



# Health Care Professionals' Perceptions of Pay-for-Performance in Practice: A Qualitative Metasynthesis

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## Abstract

Incentive-based pay-for-performance (P4P) models have been introduced during the last 2 decades as a mechanism to improve the delivery of evidence-based care that ensures clinical quality and improves health outcomes. There is mixed evidence that P4P has a positive effect on health outcomes and researchers cite lack of engagement from health care professionals as a limiting factor. This qualitative metasynthesis of existing qualitative research was conducted to integrate health care professionals' perceptions of P4P in clinical practice. Four themes emerged during the research process: positive perceptions of the value of performance measurement and associated financial incentives; negative perceptions of the performance measurement and associated financial incentives; perceptions of how P4P programs influence the quality/appropriateness of care; and perceptions of the influence of P4P program on professional roles and workplace dynamics. Identifying factors that influence health care professionals' perceptions about this type of value-based payment model will guide future research.

## Keywords

pay-for-performance, incentive payments, value-based payment models, physician engagement, health care professional engagement, intrinsic motivation, quality measurement

### What do we already know about this topic?

Lack of physician and health care professional engagement has been identified as a factor that influences P4P program outcomes.

### How does your research contribute to the field?

Understanding the literature on health care professionals' perceptions of P4P will inform future research and incentive-based payment model development.

### What are your research's implications toward theory, practice, or policy?

Future research on incentive-based payment models should incorporate essential factors that influence provider engagement in P4P models including involvement in program design, measure selection, and implementation.

## Introduction

Value-based payment (VBP) models such as pay-for-performance (P4P) have proliferated in the health care realm since the Institute of Medicine (IOM) identified the need for broad health system transformation to improve health outcomes while reducing health care costs in 2001.<sup>1–3</sup> The Agency for Healthcare Research and Quality (AHRQ)<sup>4</sup> defines P4P as “any type of performance-based provider payment arrangements including those that target performance on cost measure.” The Center for Medicare and Medicaid Services

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(CMS) spearheaded much of this work to advance P4P models in the United States with changes to Medicare reimbursement for hospitals and qualified providers in the outpatient setting.<sup>5</sup> The Medicare Access and CHIP Reauthorization Act (MACRA) of 2015 introduced the Merit-Based Incentive Payment System (MIPS), which requires all Medicare Part-B-eligible providers to participate in this P4P program if they are not already participating in an eligible alternative payment model (APM). In addition to the large-scale Medicare P4P program in the United States, the United Kingdom implemented the Quality Outcomes Framework (QOF) P4P program in 2004.<sup>6,7</sup> Globally, P4P programs are being implemented across high- and low-income as well as developing countries as a way to incent quality care and spur development of systems that improve care delivery.<sup>8-11</sup> Despite the proliferation of P4P and other VBP models, there is mixed evidence that these models positively influence health outcomes or reduce the cost of care.<sup>9,12-17</sup> There are many complex, intersecting factors that influence the success of P4P programs, such as program design and institutional factors.<sup>18,19</sup> In addition, physician engagement in P4P model design and implementation has been cited as an important factor that may affect program outcomes. Economic principal agent theory posits that the incentive in P4P is a mechanism used by health plans to change physician provider behavior. In reality, behavior change can be positive or negative in response to incentives and is dependent on many complex factors.<sup>5,9,20,21</sup>

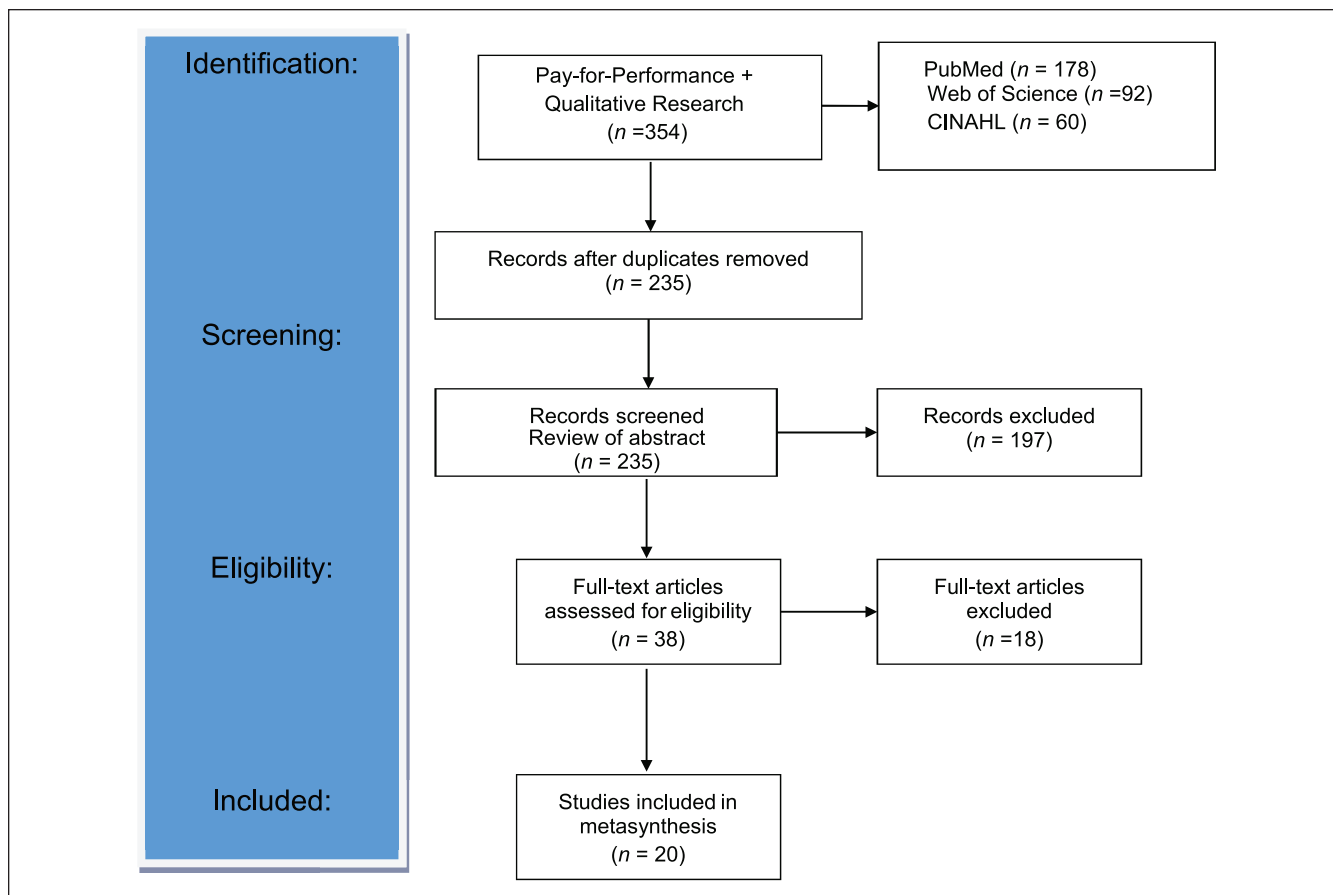
Young et al<sup>20</sup> found that physicians enrolled in P4P programs had an initial improvement in quality outcomes at the 1-year mark that was improved at the 4-year mark in comparison with a national comparison group. However, the authors found that the “motivational effects of financial incentives are potentially moderated by the targeted individuals’ psychological attitudes toward the incentives.”<sup>20</sup> Meterko and colleagues used a validated survey to study physician attitudes about the general P4P concept. The study showed that most providers perceive the concept positively, although in practice these same providers noted they do not believe the data reflect their quality of care and are less positive about the actual P4P programs in place.<sup>22</sup> Casalino et al<sup>23</sup> found that P4P implementation without physician support can have a negative impact on health outcomes and that there is a mistrust of health plans and the government. Saint-Lary and colleagues<sup>24</sup> surveyed French general practitioners (GPs) about the decision to participate in voluntary P4P programs and found that GPs who chose not to participate perceived the ethical risks of participation to be high, which influenced the decision. Alqasim and colleagues conducted a cross-sectional study of Dutch physicians in surgical specialties to assess perceptions of the P4P concept. Respondents noted a more positive than negative acceptance of the concept and quality indicators with some hesitancy about who should be held accountable and an overall low level of experience and knowledge of P4P programs. This might be due to the low

