plan typically occurred long after the full integration of hospitals and physicians (Burns & Thorpe, 2000; Gillies et al., 1997; Shortell et al., 1994; Shortell & McCurdy, 2010). In addition to these physician characteristics, aligned incentives and compensation for providers were also suggested as important components for success (Calvaruso, 1999; Gillies et al., 1997; Maeda, Lee, & Horberg, 2014; McCarthy & Mueller, 2009).

Specific structural and operational characteristics were also noted as important factors for formation and success. A health system must have necessary support functions and flexible management and governance structures that are willing to adapt to changing conditions. Additionally, the operations structure should be cross-functional or cross-service line, not unit based, they must be patient centered, must focus on the entire continuum of care and not only the acute hospital, with the hub at the system level. (Gillies et al., 1997; Maeda et al., 2014; Shortell et al., 1994; Shortell & McCurdy, 2010). However, the success of various strategies may be dependent on both payer mix and fit of the organizations activities with its own strategy, such as substituting outpatient care for inpatient care when owning a health plan (Inamdar, 2007). An organization must also be willing and able to assess the needs of the population and develop a process which continuously incorporates evidence-based medicine into the care management for that population (Gillies et al., 1997; Shortell et al., 1994; Shortell & McCurdy, 2010). Patient self-management has also been identified as an important factor for the success of Kaiser Permanente (a large integrated delivery system with a health plan) over other organizations across 65 studies (Maeda et al., 2014).

An organization must also consider its attractiveness to potential customers, which includes its reputation and prestige, and its ability to market its plan (Calvaruso, 1999; Gabel et al., 1986). Existing relationships with payers is another important element for consideration, as the launch of a health plan will introduce an element of competition into interactions with payers (Calvaruso, 1999).

Some of the most frequently cited factors for formation and success of PSI and integrated delivery systems in general were both clinical and functional integration. The first is functional integration or operational integration, which coordinates supporting functions such as HR, finance, IT and other departments across the various units of the enterprise (Bazzoli, 2008; Shortell & McCurdy, 2010). This involves aligning and coordinating a number of operational processes such as strategy formulation, budgeting, program adaptation, financial monitoring and reporting, performance measurement, and client management. In order to accomplish these aims, there is a need to address non-operational issues such as

power and authority, conflict resolution, motivation, and management of the organizational culture (Young & Barrett, 1997).

The second, and arguably most important type of integration for the performance of the IDS, is process integration or service integration (Bazzoli, 2008), also referred to as clinical integration (Gillies, Shortell, Anderson, Mitchell, & Morgan, 1993; Maeda et al., 2014; Shortell et al., 1994; Shortell & McCurdy, 2010; Young & Barrett, 1997). This type of integration refers to the tasks directly associated with the provision of care for patients. It was found that health plan enrollment and profitability increased when there was greater sharing of clinical plans among operating units (a measure of clinical integration) (Shortell et al., 1994). Additionally, the degree of clinical integration increased when the following conditions were met: high alignment of members with mission and vision of the organization, inclusive strategic planning processes, IT that shared clinical data across the system, financial incentives and policies that span service lines, quality improvement programs that span service lines, and greater physician-hospital integration (Shortell et al., 1994).

Multiple articles highlight the importance of information systems to facilitate clinical integration or performance with features of managed care (Calvaruso, 1999; Gillies et al., 1997; Glaser, 1998; Kohn, 2000; Leonard, Tan, & Pink, 1998; Maeda et al., 2014; Paulus et al., 2008; Psek et al., 2015; Rabunski & Weil, 1995; Shortell et al., 1994; Shortell & McCurdy, 2010). Better information systems are assumed to allow hospitals to have more sophisticated risk management programs (Higgins & Meyers, 1987). A case study describes a system with a provider-sponsored health plan that enjoyed market dominance. The system was assumed to be appealing because it had the most advanced technology in the market (Luman, 2006). Geisinger health system, which also owns a health plan, notes that the use of the EHR, while critical, only yielded benefits after a long period of experimentation (Paulus et al., 2008). The EHR was used at Geisinger to better manage population health by stratifying patients into high risk and high utilization categories and closing gaps in care across 400 measures and 600,000 patients daily (Psek et al., 2015).

Barriers

Numerous barriers for both the formation and success of PSI are noted in the literature. The following section will detail the specific barriers to the formation of a health plan, and also barriers to the success of a plan once formed.

