

Appendix A

Quality Appraisal Table

Overall rigor criteria	Credibility: Are descriptions and interpretations of participants' experiences recognizable?	Transferability: Can the findings be transferred to other situations?	Dependability: Is there a clear explanation of the research methods?	Confirmability: Were strategies employed to minimize bias?
Bakhour et al., 2006	Yes	Yes	No	Yes
Campbell et al., 2008	Yes	Yes	Yes	Yes
Cheraghi-Sohi et al., 2012	Yes	Yes	Yes	No
Chimhutu et al., 2016	Yes	Yes	Yes	Yes
Culhane-Pera et al., 2018	Yes	Yes	Yes	Yes
Damberg et al., 2019	Yes	Yes	No	No
Grant et al., 2009	Yes	Yes	Yes	Yes
Hackett et al., 2014	Yes	Yes	Yes	Yes
Kirschner et al., 2013	Yes	Yes	No	Yes
Lester et al., 2011	Yes	Yes	Yes	Yes
Lester et al., 2013	Yes	Yes	Yes	Yes
Lohman et al., 2018	Yes	Yes	Yes	Yes
McDonald et al., 2007	Yes	Yes	Yes	Yes
Maisey et al., 2008	Yes	Yes	Yes	Yes
Norman et al., 2014	Yes	Yes	Yes	Yes
Powell et al., 2011	Yes	Yes	Yes	Yes
Powell et al., 2014	Yes	Yes	Yes	Yes
Saint-Lary et al., 2012	Yes	Yes	Yes	Yes
Teleki et al., 2006	Yes	Yes	Yes	Yes
Wharam et al., 2011	Yes	Yes	Yes	Yes

Summary of Lett's Quality Appraisal

Appendix B
Reciprocal Translation Table

Synthesis and Reciprocal Translation: Health care professional perceptions of P4P in clinical practice		
Derived Analytic Themes and Sub-themes	In paper # (as listed in Table Two)	Primary Study Themes (as labeled)
Theme 1: Perceptions of the value of quality performance/target measures in practice impacts engagement		
Subtheme 1a: Quality targets improve patient care	1, 2, 6, 9, 10, 11, 12, 13, 15, 16, 17, 20	<ul style="list-style-type: none"> Focusing attention on necessary clinical activities Alignment with quality of care Data collection and feedback provide good closure for work Motivates health workers by giving them direction and goals perceived as better quality sense of pride and disbelief in individualistic non-uniform practice used in the past increased patient satisfaction and comprehensiveness of care overall support for high quality care standardization of practice as good practice
Subtheme 1b: Performance measures and Quality targets are based on evidence-based medicine	2, 6, 7, 10, 11, 12, 14	<ul style="list-style-type: none"> Improved and standardized clinical care Assume evidence-based question the evidence base of all of the measures measures don't keep up with evidence skepticism of targets due to limited evidence base sense of pride in practicing evidence-based medicine black-and-white nature of evidence-based measurement conflicts with grey area of working in primary care
Subtheme 1c: Validity of performance measures as a measurement of quality	1, 2, 4, 5, 13, 15, 19, 20	<ul style="list-style-type: none"> Validity of measures should be improved what is being measured does not represent quality measures not consistent with physician definition of quality Need to align targets with clinical goals question target relevance to patients Collecting data for a specific quality measure not the same as measuring quality health care measure at system, not provider level suspicious about the ability of measures to reflect quality of care need to define health care value
Subtheme 1d: Credibility of the performance measurement	1, 2, 4, 6, 7, 9, 10, 11, 12, 13, 14, 19, 20	<ul style="list-style-type: none"> Data not accurate recording and reporting data is inaccurate system needs to be monitored health plan data inaccurate feedback on measures not used by clinicians negative perception of new targets Feedback helpful in showing clinical care performance negative feedback hard to deal with data should be verified by an external party concern about data verification procedures hesitant to be compared on quality publicly concern about inaccuracies of the data many physicians do not try to access the data self-monitoring: accurate and timely data would help feedback and comparison to peers
Subtheme 1e: Box checking, and measure fixation creates tension	4, 8, 10, 11, 13, 15	<ul style="list-style-type: none"> Exacerbated tensions between patients and professionals due to box ticking Measure fixation: sensitive topics are prompted at inappropriate times