penetration of P4P in the Netherlands. However, even in the United States, which has a relatively high penetration of P4P programs across private and public health plans, physicians and other health care professionals do not always have clear knowledge, understanding, and perception of the P4P program being implemented.<sup>5</sup> An assessment of current research on P4P programs illuminates the need to understand factors related to physician and health care professional engagement that influence the effectiveness of incentives when developing and assessing the programs. Quantitative research into factors that influence physician engagement and decision making in settings that use incentives provides valuable insight but leaves a knowledge gap that the existing qualitative research fills related to the perceptions of physicians and health care professionals within the complex setting of value-based care programs such as P4P.

Given the gap in understanding of physician and health care professional engagement in P4P, this thematic metasynthesis strives to methodically synthesize available qualitative literature on attitudes about P4P payment models. Qualitative research helps us understand and explore the health care professionals’ experience and perceptions within the context of P4P across diverse settings. The primary focus of inquiry is on physician attitudes about P4P because most programs target physicians. However, perceptions of advanced practice providers and other health care professionals, including practice leaders and administrators, adds depth to our understanding of how incentives influence program buy-in and how health care professional engagement influences program success. This qualitative metasynthesis aims to answer the question: How do physicians and other health care professionals perceive P4P programs in clinical practice? Insight into attitudes and engagement will enhance opportunities to develop payment models that positively influence clinical quality and health outcomes.

## Methods

This study is a qualitative metasynthesis of the current literature that included a systematic literature search,<sup>25,26</sup> quality appraisal process,<sup>27</sup> thematic synthesis, and reciprocal translation.<sup>28,29</sup> Analytic themes that emerged to answer the research question are presented. Qualitative synthesis rooted in the meta-ethnography principles outlined by Noblit and Hare<sup>29</sup> enables comparison and translation across studies to encapsulate rich analysis which is greater than the parts because of the process. A metasynthesis is the most appropriate vehicle to better understand the phenomenon of interest because it enables an interpretive understanding rather than just seeking to aggregate findings.<sup>28</sup> Following the methods outlined by Thomas and Harden, the integrative interpretation allows examination of “concepts and patterns,” which leads to a deeper understanding of health care professionals’ perceptions, using methods previously published by our team.<sup>28,30,31</sup> These methods reflect international



**Figure 1.** PRISMA flowchart study selection process.<sup>25</sup>

standards required for the conduct and publication of qualitative metasynthesis.<sup>26</sup>

## Study Selection

A systematic search was undertaken by the primary researcher using PubMed, Web of Science, and CINAHL databases. Results from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart process, reported below, provide transparency of the search process and methods used (Figure 1).<sup>25</sup> Filters were used for English language, human subject, and published from January 2000 through February 2019. The extensive search period was meant to capture the evolution of qualitative research on P4P since the publication of the IOM report in 2001, including early health care professional experience with P4P as well as evolving experience and attitudes. Search terms included: P4P AND qualitative research or qualitative study. We excluded published studies that (1) had no primary qualitative data collection, (2) focused on the perceptions of patients and caregivers, (3) were primarily hospital-wide or nursing home P4P, or (4) were dissertations, review articles, gray literature, or mixed-methods research. Literature on hospital-based and nursing home P4P was excluded to focus on

outpatient primary care settings. Primary care settings are noted in the literature to be the predominant setting for P4P programs globally. Mixed-method research, while rich in its integration of quantitative and qualitative data, is primarily focused on the integration of qualitative data with the quantitative findings. In contrast, the primary focus of qualitative studies is exploration and understanding, derived from qualitative inquiry. Because of this, mixed-method studies were excluded.<sup>32</sup> The systematic study selection process following PRISMA guidelines was followed. This is not, however, intended to be an exhaustive representation of existing literature. It represents a saturation of themes the authors believe reflects the body of research in existence.

A total of 235 de-duplicated articles were identified for title and abstract review. Articles were excluded for the following reasons: 13 were systemic reviews, 13 did not have a primary qualitative component, 162 were not applicable, and 10 had too narrow a focus on disease state or special population. Thirty-eight articles were eligible for full text review for inclusion in this metasynthesis. Out of that total, 11 were out of scope (not clinician perspective, focused on hospital, or complex systems), 1 was a meta-analysis, 4 were process or evaluation-focused, 2 were mixed methods instead of primarily qualitative, and 1 could not be accessed.

## Data Extraction and Quality Assessment

Following the final selection of articles, each article was read several times to gather a full understanding and identify overall themes. Data for this analysis consisted of each study as represented in published articles. A description of the articles is summarized in Table 1. Quality appraisal was completed using the McMaster University Tool, a quality appraisal tool that comprises 17 domains to assess the rigor of qualitative studies. The quality of each study is summarized in Supplemental Appendix A.<sup>27</sup> Articles were included from a range of developed and low-income countries to capture the depth of perceptions across different contextual and institutional settings.<sup>19</sup> There has been some exploration of how context influences P4P, and a recognition that despite the different contextual settings in which P4P is implemented, there are common characteristics of program design (e.g., which providers are being incentivized, what is being incentivized, and how is it being incentivized), and equally mixed results. This variation creates an opportunity to identify common themes related to health care professional engagement focusing on perceptions of P4P as the phenomenon of interest across diverse settings.<sup>8,9,17,24</sup> In low- and middle-income countries, nurses and other health care professionals were often included in the incentive programs. In the United Kingdom, practice nurses were given specific roles within the QOF to engage in chronic disease management. While physicians are often the target of P4P incentives in the United States, some programs extend incentives across the organization, which allows practice leaders to determine the incentive scheme and influence P4P program implementation. As a result, perspectives of physicians, other health care professionals, and practice leaders were included in this qualitative metasynthesis.

## Data Synthesis and Analysis

Data for this analysis consisted of each study as a whole as represented in the published article. This approach acknowledges that each study is an interpretive act in which positions, concepts, data, and analysis are chosen by the authors to be included. Metasynthesis is an interpretation and synthesis of interpretations. Members of the research team independently reviewed the final studies and met to discuss emerging concepts, identify key themes and subthemes. Each study was reviewed to understand purpose, methods used, specific health care professional or health care leader perspective, setting, and qualitative findings. Thematic content of each study encompassing the entire content of the study, including participant quotes and authors' interpretations was included.

After initial discussion of emerging concepts with the research team, coding of each study was completed by the primary author to identify themes and subthemes related to health care professional or administrative/leader perspectives

on P4P. Authors met to discuss the emergence of descriptive themes and review a compiled list of coded text by descriptive themes and subthemes. The discussion and comparison was an iterative process. A written audit trail of observations and decisions was maintained by the first author. After comparison of identified themes and subthemes, categorization and interpretation of concepts across studies allowed us to synthesize concepts and identify analytic themes. Team consensus was reached through discussion, diagramming, and completion of a comparative analysis table for full abstraction of major themes and subthemes. A reciprocal translation table (Supplemental Appendix B) was completed to map the emerging themes to the primary studies.<sup>28,31</sup> Translation of our key-concepts from one study to another enabled corroboration of emerging themes and led to a rich framing of our concepts. The research team discussed the reciprocal translation process and emergent themes to answer these questions: Was there coherence of our findings across the studies?; What was the meaning of the emerging concepts to better understand health care professional perceptions of P4P?; and how could the findings deepen our knowledge of factors that impact health care professional engagement in the setting of incentive-based payment models?