To Formation

Burns and Thorpe (2000) suggest that in order to take advantage of opportunities offered by vertical integration, providers must have the abilities to run an insurance plan that is comparable to competitors, there must be opportunities for growth in the market, and the production of health care and insurance must share some of the same supply costs. They argue that these conditions are rarely met in the realm of provider-sponsored insurance (Burns & Thorpe, 2000). Another barrier to formation of more integrated structures is existing culture. The opportunity to redesign care for the best possible performance for the patient is often overshadowed by the desires of organizations and professions, such as individual autonomy over teamwork (Shortell & McCurdy, 2010). Several barriers to forming an ODS were identified which may also be applicable to PSI. These include lack of information about the population, poor IT infrastructure and systems, lack of understanding of integration or knowledge about which functions to integrate, fear of failure or loss of autonomy, deficits in personnel skill, geographic dispersion among units, continued operating unit focus or lack of operating unit support for integration, and a poor understanding of the health care environment (Gillies et al., 1997).

To Survival or Success

Several reasons are suggested for the demise of provider sponsored insurance plans. These include medical loss ratios that were too high, undercapitalization, inexperience with managing risk and lack of actuarial expertise, poor negotiating prowess, insufficient IT systems to manage costs and quality, poor marketing, and entry into overly competitive insurance markets (Burns & Pauly, 2002; Burns & Thorpe,

2000; Hurley et al., 2002). Market conditions that are favorable when the plan is launched may become unfavorable (Burns & Thorpe, 2000).

Another challenge is the conflicting needs and goals between hospitals, physicians and health plans (Burns & Pauly, 2002; Burns & Thorpe, 2000). Within an IDS that contains both hospitals and a provider-sponsored health plan, payer contracting strategies which benefit the hospital may harm the health plan and vice versa (Luman, 2006). Provider-sponsored plans may also experience challenges with physicians who are not as concerned with the goals of the larger system (Burns & Thorpe, 2000).

The pricing, growth and membership of health plans also played a significant role in their demise. Poor actuarial skills and negotiation experience may lead a system to underprice its health plan, thus leading to rapid growth of health plan enrollees (Hurley et al., 2002). This rapid growth can overwhelm a system that does not have the technical infrastructure or expertise to keep up (Burns & Thorpe, 2000). Plans with too few enrollees can similarly result in financial losses or inability to compete (Burns & Thorpe, 2000). Adverse selection is a significant concern, and can result in poor patient mix of a provider's health plan, particularly if they have a large elderly or low income patient population in their hospital business (Burns & Thorpe, 2000). In some markets, there was a tepid response from consumers for the insurance products hospital systems were developing (Burns & Pauly, 2002; Robinson, 2001).

Simply changing the structure to achieve integration is not effective in itself for achieving true clinical integration of care or administrative and operational processes (Burns & Pauly, 2002; Kohn, 2000). Some noted that despite significant organizational change, little was changed about the actual delivery of care (Kohn, 2000). Additionally, many of the shortcomings in performance for IDS lie in the overemphasis of process integration and neglect of functional or clinical integration (Shortell & McCurdy, 2010). There is a long learning curve for managing new organizational forms such as PSI, and as a result, the abandonment of these forms may arise due to boards and leadership's desires for quicker results or to stop heavy initial financial losses (Burns & Pauly, 2002).

OUTCOMES

The purpose of this section is to summarize the literature on performance outcomes of provider sponsored insurance in regard to cost and utilization, quality, satisfaction and innovation. We group both financial performance and utilization together because in the context of provider sponsored insurance, these dimensions are inextricably linked. Because the health plan generates revenue, financial performance is linked to minimizing costs, which means minimizing utilization of services while ensuring quality outcomes.

Costs and Utilization

There are mixed research findings on provider sponsored insurance plans in regard to financial performance and utilization. The various studies with implications for utilization and financial performance are summarized in the following section. A study of 11 sites within the Veterans Health Administration, U.S. Department of Veterans Affairs (VA), which introduced managed care offerings in the forms of a Health Maintenance Organization (HMO) and Preferred Provider Organization (PPO) option, demonstrated lower utilization overall compared to control sites. However, for the HMO option specifically, utilization increased significantly. The costs of the program were the same or slightly higher compared to control sites (Zwanziger et al., 2000). A study of a 2.7 million member integrated delivery system with an insurance arm examined the impact of moderate cost sharing on ED utilization and the resulting impact on health outcomes. They found that modest copayments reduced ED utilization without resulting in worse complications or health outcomes from avoiding necessary care (Hsu et al., 2006). For a hospital, a reduction in ED visits represents a loss in revenue assuming the potential admitted patient is insured at a rate that supersedes the cost of handling the admission. However, it is only for the payer that reducing this ED use represents a financial benefit. These types of initiatives represent a financial opportunity for systems with provider-sponsored insurance that allow them to capture savings typically accrued by payers.