		<ul style="list-style-type: none"> complete computerized care reminders at each visit regardless computer technology as a distraction from patient concerns tick the box mentality reduces clinical autonomy box-ticking does not acknowledge the responsibility of the physician delegation to nurses who complete all aspects of P4P alerts, whether appropriate or not nurses delegated to box-ticking
Theme 2: Perceptions of financial incentives impacts physician and team dynamics		
Subtheme 2a: Potential for unintended consequences: Prioritize financially-incentivized aspects of care and potential for gaming	2,4,5, 6,7, 8, 9, 10, 11, 15, 16, 19, 20	<ul style="list-style-type: none"> QOF influences the agenda P4P causes tensions potential for gaming—exceptions reporting potential for data manipulation neglecting areas that are not incentivized can cause harm if clinicians focus only on what is measured Many imagined others gaming the system tunnel vision for the prioritized aspects of care treat the measure not the patient incentivize action that may not be beneficial to the patient less focus on non-incentivized conditions risk of cherry-picking patients but hard to do in reality non-incentivized patient concerns may be overpowered by incentivized clinician agenda
Theme 2b: Increased morale from financial incentives	1, 2, 9, 12, 18, 19	<ul style="list-style-type: none"> Effective agent for change Incentivizing quality better than incentivizing utilization Incentivizing quality acceptable to physicians helpful for morale in physician work/life balance bonus as a stimulus to improve quality and perform better opportunity to earn extra income to improve lifestyle P4P an effective way to incent quality anger at the idea of a financial incentive for quality resent implication that quality of care not already being provided
Theme 2c: Represents a bonus for quality care already provided	1, 2, 9, 14, 19	<ul style="list-style-type: none"> Quality care is already being provided reward for care received financial reward as acknowledgement of prior quality work bonus seen as a reward, a gift—variation in how it is used, the incentive is a gift withholding money and then giving back as an incentive or a bonus
Theme 2d: Financial incentives have no impact on care delivery: not enough to incent change, lack of awareness of the incentive, perception that incentive itself does not impact care delivery decisions	1, 6, 10,11,12, 19	<ul style="list-style-type: none"> Money distributed differently across practices, money distribution based on physician performance may be a more high-powered incentive for many the bonus was not the motivating factor the incentives do not affect clinical behavior Constant incentive re-organization is fatiguing overall the reward too little to act as a motivator Variation in structure and amount of incentive size of the scheme—concern that if incentive less than 10% it is not enough to motivate many physicians do not know what the program is or how they are being scored

		<ul style="list-style-type: none"> poor connection between quality measurement and the financial incentive
Theme 2e: Financial incentives create distrust among team members	1, 2,4,6,8,12,13, 14, 15, 16	<ul style="list-style-type: none"> Distribution of payments and perception of fairness impacts team dynamics Money retained by the organization can avoid complications of who is responsible for the good quality care Tensions between individual physician level and practice level compensation interprofessional tensions about the equity of dispersment, Nurses are resentful of limited financial benefit despite majority of work P4P doesn't provide financial incentive for those doing the most work no matter the strategy one group or another felt they were being treated unfairly flat rate is better exacerbated tensions-unfair distribution adverse consequences on primary care team dynamics— incentive discrepancy nurse resentment of physicians receiving the bonus perception of unfair treatment lead to less effort to perform job duties decreased motivation to work in departments that received less physicians don't do more work, but they get more nurse resentment of physicians receiving the bonus
Theme 3: Perceptions of the impact of P4P programs on quality/appropriateness of care creates tension		
Subtheme 3a: The unintended negative consequences of P4P on health equity	4, 5, 8, 13, 20	<ul style="list-style-type: none"> Credibility of indicators and relevance in deprived populations and locations Differences in patient populations lead to disparate quality measures non-safety net clinics have the ability to act on prevention clinics with low SDOH burden have resources clinics with high SDOH burden must deal with social complexity quality measures are based in social inequities, health equity requires new metrics context of affluent/deprived practices led to differing perspectives about P4P ethics of protecting vulnerable populations, incentivize caring for vulnerable populations, current inequitable health care system should not be reinforced with financial payments, risk for furthering the divide if populations are not considered in target development, vulnerable populations need protection/special considerations
Subtheme 3b: P4P disrupted patient-centered care: Loss of holism, continuity and the doctor-patient relationship	2,3, 6,7,8, 10,11,12,13,14, 15,16, 20	<ul style="list-style-type: none"> Exacerbated tensions within consultations, doctor-patient relationship interrupted, decreased provider focus on patient concerns and patient service, the essence of the face-to-face is unchanged, less continuity with GP, GPs have increased flexibility in terms of work-life balance, but patient care declined as a result, consultation process and competing agendas,