## Results

A total of 20 studies were included in this metasynthesis (Table 1). Table 1 provides details related to the time period of program implementation since the inception of P4P in the early 2000s (early, evolving, and routinization), as well as the program design as described by the authors of each article. Nine articles were focused on studies based in the United Kingdom,<sup>34,35,39,40,42,43,45-47</sup> 7 articles in the United States,<sup>33,37,38,48,49,51,52</sup> 1 article each in Tanzania,<sup>36</sup> Malawi,<sup>44</sup> France,<sup>50</sup> and the Netherlands.<sup>41</sup> Twelve articles focused on physicians, nurses, and health care professionals, 5 articles focused on physicians, one of which also included practice executives, 2 articles focused on practice executives/leaders, and 1 article focused on nonphysician health care professionals. The articles span from 2006 to 2019 with sample sizes ranging from 13 to 59 and a total number of participants across all studies totaling more than 836. The majority of the studies focused on primary care or family medicine, 1 article focused on general internists, 1 article explored physician organization leaders' reflections on primary care and specialty care and the 2 studies from the African continent focused on maternal health (In the United States, the term primary care provider [PCP] is often used to describe a physician working in the primary care setting. They can also be called an internist, a family practice doctor, or simply a provider. In the United Kingdom and other countries, the term GP is often used. The titles were not changed for this study. If available, the health care professional or clinic role is attributed to the quotes). Eighteen of the studies were qualitative descriptive in design, and 2 studies used an ethnographic approach.

**Table 1.** Description of Studies.

Authors	Study purpose perspective time period of implementation	Country program design	Study design	Methods	Participants	Summary of findings
Bokhour et al <sup>33</sup>	An investigation of practice perspectives in physician groups regarding P4P. Quality-focused programs. Perspective: practice executive Timing: early implementation	United States P4P program design: Massachusetts Rewarding Results Initiative. Financial incentives based on multi-payer report card	Qualitative, descriptive	Audio-taped 35-minute semistructured phone interview; Thematic analysis of the transcripts, developing coding scheme based on repeated reading of on an open-coding method.	28 individual practice executives representing 25 provider organizations	Quality incentives were more aligned with physicians' clinical goals than utilization of incentives. Performance monitoring and feedback may be enough. Physicians already provide quality care. Marked variation in how incentives are shared with providers, which influences the power of the incentive.
Campbell et al <sup>34</sup>	To explore the beliefs of family physician and nurses about how P4P influences family health services. Perspective: family physician and nurses Setting: early implementation	United Kingdom P4P Program design: QOF 2004 initially, 146 quality targets related to clinical, organizational and patient experience indicators—reduced to 135 in 2006.	Qualitative, descriptive	Digitally recorded, semistructured interview; constant comparative method for data interpretation; key-concepts identified using open-coding method	21 physicians and 20 RNs in 20 nationally representative practices across England	Quality targets improved patient care, encouraged patient outreach, and focus on prevention, enhanced chronic disease management by RN staff. Financial reward improved morale for MDs but not RNs. Some sense that targets focused patient interaction on measurement rather than patient issues, lack of clarity of long-term effects of performance monitoring.
Cheraghi-Sohi et al <sup>35</sup>	To explore post-2004 views and experiences of salaried GPs postimplementation of the QOF. Perspective: GPs Setting: routinization	United Kingdom P4P Program design: QOF. GPs allowed to opt out of extended hours, salaried or principle GP, increase use of practice nurses for chronic disease management, use of templates for data collection, introduction of internal peer review and surveillance.	Qualitative, descriptive	Semistructured interviews with 23 salaried GPs conducted during a 2-year period; Recorded and transcribed; Key-concepts and themes emerged and created codes that were agreed upon by larger team.	23 salaried GPs from 17 practices across 11 primary care trusts nationwide. All but 3 had only worked in salaried role; 3 had previously worked as GP principals.	QOF successful in improving and standardizing clinical care; risk for unintended consequences; Most of participants said they believed they had been fairly compensated for role and recognized difference with GP principals reflected the different level of responsibility. Many looked to evolve into partner roles.
Chimhutu et al <sup>36</sup>	To explore the perceptions and experiences of health workers with P4P bonus distribution in the health system context of rural Tanzania Perspective: Nurses and other health care professionals Setting: early implementation	Tanzania P4P program design: Tanzania plus international donor supported. Incentive payments to staff (percent to medical and nonmedical) plus for facility improvements. Reward for attainment of performance target with threshold. Incentive paid out biannually.	Qualitative, descriptive	Semistructured interview; recorded and transcribed; thematic analysis	32 interviews with administrators and health care workers from 11 health care facilities in Rufiji district. Six focus group discussions with RCH staff, other clinical staff and nonclinical staff	Both RCH and non-RCH staff believed the P4P program was unjust. Perceived unfairness affected work motivation, undermined teamwork across departments, and created tensions in the social relations at the health facilities.

(continued)



Table 1. (continued)

Authors	Study purpose perspective time period of implementation	Country program design	Study design	Methods	Participants	Summary of findings
Culhane-Pera et al <sup>37</sup>	To identify PCP perspectives on quality metrics, financial incentives and impact on patient care at SN and NSN clinics. Perspective: Primary care physicians and nurse practitioners Setting: Evolving Implementation	United States P4P program design: Mandated Minnesota quality measure and reporting system for foundation of P4P and value-based payment.	Qualitative, descriptive	Targeted key informant interviews followed by focus group; recorded and transcribed; thematic analysis with participant feedback elicited	4 key informant interviews with 4 family physicians and 3 focus group discussions with 10 PCPs. All were family physicians with experience working at both SN and NSN clinics.	Aligning payment with current quality metrics could exacerbate health disparities. Incorporate PCPs' perspectives in measure and program development.
Damberg et al <sup>38</sup>	To explore care delivery changes among physician organizations exposed to a value-based P4P program and identify challenges in working to improve value. Perspective: physician organization leaders Setting: evolving implementation	United States P4P program design: California IHA value-based payment P4P. Full or professional risk capitation. Shared savings based on quality, TCOC and resource use.	Qualitative, descriptive	Semistructured interviews; recorded; thematic analysis	One or more senior leader from each of 40 participating physician organizations in California	Provider organization leaders identified cost reduction activities, care redesign, financial incentive structure, and challenges to improving value in P4P.
Grant et al <sup>39</sup>	To observe and explore the impact of the QOF on existing clinical hierarchies within practices Perspective: GPs, nurses, managerial staff Setting: early implementation	United Kingdom P4P program design: QOF. Single weighted capitation formula (the "global sum") plus P4P accounting for 20-25% U.K. Practices' income based on performance measured against 140 centrally defined quality indicators.	Qualitative, ethnography	Two interlinked ethnographic studies in England and Scotland; Fieldwork iterative, drawing from quantitative and qualitative data; 48 formal audio-recorded interviews; observational work included field notes that were analyzed with the interview transcripts; Feedback elicited from practices as validation.	Two practice sites in England and 2 practices sites in Scotland; 48 interviews with care team members from each clinic.	QOF increased contractual authority over general practice by incentivizing practice redesign and quality. All 4 sites employed new practice teams and reorganized the role of nurses; shifted decision-making dynamics to create "hierarchies of appropriateness"; Upward usurpation
Hackett et al <sup>40</sup>	To investigate whether professionals' experience of a local scheme in 1 NHS differed from that of the national QOF in relation to the goal of reducing inequalities Perspective: GPs, practice nurses, practice managers Setting: routinization	United Kingdom P4P Program Design: QOF plus 2008 locally developed P4P reflect local needs and how the programs impact inequalities. Incentive payments to practices for meeting minimal, mid, and max target threshold.	Qualitative, descriptive	Retrospective, semistructured, face-to-face interviews were digitally recorded. Thematic framework approach to analysis. Data initially coded deductively to prespecified areas, codes emerged inductively, interviews continued until no new codes were identified.	38 primary care professionals from 16 general practices and 6 locally-derived P4P. Professionals in developing local indicators. Practices identified according to practice population socioeconomic profiles	Providers said the contentious nature of P4P was not reduced with local implementation, no clear benefit to locally-derived P4P. Professionals from "affluent and deprived" populations believed the P4P legitimized their intrinsic motivation. Tensions were exacerbated at 3 levels: patients and professionals, MDs and RNs, and between practices that served affluent and deprived populations.