A longitudinal study of over 4,000 adults found that approximately 3% of adults in the study population were high utilizers of health care, or “super-utilizers,” and accounted for 30% of charges. However, this “super-utilizer” designation is transient, and these adults tend to drift in and out of this category within the same year (Johnson et al., 2015). Given their substantial impact on a health plans expenses, identifying and understanding these current and potential future super-utilizers is important for a plan’s success.

A study comparing end-of-life cancer care in the VA (a fully integrated system between the payer and provider which mirrors provider sponsored insurance) and FFS patients found that the VA patients received less aggressive end-of-life cancer care. The authors suggest that this may be due to the lack of financial incentives for increased activities at the end-of-life which could be revenue generating in the FFS environment resulting in the provision of overly-aggressive care (Keating et al., 2010). This represents one possible mechanism for aligning provider incentives to achieve cost savings at the provider-level.

In a case study of a 3-hospital IDS with 180-462 beds, certain specialties under capitated payments showed improved outcomes and reduced costs, total inpatient days were reduced, enrollment forecast were exceeded, and payments to network members increased. Initial startup funding for the plan was projected at \$2.5 million with an extra \$5 million to cover operating losses for the first 3 years in 1996 dollars and 13,000 members were projected as necessary to breakeven as a health plan (Calvaruso, 1999).

Whellan and colleagues (2007) analyze a heart disease management program from the perspective of hospital systems, providers and insurers. They found that the program was expected to result in financial losses for all providers, but generate substantial savings for third-party insurers (Whellan et al., 2007). This suggests that some of the financial barriers to implementing clinical improvement programs within a health system may be offset if they can generate savings for the system through its insurance arm. However, there may be little incentive for providers to implement costly programs if the financial benefit only accrues to the non-integrated payer. Early evidence suggested that more integrated systems had better financial performance relative to less integrated competitors (Stephen M Shortell et al., 1994), however this data is cross-sectional and thus it is unclear whether better financial performance is an antecedent or consequence of integration.

Quality

There is very little research on the quality implications of PSI. Generally, integrated health plans were better at adhering to process of care measures, but little evidence exists for improved mortality or morbidity outcomes. Centralized health systems with an insurance product were more likely to adopt patient safety initiatives such as CPOE (Ford & Short, 2008). A systematic review of empirical studies comparing VA to Non-VA outcomes revealed that the VA consistently performed better at adhering to recommended process of care measures, but no noticeable differences were found in risk-adjusted mortality between the two settings (Trivedi et al., 2011). However, another study comparing diabetes care for FFS arrangements to try to determine if pay-for-performance programs might have the ability to achieve outcomes comparable to closed-panel HMOs and fully integrated models such as the VA found little support for better outcomes in the fully integrated VA system. The study of over 2,000 patients at 22 sites revealed that FFS performance on diabetes care measures was better than the national average, and similar to the best performance in the VA and closed-panel HMOs (Hollander et al., 2005).

Another review of IDS performance across 25 studies from 2000- 2012 found that typically, increased integration had positive effects on quality of care (Hwang, Chang, Laclair, & Paz, 2013). This study did not isolate the effects of provider-sponsored insurance or define which IDS in the study had an insurance component, therefore its findings may or may not be applicable to health plan ownership specifically. Another shortcoming of this study is that it only analyzed research after the year 2000, though much of the research conducted on IDS occurred in the 1990s.

Satisfaction

Very little research exists on satisfaction with provider sponsored plans. A study examining the launch of a provider sponsored HMO option found that satisfaction remained the same at the intervention and control sites with HMO enrollees reporting slightly higher satisfaction (Zwanziger et al., 2000). Another study surveyed consumers' satisfaction with their insurance products, which indicated that many consumers will choose a heavily managed (restrictive) option because of the lower cost, but may still be frustrated by the highly managed plan (Kemper et al., 2002). These consumer preferences are important for provider-sponsored insurers to consider in launching a plan, especially one that may be largely restricted to providers within their own system.

A study of provider-sponsored health plan enrollees indicated that among respondents who knew that they had a deductible for care, 51% percent indicated that this deductible would cause them to change their care seeking patterns including avoiding the emergency room or delaying care. Twenty-six percent were concerned about their costs of care, and 15% were actively searching for other health plans (Reed, Benedetti, Brand, Newhouse, & Hsu, 2009). This has important implications for provider-sponsored plans considering how to structure their plan offerings. This research suggests that deductibles may be an effective mechanism for changing utilization habits, but also might result in losing price-sensitive customers.