(continued)

**Table 1. (continued)**

Authors	Study purpose perspective time period of implementation	Country program design	Study design	Methods	Participants	Summary of findings
Kirschner et al <sup>41</sup>	To explore general practices' experiences with P4P in primary care in the Netherlands Perspective: GPs and practice nurses Setting: early implementation	The Netherlands P4P program design: Voluntary pilot P4P for clinical care, practice management and patient experience. Benchmark with tiered thresholds. Bonus 5 to 10% of practice income.	Qualitative, descriptive	Semistructured interview; recorded and transcribed; content analysis	Participants from 29 general practices—in 28 practices the GP was interviewed, 2 included a practice nurse and in 1 practice, researchers only interviewed the practice nurse.	Feasibility of implementing the P4P program questioned due to time commitment, feedback discussed in team settings, bonus considered a stimulus, prioritizing incentivized care identified as an unintended consequence. Labor-intensive positive focus on quality improvement Almost all interviewees emphasized the value of piloting to identify unintended consequences, 4 potential consequences: measure fixation, tunnel vision, misinterpretation, and potential gaming.
Lester et al <sup>42</sup>	To explore family physician, nurse, and staff views on piloting quality indicators with an emphasis on unintended consequences of 13 new quality indicators Perspective: GPs, practice nurses, practice managers Setting: early implementation	United Kingdom P4P program design: QOF 2009 New quality indicators piloted. Focus on potential unintended consequences.	Qualitative; explorative descriptive	Semistructured, in-person in the practice interviews. Topic guide developed from a priori questions. Analysis: open coding, initially inductively, merged into categories.	57 family practice professionals in 24 representative practices across England.	
Lester et al <sup>43</sup>	To obtain a long-term perspective on QOF from GPs and primary health care teams before memories of working in a pre-pay-for-performance era became less reliable Perspective: GPs, practice nurses, practice managers Setting: routinization	United Kingdom P4P program design: QOF. 87 of 142 indicators clinical could account for 20% pay for a profit-sharing GP (70% profit-sharing; 30% salaried).	Qualitative, descriptive	Semistructured 1-hr interviews by 2 experienced researchers with a topic guide piloted with 2 practices prior to study start; audio-taped and transcribed and coded separately with discussion on disagreement until consensus; data collection continued until theoretical saturation.	23 practice sites agreed to participate; 47 individuals interviewed; 26 GPs, 13 practice managers, 6 nurses, and 2 administrative staff	Routinization of P4P into primary care work; impact of P4P on medical professionalism—some GPs prioritize incentivized care and reduced clinical autonomy; Evolution of P4P in a primary care setting.
Lohman et al <sup>44</sup>	To explore how PBF impacted health workers' motivation in the context of the Malawian Results-based financing for maternal and newborn health perspective: Nurse midwives, nurses, medical assistants, and clinic officers Setting: early implementation	Malawi P4P Program Design: PBF targeting district health management team and health facility, conditional cash transfer for patients. Reward for attainment of performance target related to adherence to treatment standards for maternal care.	Qualitative, descriptive embedded in a larger impact evaluation	In-depth interviews with health workers directly involved at 1 and 2 years after the start of the intervention conducted in English with semistructured interview guide; deductive and inductive coding with individual perspective at the level of analysis; Analyst triangulation independent coding by first and second authors with development of analytic framework; emerging interpretation discussed with all authors	Health facilitates across all 4 districts; 12 in 2014, 14 in 2015, Purpose sampling 1 to 4 workers at each site based on availability and practice size.	PBF motivates health workers to perform better in their jobs—more than just the prospect of earning extra income. Perceived weakness of the income and contextual limitations impact the effectiveness of the program. Ability to be successful and sense of accomplishment and purpose at work strong motivators.

(continued)

Table 1. (continued)

Authors	Study purpose/perspective time period of implementation	Country program design	Study design	Methods	Participants	Summary of findings
McDonald et al <sup>45</sup>	To explore the impact of financial incentives for quality of care on practice organization, clinical autonomy, and internal motivation of doctors and nurses working in primary care. Perspective: GPs and practice nurses.	United Kingdom P4P program design: QOF: 2004 General Contract between GPs in primary care and the central government. Individual physician and organization-level performance metrics and financial incentives.	Qualitative: ethnographic case study	Observation of practices over a 5-month period after the introduction of financial incentives for quality of care introduced in the 2004 GP contract. In addition, interviews and some analysis of documentation.	12 GPs, 9 nurses, 4 health care assistants and 4 administrative staff	Broad support for P4P scheme, increase use of templates, new methods of surveillance. Attitudes positive although more intensive surveillance regimen increased discontent. More work but more autonomy for RN staff. Most doctors did not question the quality targets or implications on their own clinical autonomy
Maisey et al <sup>46</sup>	Setting: Early Implementation To understand the effects of a large-scale P4P scheme (QOF) on professional roles and the delivery of primary care in England Perspective: GPs and practice nurses	United Kingdom P4P program design: QOF: 146 indicators of quality across clinical care, practice organization, and patient experience.	Qualitative, descriptive	In person, semistructured digitally recorded. Analysis using a framework analysis approach, discussion of emergent codes, and thematic framework.	24 clinicians: 1 GP and 1 practice nurse each from 12 practices across England.	Increase team work and coordination on incentivized conditions but not for nonincentivized conditions, less patient-led focus, increased RN workload but also increased autonomy. Overwhelmed by policy initiatives.
Norman et al <sup>47</sup>	Setting: early implementation To explore some effects of the British P4P model on GPs' principles and practice, which may contribute to issues related to financial incentive modalities and quality of primary health care services in low- and middle-income countries Perspective: GPs	United Kingdom P4P Program design: QOF. Incentive payments based on performance targets in clinical care, practice organization, and patient experience.	Qualitative, descriptive	In-person, semistructured interviews at interviewee location. Recorded and transcribed, thematic analysis using constant comparison model.	13 GP educators and 13 GP leaders working in academic medicine across the United Kingdom.	Historically, family practice seen as holistic care, not the biomedical model—P4P changing this. Continuity of care has declined. Leads to deskilled physicians and fragmentation. May lead to treating to the target at the patient level.
Powell et al <sup>48</sup>	Setting: routinization To identify the unintended, negative consequences of PM systems for patients and develop a conceptual framework of hypothesized relationships between PM systems, facility-level variables, and unintended negative effects on patients. Perspective: Physicians, nonphysician practitioners, intake nurses, and clinic leaders	United States P4P program design: VHA national clinical performance measurement system	Qualitative study using dissimilar cases sampling	Semistructured in-person interviews lasting 60-90 minutes using guide developed by review of the PM literature. Qualitative analysis software used to apply codes, top codes were identified inductively, subcodes within the top codes.	59 participants from 4 VHA facilities—including members of the primary care staff and facility leaders. Facilitates chosen based on size and performance on an index of primary care clinical PM scores.	Three reported negative consequences for patients: PM can lead to inappropriate clinical care; decrease provider focus on patient concerns and patient service; and compromise patient education and autonomy

(continued)



**Table 1. (continued)**

Authors	Study purpose perspective time period of implementation	Country program design	Study design	Methods	Participants	Summary of findings
Powell et al <sup>49</sup>	To identify and describe potential ancillary benefits of performance measures as perceived by primary care staff and facility leaders in a large U.S. health care system Perspective: Physicians, nonphysician practitioners, intake nurses and clinic leaders, facility leaders, and quality officers Setting: routinization	United States P4P program design: VHA performance measurement system. 41 primary care clinical measures. Incentive-based physician payment structure based on quarterly report at the provider, facility, and regional level.	Qualitative, descriptive	Semistructured interviews; recorded and transcribed; organized into thematic categories	59 primary care staff and facility leaders at 4 VHA facilities	Local performance measure implementation can increase patient knowledge and motivation, which can improve performance. In addition, increased communication and greater satisfaction with care. Providers experience increased pride on performance and confidence that care is organized around evidence-based medicine.
Saint-Lary et al <sup>50</sup>	To explore the ethical tensions arising in GPs' profession linked to the introduction of P4P in France Perspective: GPs Setting: early implementation	France P4P Program design: CAPI. Voluntary program introduced 2009 sought to achieve quality objective with cost neutrality. 16 performance indicators.	Qualitative, descriptive	Two focus groups; recorded and transcribed; inductive thematic analysis with triangulation	Two focus groups—the first was 6 GPs exposed to P4P who signed a CAPI and the second comprised 8 GPs who had not signed contracts.	All participants concerned about potential conflict of interest and loss of patient autonomy, those not participating worried about adverse selection. Financial incentive viewed as insufficient.
Teleki et al <sup>51</sup>	To identify possible barriers to the successful application of financial incentives by exploring physicians' opinions of and experiences with pay-for-performance programs Perspective: physicians Setting: early implementation	United States P4P program design: California Preferred Provider Organization health plan P4P on a range of clinical and financial measures (clinical quality, access, generic prescribing, and electronic information exchange). Incentive bonus was up to 4% of a physician's salary.	Qualitative, descriptive	Two focus groups plus 1-hr interviews using structured protocols; Open-ended answers grouped into summary categories; 2 researchers who conducted interviews coded using codes arrived at through review of interview summaries and discussion.	Two focus groups: 1 for generalists and 1 for specialists that comprised 12 physicians per group; 25 interviews physicians from California—16 from the program pilot area and 9 from the rest of California	After 1 year of program implementation, most physicians were unaware of the program, had no knowledge of their performance scores and how they compared with peers, and were uncertain about whether they had received bonus money for their performance. None of the physicians indicated that the program had changed practice behavior.
Wharam et al <sup>52</sup>	To assess perceptions of general internists and P4P program leaders regarding how to implement fair and effective P4P. Perspective: general internists and P4P program leaders Setting: early implementation	United States P4P program design: Participants from a variety of P4P programs	Qualitative, grounded theory	Semistructured interviews with program leaders lasting 30-45 minutes. Focus group audio-recorded discussions with internists after a standard P4P presentation lasting 60-90 minutes. After a coding validation exercise on the initial transcript, thematic analysis used to code.	76 general internists from 6 regions of the United States. High-level leaders of 9 major insurance and coalition P4P programs.	Internists emphasized gradual and cautious approach to P4P, using measure validity. Program leaders implement early and learn. Protect vulnerable populations risk adjust, measure improvements in quality rather than absolutes.

Note. QOF = quality outcomes framework; RN = registered nurse; GP = general practitioner; RCH = reproductive child health; PCP = primary care provider; SN = safety net; NSN = nonsafety net; IHA = Integrated Healthcare Association; TCOC = total cost of care; NHS = National Health Service; PBF = performance-based financing; VHA = Veterans Health Administration; CAPI = Contract for Improving Individual Practice.

Four themes emerged from this qualitative metasynthesis and reciprocal translation (Supplemental Appendix B): (1) Positive perceptions of the value of performance measurement and associated financial incentives; (2) Negative perceptions of the value of performance measurement and associated financial incentives; (3) Perceptions of how P4P programs influence the quality/appropriateness of care; and (4) Perceptions of the influence of the P4P program on professional roles and workplace dynamics.

## Theme I: Positive Perceptions of the Value of Performance Measurement and the Associated Financial Incentive

A P4P program by definition has identified performance measures and associated quality targets or benchmarks that determine the incentive or penalty the provider or organization will receive. The intent of the P4P program in England is to “reward quality of care . . . , improve data capture and care processes and improve doctor’s working conditions.”<sup>34</sup> The assumption that the performance measures/quality targets are of value and will impact the quality of care and can be impacted by a health care professional’s or an organization’s actions is critical to the success of a P4P program.

### Quality Targets Improve Patient Care Processes

Across all studies, a significant number of participants reflected that quality targets included in P4P programs improve patient care.<sup>33,34,38,41-45,47,48,49,52</sup> Physicians in one study noted that the quality targets had improved care by focusing attention on certain clinical activities.<sup>34</sup> A clinician noted that “[quality measures] are important because they do help to improve [care], at least we think they help improve, health . . . .”<sup>37</sup> Another study participant reflected that quality target feedback is important to show the clinical care performance. A GP remarked, “I thought I was doing well, but now I get more insight into what happens.”<sup>41</sup> Providers also said that the target measures provided motivation and direction. A GP noted:

But without a doubt, most GPs are now motivated to perform well on certain quality issues, particularly around secondary prevention. And I think that’s great. I mean it wasn’t there before—there wasn’t any quality, it was all about quantity.<sup>45</sup>

There was a sense of disbelief at the individualistic way of practicing medicine before P4P quality targets. One GP said:

I’ve got a few friends whose dads are GPs, who are now taking over their practices, and they tell me how terrible their dads run their practices . . . . When I look back at some of the diabetic care [before the QOF] . . . . And I think it does make sure that those GPs work to a certain standard.<sup>43</sup>

A clinic nurse noted:

It’s benefiting the patients, that they don’t get missed, they don’t slip through the net, they get their medicines reviewed, they get their blood tests done, they’re kept on the optimum treatment.<sup>46</sup>

Many respondents also noted that performance measures and quality targets are based on evidence-based medicine.<sup>34,38,39,42-44,46</sup> Respondents said quality targets enabled practices to standardize clinical care based on the evidence, which created a sense of pride. There was, however, some skepticism in the congruence between quality targets and the nature of working in primary care, a feeling that the measures/quality targets did not always keep up with the evidence and that the real world of medicine requires a gray area. One GP said:

I think I would definitely make it less black and white. I mean, the ranges are good in terms of, you know, like the HbA1c where you hit a range. But sometimes medicine isn’t like that. Maybe you, you know, maybe more QOF indicators should be slightly more grey.<sup>43</sup>

### Alignment With Professional Values and Intrinsic Motivation

Professional motivation refers to an “individual’s degree of willingness to exert and maintain an effort towards organizational goals.”<sup>53</sup> Intrinsic motivation is characterized by the individual’s sense of autonomy, mastery, and purpose.<sup>54</sup> Intrinsic motivation has been noted as a significant driver in physician behavior, given the ethos for patient health and well-being. As illuminated in the studies included in this metasynthesis, professional values and intrinsic motivation apply to not only physicians but many health care professionals, including nurses, midwives, and assistants.<sup>55</sup>

Study participants noted that physicians and nurses were motivated to provide good quality care and that the P4P programs legitimized their intrinsic motivation to improve outcomes for their patients.<sup>33,34,36,37,40,44,50-52</sup> “Personally, the incentives are just an addition, but my spirit is to help people. Nursing is a calling. So incentives, no incentives, I do my work the same,” said one nurse/midwife.<sup>44</sup> Other health care professionals were motivated by the wake-up-call the P4P programs provided because it revealed the discrepancy between the type of care they were providing and what they knew they should be doing and, in some cases, thought they were doing. “I think because it largely focuses on things with we should be doing anyway, it’s just an additional motivation to make sure that we are practicing good practice,” said one GP.<sup>45</sup>