Innovation

Several case studies of Geisinger Health System suggested that there might be implications for an organization's ability to innovate when they have both an integrated delivery system and health plan. Though these findings may not be generalizable, they offer interesting insights into the mechanisms through which PSI might be able to help an organization develop the capacity to learn, improve and innovate. Geisinger Health System has a provider sponsored health plan in which a subset of patients' care is also provided by Geisinger's own physicians. This population represents roughly one-third of its patient care, with the remainder served by traditional sources such as commercial payers, Medicare and Medicaid (Paulus et al., 2008).

Geisinger executives propose that innovation most readily occurs in that portion of the organization where the system is both financially and clinically responsible for patients because of the ability to align incentives, and coordinate care. This part of the organization usually serves as the starting point for new initiatives and experimentation, after which successful models and programs can be rolled out to the remainder of the organization (Paulus et al., 2008). One such experiment involved the implementation of a provider-led pay for performance cardiac surgery program with the Geisinger health plan, which resulted in a decrease in hospital charges of 5.2% and a decrease in length of stay by 16% (Casale et al., 2007). Geisinger cites its ability to align incentives particularly through its health plan population that also receives care from Geisinger physicians as a critical component of its success in innovation, along with strong financial performance, IDS structure, clinical leadership, and EHR infrastructure, along with its entrepreneurial staff and permission to learn from failure (Paulus et al., 2008).

DISCUSSION

Given the troubled history of provider sponsored insurance, the changing environment, and mixed findings on performance, there are some that argue that virtual integration without actual ownership may confer the benefits of vertical integration without many of the associated risks (Burns & Pauly, 2002; Evans et al., 2013; Goldsmith, 1994). Yet a counterpoint to this argument is the success that IDS attribute to the ownership of their insurance products, and the challenges noted in coordination when the product is not owned (Salmon et al., 2012). Salmon (2012) reports on a payer-initiated attempt at better integration and performance noting organizational structure and lack of operation within an IDS as a major limitation for the initiative. Similarly, Geisinger notes that its best opportunity for innovation and influencing outcomes occurs at the nexus of its owned health plan and employed providers, adding another data point to the case for ownership (Paulus et al., 2008). Fully integrated provider-payer organizations are assumed

to have a higher ROI for initiatives aimed at system engineering and quality improvement and ultimately clinical integration (Shortell & McCurdy, 2010).

Arguably, the transference of risk from a payer to a provider implies that the payer has still built in a margin for themselves based on their actuarial estimations. While these arrangements might offer the opportunity for a health system to save money through lowering their own costs and utilization, presumably the upper cap of the amount a payer would give to the provider still falls below the amount they are receiving in the form of premiums. Simply put, under these types of arrangements, a health system's profitability in taking on risk is limited by the margin the health plan insists on receiving first.

Implications for Practice

The list below, adapted from Gillies, et al., (1997) with suggestions for best practices for an ODS, may serve as a guide for executives today seeking entrance into the health insurance market through provider-sponsored insurance:

- Develop a strategic plan with explicit clinical integration goals
- Communicate commitment from leadership
- Streamline governance processes by consolidating multiple boards at the system level
- Redefine management roles to align with integration goals
- Develop strong physician leadership to champion integration efforts
- Gain support for integration from operating units
- Strengthen the culture and foster values that support integration
- Have robust quality improvement mechanisms in place
- Develop sufficient IT systems to support the strategic plan
- Align incentives and rewards
- Establish performance criteria which fosters accountability and incorporates cost, quality, access and satisfaction

However, scholars note that beyond any specific structure or strategy, the most important quality for successful integration is for the system to "experiment and innovate" (Gillies et al., 1997, p. 320) and to create a "system of learning" (Shortell & McCurdy, 2010, p. 372). Geisinger executives echo this sentiment, stating that its individual innovations are less important than developing an "innovation infrastructure," which is most readily achieved in its slice of business where the provider sponsored health plan and clinical delivery are fully responsible for patients (Paulus et al., 2008, p. 1243). It remains to be seen whether this new era of health care will reward such experimentation and innovation for the organizations with enough resources and bravado to do so.

CONCLUSION

Many questions remain about whether new pressures from government, employers and directly from consumers choosing high deductible health plans will be enough to create an environment that once again supports the notion of provider-sponsored insurance. Similarly, have consumer preferences changed? Are narrow provider choices offered by HMOs now more palatable to the consumer than they were in the 1990s? Though information technology has evolved since the 1990s, its mere presence is not enough to ensure that organizations have developed the capability to actually analyze, understand, and manage the clinical and financial risk of a population. Further study is needed to understand the implications for provider sponsored insurance in the post-reform era.

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