There was, however, significant concern noted about physicians’ autonomy to make clinical decisions and their control, or lack thereof, of patients’ decisions about their care that might negatively influence performance measurement, such as refusing a recommended screening colonoscopy.<sup>33,36,40,43,51</sup> Some physicians identified a need to regain control by modifying clinical targets based on individual

patients, enabling the gray area of care delivery that is often enabled by physician clinical autonomy. “The more templates that get introduced, it takes away the clinician’s freedom and that sort of rapport that you can build with a patient is much more difficult when you have to go through set questions,” said one GP.<sup>43</sup>

Financial incentives and competition are 2 extrinsic factors that may impact health care professionals’ intrinsic motivation. Competition itself was noted to be a strong positive driver of behavior change that did not appear to impact the health care professionals’ intrinsic motivation.<sup>33,34,37,38,40,44,49,51</sup> Competition was noted, both within a clinic and across clinical settings, to have a strong impact on participants. “I think that GPs, and doctors by nature are competitive, and so one wants to get all the brownie points that one can . . .,” said one GP.<sup>34</sup> “It does feel a bit like a competition with other surgeries. I don’t know how others feel but I wouldn’t like to come in last in our locality,” said one practice manager.<sup>40</sup>

One study participant noted the importance of success regardless of the program goals to ensure income, potentially impacting intrinsic motivation, but for others, money was seen as an “in addition to” motivator along with recognition and respect. Physicians and other health care professionals reported improved morale from financial incentives.<sup>33,34,41,44,50,51</sup> Incentivizing for quality was seen as better than incentivizing for utilization and was more acceptable.

I think the idea of a quality incentive is probably easier to swallow than the previous financial incentives that were offered to us. In other words, the quality of care seems to be a common goal among the physicians, and now we are incentivized by the insurance companies to perform on quality measures, whereas in the past, it was more of a controversy as to whether the incentive was to get the patient out of the hospital faster or perform fewer tests, said one practice executive.<sup>33</sup>

Although the literature cites the potential tension between intrinsic motivation to provide quality care and external influences such as financial incentives and competition on health care professional behavior, this was not the perspective of many study participants.<sup>56,57</sup>

## **Theme 2: Negative Perceptions of the Performance Measurement and the Associated Financial Incentive**

### *The Performance Measures as a Measurement of Quality*

Concern was raised about the validity of performance measures and quality targets as a measurement of quality.<sup>33-35,37,45,47,51,52</sup> Respondents noted that what is being measured does not necessarily represent quality or might be inconsistent with physicians’ definitions of quality. There was a suspicion of the

ability of measures to reflect quality of care and a recognition of the need to define value. “Quality is so much more than this [quality target] could ever get at, for me. Because quality is continuity of care. It’s that I know my patients. That they know me. That they trust me. That I trust them.”<sup>37</sup>

In addition, there was concern noted about the credibility of the performance measurement across most of the articles.<sup>33,34,36-39,41-46,51,52</sup> Respondents reflected concern about data accuracy, both in recording and reporting as well as concern about data used from third-party sources, such as health plans. One practice executive noted: “The difficulty is in the measurement. It’s how you measure. What are the measures? Are the measures valid for consumers? Are the statistics, are they done correctly? Are they shown correctly?”<sup>33</sup> There was variability in use of measurement or benchmark feedback, and some respondents reported that they do not use feedback, while others said accurate and timely data with feedback and comparisons would help improve practice.<sup>33,51</sup>

### *Unintended Consequences: Box-Checking, Measure Fixation, and the Potential for Gaming*

One consistent theme was that P4P led to box-checking and a fixation on measures that created tension in practice.<sup>36,40,42,43,45,47</sup> “So I think if this is going to become a tick-the-box exercise it might be that the question will be pushed at an inappropriate time, the wrong moment for the sake of some points,” said one GP.<sup>42</sup> Another respondent noted, “the boxes were checked.”<sup>37</sup> Nurses were often delegated the role of checking the box. Within this domain, respondents lamented the increased role of health information technology and the intrusion on clinical practice and the provider-patient relationship.

I feel actually I am looking at the patient less than I used to, which is a shame . . . I have to say to them, I’m sorry, I’ve got to look at the computer as well and type in while you’re talking to me. (a practice nurse)<sup>34</sup>

A GP noted:

I think if anything the patients with a QOF-able disease are the ones who probably suffered because instead of talking to them we look at our computers and look out for our little red boxes that tell us we should be doing something.<sup>46</sup>

In addition, a consistent concern raised by health care professionals was the unintended consequences of developing programs that incentivize certain clinical focus areas over others.<sup>42,43,47,48,51,52</sup> The potential for P4P programs to drive inappropriate care was noted as a potential unintended consequence. “There are a lot of these providers that are really, really pushed by these performance measures and just add on drugs to treat the performance measure,” said one GP.<sup>48</sup> Some study participants said that providers might

be pressured to focus on the incentivized clinical care activities instead of addressing patient concerns. “Occasionally a patient will come in with a complaint and the providers will make sure all of the alerts are answered rather than addressing the complaint per se,” said one physician.<sup>48</sup> A GP noted

there have been 1 or 2 occasions where I went through the cholesterol, the depression, the CHD, and everything else and “Oh that’s wonderful I’m finished now,” and the patient said, “well what about my foot then?” [And I said,] “what foot?”<sup>34</sup>

Computerized clinical reminders based on performance measures were noted to potentially cause harm in one study. One physician said,

I have some very healthy people in their 20s who all of a sudden come up as supposedly needing pneumococcal vaccine and I’m like ‘no they don’t.’ Unfortunately, the nurses get that one and so they’ll just go ahead and give [it].<sup>48</sup>

Finally, potential for gaming the system was identified as a potential unintended consequences, although most respondents identified other practitioners rather than themselves as potentially changing measure submissions or excluding certain patients from the measurement.

### *Financial Incentives Have No Impact on Care Delivery*

Some participants believed that financial incentives had no impact on care delivery, either because the incentive itself was not enough to incent change, there was a lack of awareness of the incentive, or the perception that incentives in and of themselves do not change clinical behavior.<sup>33,38,42-44,51</sup> The amount of the incentive as well as the distribution of incentive dollars affected participants’ perceptions. “We’re paid to do it anyway. Why is it that there’s extra money given when you’re given a wage to do it anyway? I don’t know why a carrot should be dangled. Personally, I find it immoral,” said one practice nurse.<sup>40</sup> In Malawi, a clinical officer involved in a P4P program noted, “With the current economy, someone cannot motivate me with 7.600 Kwacha [around \$22.30] in 6 months. But it is psychological torture to be told to work extra hard for something and that something is almost nothing.”<sup>44</sup>

Some respondents were angered by the idea that they needed a financial incentive to drive quality and some resented the notion that the incentive implied quality care was not already being provided.<sup>33,51</sup> “Although many physicians supported the idea of a merit-based bonus, they expressed significant anger and suspicion of financial incentives for quality.” Many viewed the incentive dollars as money already owed, a bonus for quality care already provided.<sup>33,34,41,46,51</sup> “Good physicians are just good physicians . . . they do what’s best for the patient,” said one practice executive.<sup>33</sup>

## **Theme 3: Perception of How P4P Programs Influence the Quality and Appropriateness of Care**

### *The Unintended Negative Consequences of P4P on Health Equity*

The negative consequences of P4P on health equity were addressed in multiple studies.<sup>35,40,45,52,58</sup> A key concern was the credibility of the quality targets and relevance across populations. Some industry members said that clinics with more resources can put more toward necessary clinic redesign, which leads to success with P4P. In addition, preventive measures that require patient activation might be harder to obtain when populations have significant social and medical complexity. A provider working in a safety net clinic noted:

[In] the populations we serve . . . it’s harder to get patients engaged in their disease processes . . . when [they’re] trying to survive . . . all other things just fall to the side, including management of [their] chronic disease. It’s poverty . . . it’s how close is a real grocery store, that’s affordable . . . how safe is the neighborhood.<sup>37</sup>

A practice executive noted, “if we don’t reward performance [*and*] improvement, we may exacerbate the disparities you are seeing in poorer neighborhoods that are without infrastructure.”<sup>52</sup> It was noted that practices working with vulnerable populations might be penalized for the complexity of the patient population.

It’s not fair [P4P] based on quality metrics]. You’re penalizing the clinics that are trying to work with people and do the best they can, from where they [patients] are coming from, for the [realities] of people’s real lives in the real world that don’t conform to what somebody has decided it’s what they should do and then we are being penalized for that? It’s not fair . . . because you know: no money no mission.<sup>37</sup>

### *Disrupted Patient-Centered Care and Devaluing the Patient’s Agenda*

Several studies noted that P4P disrupts patient-centered care, contributes to a loss of holism and continuity, and disrupts the doctor-patient relationship.<sup>34,35,38-40,42-48,52</sup> Numerous study participants noted exacerbated tensions during patient consultations as well as a decreased focus on patient concerns and less continuity of care. Many P4P programs incentivize same-day appointments and after-work hours to ensure access but that might mean that patients work with multiple providers. In addition, the segmented nature of performance measurement-driven chronic disease management meant that patient care might be assigned to multiple team members.

In the sense that it’s still a patient presenting to the doctor with a problem, yes, it is the same as it always was. The difference is



that it is more likely that the patient and the doctor won't know each other, said one GP.<sup>34</sup>

Another GP noted, "We have become so measurement-oriented, it's becoming more difficult for the patient and the doctor to have a genuine personal relationship around the patient's own circumstances."<sup>47</sup>

In addition to the loss of patient-centered care described in studies, some P4P program participants noted a consistent concern about the loss of patient autonomy and devaluing a patient's agenda.<sup>34,36,37,45-50</sup> Health care professionals noted that patient concerns or preferences were often marginalized. A significant concern pertaining to patient autonomy was the inability for providers to note that patients declined care. As one registered nurse (RN) noted, "the system does not let you refuse . . . it's like you're trying to break [the patients] down and eventually make them give in and say, 'oh okay, I'll take that flu shot.'"<sup>48</sup>

#### **Theme 4: Perceptions of the Influence of the P4P Program on Professional Roles and Workplace Dynamics**

Across the diverse program settings and despite the variation in program design, respondents in most studies identified similar themes related to changing roles and workplace dynamics.

##### *Performance Measurement and Associated Financial Incentives Creates Tension Amongst Team Members*

The nature of most P4P programs requires a reorganization of practice structure to enable performance monitoring, workflow redesign, and quality improvement activities to ensure success. There is often a designated individual in the clinic to monitor team performance, which can be seen as surveillance and policing and creates tension—especially when nurses or other health care professional staff are surveilling physicians.<sup>34,39,40,42,47-49</sup> A clinical lead noted,

I will go in and privately speak to them and explain why it's important . . . I did do one area of naming and shaming . . . that did work quite well . . . it's personal, isn't it, that you don't want to be seen as the GP who's falling down in a particular area?<sup>45</sup>

According to one GP, "there is an environment and ethos of increased surveillance and performance monitoring."<sup>34</sup> A practice nurse at the same clinic echoed that "it feels more like I am being watched. It's a little bit like big brother—you've not ticked the boxes."<sup>34</sup>

Several respondents noted a sense of distrust that was prompted by financial incentives.<sup>46-48,58</sup> In a P4P program in Tanzania that was meant to incentivize care delivery in the appropriate setting, certain areas within the health system

were prioritized to receive incentive payments over others. "The program is good, but the problem starts when the money is distributed. My opinion is that the money should be shared equally to all because all workers have their own responsibilities," said one staff member.<sup>36</sup> The financial incentive and the real and perceived fairness in the distribution of the incentive influenced team relationships. "I don't get any monetary returns from my doing my part and I've heard . . . that providers do," said one RN, who added, "To me it's like I'm helping the provider get a bonus—but it's part of their job anyways, that's not fair to me."<sup>48</sup> While explaining why the money was retained by the organization and not divvied out, a practice executive noted, "the expectation is that it's a group effort. Whether it's, you know, the secretary or it's the physician."<sup>33</sup>

##### *Tension Over Changing Professional Roles*

A particular tension was noted from the physician perspective about the changing professional role in the setting of P4P.<sup>33,34,39,42,44</sup> Altered roles and responsibilities led to what some called a change in identity and some described as a reduction in professionalism as team members assumed tasks historically completed by physicians, such as chronic disease management. In addition, new managerial roles emerged and often practice administrator authority was enhanced, shifting some of the historical authority once held by physicians to other team members. One GP also noted how the use of skilled team members can affect a physician's confidence:

There's a little bit of deskilling there. I mean, we have a respiratory nurse so she sees all of the asthmatics and does all of the routine checks on them . . . But a lot of the asthmatics tend not to see [a GP], which is a good thing because it means they'll be better controlled. But on the other hand, I feel like, 'Oh an asthmatic patient [when I see them]! What do I do?'<sup>34</sup>

The redistribution of work from doctors to nurses, who were given expanded roles and autonomy was noted by many study participants.<sup>34,35,38-40,42</sup> The introduction of P4P programs created opportunities to delegate responsibility for chronic care management and monitoring of the tests, tools, and questionnaires necessary for success with performance measurement. Nurses reported their expanded role led to increased continuity for patients as well as increased role autonomy, and increased workload and stress. One practice nurse noted that the increased autonomy was worth the increased workload and stress: "It makes a more fulfilling job . . . it's something I've got responsibility or ownership of and that to me is a rewarding thing."<sup>46</sup> In some programs, however, there was a continued sense of physician ownership and accountability. As one GP said, "Nurses are very good at doing things and at following criteria and they will run the clinics, but the overall medical control will always come back to us."<sup>39</sup>



A related but distinct subtheme that emerged was that of the ownership of the P4P program and emergence of a practice or program champion.<sup>38-40,42</sup> Participants noted the importance of a practice champion, who claimed ownership of P4P program implementation, facilitated engagement across team members and made the necessary tasks or changes to clinic processes more coherent. "It's having someone that's responsible for it, their baby, they've got an interest in it, and they will drive it through," said one practice manager, who added, "That's what you need if you want to achieve with these things you need a champion, someone who will champion it for you."<sup>40</sup> This role was filled by a variety of care team roles, enabling new opportunities for responsibility and authority not previously possible in the traditional model of care delivery.

### *Changes to Workflow and Care Delivery: Evolution and Adaptation*

Experience with changes to clinic workflow and care delivery influenced participant engagement in P4P programs.<sup>33,34,36,38,40,42,44,45,47,52</sup> Participants noted the standardization of care and the ways incentives altered practice operations and standardized approaches. "Most physician organizations worked to reduce practice variation."<sup>38</sup> Practices required infrastructure changes, and a significant investment of time and resources to achieve new and changing quality targets. Practice considerations of what change was feasible as well as the continued concern about practices ability to reallocate resources for necessary care redesign was noted.<sup>33,37</sup> Difficulties with data extraction from electronic medical records was also cited as a burden. Overall, participants noted that efficient processes and an adequate infrastructure to assess those processes should be in place before the P4P program starts.<sup>52</sup>

Evolution and adaptation over time emerged as an essential construct that influences health care professionals' experiences with P4P programs. Health care professionals learned to adapt.<sup>42-44,49</sup> Concerns about changes to clinical practice, altered roles and identities, movement away from holism were counterbalanced by a sense of more structured and planned care, more knowledgeable patients, and development of programmatic reporting and feedback that was appreciated by participants. As one nurse noted: "[Previously] it was very much more individualistic, depending on which doctor they first pitched up with as to how their care pathway would go . . . some might be ignored completely."<sup>46</sup>

### *Physician Input: Value of Including Physicians in Program Development*

Provider participation in program development and implementation was a consistent theme across multiple studies.<sup>33,38,39,41,43-45,47</sup> Respondents noted that provider buy-in

is easier to gain when the program designers ensure relevance of the measures and feasibility of implementation.

So I think there is an opportunity to actually help define what quality is and . . . of determining a methodology. And actually taking a stand on what it is that we feel we should be evaluated on, not [leaving P4P development to] some outside organization. (a general internist)<sup>52</sup>

Many believed that physician engagement and involvement in program development would influence success of the program. A GP noted:

I think that's tremendously important that GPs feel they have some form of participation in generating indicators. I think it completely changes your relationship from feeling it's some sort of diktat handed down from on high to thinking we're all involved in saying what's gonna be the best way of driving change.<sup>43</sup>

## **Discussion**

This metasynthesis of qualitative studies examines health care professional perceptions of P4P programs in clinical practice. Much of the research done to date to evaluate P4P has been quantitative in nature and has not always included health care professionals' perspective or attitudes about the P4P programs. This has led to a gap in the research, a question that this metasynthesis explored: What are health care professional perceptions of P4P in clinical practice? This metasynthesis has illuminated key factors that influence perceptions, engagement, and behavior in organizations engaged in P4P programs. Health care professional perceptions are complex and multifaceted. Although many P4P programs in the United States are focused on physician participation, this metasynthesis shows the complexity of engagement and perspectives across health care professionals. These accounts create a rich illustration of the perceptions of P4P in practice. Advanced practice providers, nurse midwives, nurses, practice leaders, and practice administrator perspectives provide a comprehensive lens from which to examine the impact of P4P on the traditional care paradigm.

Quality measurement and associated financial incentives have been used in health care systems globally and have fundamentally changed the way primary care, and indeed much of health care is organized and delivered. P4P programs can incentivize care based on evidence, and incentivize practices to develop systems for tracking patient care in a consistent and comprehensive manner to ensure no one falls through the cracks. Health care professionals saw value in measurement-driven practice based on evidence, sharing an expectation that the measures are in fact based on evidence and a distrust that government or health plans can determine the measures without provider input. Although the movement away from individualized medicine to practice with systems of checks and balances was perceived to have a positive impact on quality of

care delivery, the rigidity of P4P programs and potential to limit physician autonomy and decision making with patients must be noted. In addition, as we continue to grapple with the concept of value in health care, it is duly noted that what we can measure does not always equate to quality, value, or better health as defined by the patient.

There were consistent themes across all studies identifying the potential and real unintended consequences of P4P programs. For example, the patient encounter has changed and bears further exploration to address comments that P4P programs may influence providers to disregard nonincentivized patient conditions, de-value patient concerns, and override patient autonomy. In addition, the focus on performance measures and standards of care might inadvertently affect practices serving the most vulnerable individuals, and the P4P programs might favor larger organizations that have more resources. Adequate risk stratification of populations, evaluation of potential impact on health disparities while designing the program, and risk-adjusted measurement have all emerged as considerations in P4P implementation.

Health care professional perspectives on the financial incentives were varied. Many were not aware of the incentive, while some believed the money was inadequate, recognized it as a bonus for a job already well-done and were insulted at the thought that quality care was not already being provided. As payment models continue to evolve and move beyond P4P toward risk-sharing arrangements, provider perceptions about the financial incentive or disincentive and the perceived potential impact on quality care must be assessed as part of program design and implementation. Physician and care team engagement as well as patient engagement is crucial. Health care leaders and administrators have a role in better engaging and educating health care professionals about financial incentives and VBP models that are meant to impact care delivery.

This metasynthesis illuminated that P4P programs have led to shifting roles, responsibilities, and resulted in altered professional identities. Certainly, in the United States, physicians are the main focus of incentive-based payment programs, which is why the value of their engagement in program development cannot be emphasized enough. In addition, the evolving role of all health care professionals is crucial to successful implementation of programs that seek to incent quality care delivery. The global lens provided by this metasynthesis highlighted the complex and remarkable nature of care team dynamics, and the resiliency and flexibility that can be prompted by change.

This metasynthesis evaluated the phenomena of P4P programs across multiple care settings, and captured an expanse of health care professional perspectives. It should be noted that the contextual factors such as the geopolitical and institutional settings as well as program design were not the focus of this metasynthesis. Rather, this exploration of P4P across low-income and developing countries (Malawi, Tanzania) to those identified as corporatist (France, the Netherlands) or

liberal countries (the United Kingdom and the United States) sought to identify shared perspectives across diverse settings, and to explore the health care professional perceptions of P4P in clinical practice as the phenomena of interest. This exploration does not negate the importance of program design and contextual factors in P4P implementation.<sup>11,19,59</sup>

Understanding health care professional perceptions of performance measures and quality targets provides insight into key factors that should be considered in developing P4P programs. Engaging health care professionals must include a process to ensure that the quality and appropriateness of care is not sacrificed in settings with performance-based incentives. Finally, more research is necessary to understand the patient perspective to truly evaluate the impact of P4P and inform the development of the next generation of VBP models.

## Limitations

Although this metasynthesis enabled exploration of health care professional perceptions of P4P, it was not always clear what perspective was being represented in the studies. While physicians play a crucial role in P4P implementation, advanced practice providers and other health care professionals are impacted by, and often the target of P4P programs. Additional primary, qualitative research focused on the complex interacting roles in settings that use incentives may further our understanding of the impact of team engagement.

In addition, there was some insight from several studies into the evolving perceptions of P4P. Since P4P has now been in place for more than 15 years in some settings, many professionals are not aware of working in any other type of environment. The articles included in this metasynthesis spanned 2 decades and might represent views from individuals with entirely diverse cultural and educational exposure to P4P. This offers an additional opportunity to assess the evolution and routinization of P4P program implementation over time. Are there perspectives that can be understood from the emerging and experienced workforce to better understand salient factors of successful program implementation? Many public and private payers have evolved significantly in terms of implementing VBP models that continue to move from volume to value. P4P is now seen as a preliminary step, and for many just a step on the path toward increased accountability and risk. Policy leaders should learn from our understanding of health care professionals' perceptions of P4P to inform further model development across the continuum of VBP models.

## Conclusion

The results from this metasynthesis highlight the fact that health care professionals can and will adapt to new models of care delivery and are not averse to incentive-based payment. However, their perceptions of the P4P model are influenced by several factors as outlined above. This metasynthesis highlighted 4 themes that emerged from synthesis of the research:

positive perceptions of the value of performance measurement and associated financial incentives; negative perceptions of the performance measurement and associated financial incentives; perceptions of how P4P programs influence the quality/appropriateness of care; and perceptions of the influence of P4P program on professional roles and workplace dynamics. Further qualitative research could be directed at care team perceptions about P4P programs, using the themes and subthemes identified in this metasynthesis to develop a conceptual framework to guide inquiry and understanding.

Physician and health care professional perception should be considered and incorporated into P4P program design and implementation. Using any type of incentive in a primary care setting without engaging the care team up front poses risks to process, provider engagement, and care team dynamics as well as patient outcomes. Using a continuous quality-improvement loop, however, would allow providers to be heard and have an active role in designing programs that improve efficiency as well as patient outcomes.

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