		<ul style="list-style-type: none"> • loss of holistic care, • Tension between documentation and patient, • continuity of care disrupted due to need for same-day access, • loss of choice who to see, • compromise: patient autonomy to decline care, • concerns about changes to clinical practice, • population-based rather than individual, • altered roles, responsibilities, and identities, • P4P at odds with patient-centered/tailored practice, • exacerbated tension P4P adds more to the consultation, • physician concerns about losing holistic care, • skewed towards P4P, • targets, focus on population-specific goals, not patient-specific, • alerts are a distraction from the patient, • treat the measure not the patient
Subtheme 3c: Loss of patient autonomy/devaluing patient's agenda	2, 4, 5, 13, 14, 15, 16, 17, 18	<ul style="list-style-type: none"> • Quality measures not aligned with how patients and clinicians define quality health care, • patients do not know about quality scores, • patient concerns are marginalized, • P4P targets a distraction from patient agenda, • Proactive attempts to achieve P4P targets at odds with patient empowerment, • more knowledgeable patients and increased patient motivation and engagement, • P4P threatens to shift the consultation away from the patient agenda, • decreased provider focus on patient concerns, • P4P improvements that inconvenience or frustrate the patients, • repetition of clinical reminders that patients refuse, • patient decision to decline not accepted by the program, • non-incentivized patient concerns may be overpowered by incentivized clinician agenda, • loss of trust, • lack of trust that the patient's autonomy will be honored
Theme 4: Professional Motivation is influenced by performance measurement and financial incentives		
Subtheme 4a: Alignment with professional values and intrinsic motivation	1, 2, 4, 5, 8, 12, 19, 18, 20	<ul style="list-style-type: none"> • Professional motivation to provide good quality care, • Measures valuable when consistent with professionals' mission to improve health, • wake-up call discrepancy of day-to-day practice and what committed to as a profession, • improving patient health as a primary motivator, • breach of professional code of ethics, • relationship of care delivery to money, • losing money is unacceptable—doctor-patient relationship has become commoditized, • Physician torn by a double agenda: patient and P4P, • Legitimized intrinsic motivation to improve outcomes, • Motivated health workers by strengthening their perceived ability to perform successfully in their job, • recognition and appreciation for effort,
Subtheme 4b:	1, 6, 7, 9, 11, 12, 13, 15	<ul style="list-style-type: none"> • Need physician input to an ensure measures aligned with clinical goals,

Physician/provider input: Value of including physicians in measure/program development and piloting programs in real world		<ul style="list-style-type: none"> • Value of internal team buy-in, • views on piloting to avoid unintended consequences, • determine effectiveness in improving quality, • MD input needed for successful program development and implementation, • need better communication between policy makers and frontline staff/physicians, • involving practice teams in developing indicators would help regain clinical autonomy
Subtheme 4c: Provider control and Clinical Autonomy	1, 4, 11, 8, 19	<ul style="list-style-type: none"> • Physician scope of control has little impact on quality targets, • Lack of provider control in achievement of targets, • patient compliance, • physicians being penalized for things outside of control, • reduction in clinical autonomy, • loss of professionalism, • regain control over clinical work through modifying indicators based on individual patients, • lack of provider control—largely dependent on patient, inadequate supportive services,
Subtheme 4d: Extrinsic motivation: Financial incentives and competition as drivers of behavior	1, 2, 5, 6, 8, 12, 17, 19	<ul style="list-style-type: none"> • Irrespective of relevance of P4P goals, physicians motivated to have high success for the practice and income, • Financial reward in deprived regions as an extrinsic motivator of adherence to targets, • Money, respect and recognition of colleagues are motivating factors in daily practice of medicine, • Physicians responsive to ratings, • Performance monitoring and competition, • competition as motivation, • positive aspects of competition amongst providers, • competition and external threats were motivations, • health competition amongst teams is motivating, p • ride in individual or organizational performance—competition is motivation
Subtheme 4e: Tension over changing professional roles	2, 7, 10, 1, 12	<ul style="list-style-type: none"> • Change in provider role, • altered roles, responsibilities and identities, • deskilling of physicians, • underlying uncertainty of the future of family medicine, • professional status in the workplace between salaried and principals (GPs) in the UK, • fair distribution of work and inclusion, • roles of the staff changing creates tension, • new managerial roles or enhanced practice admin to manage QOF, • concentration of authority for QOF decisions, • leadership roles shifting, • recreating boundaries in new program, • physicians less satisfied being the delegator to more staff, • altered social dynamics and changes within work teams in response to the motivation to perform well, • created a hierarchy with formal rules to break across the traditional barriers of control over GPs.
Theme 5: Adaptation: Requires changes to clinic processes and shifting roles/responsibilities		
Subtheme 5a:	2, 7, 10, 8, 15, 16, 17	<ul style="list-style-type: none"> • Performance monitoring, surveillance of colleagues,

Performance monitoring and surveillance of team members impacts team dynamics		<ul style="list-style-type: none"> • nurse monitoring physicians, • recreating boundaries, • surveillance of colleagues within practice, • nurses policing the P4P incentives, • surveillance of colleagues within practice a source of frustration,
Subtheme 5b: Ownership and champions of the program	6, 7, 8, 10	<ul style="list-style-type: none"> • Ownership of implementation, • practice staff champion facilitated engagement, • teamwork enhances and more coherent,
Subtheme 5c: Redistribution of work from doctors to nurses with increased nurse role and autonomy	2,6, 3, 7, 10, 6, 8	<ul style="list-style-type: none"> • Greater continuity of care by nurses for patients with chronic conditions, • Exacerbated tensions, • delegating responsibility for monitoring to RN staff, • RN more responsibility and autonomy, • nurses report increased consistency of care, • nurse-led clinics for QOF-incentivized diseases, • nurses feel empowered, • nurses have greater workload and stress—worth the greater autonomy, • role of the practice nurses in conducting day-to-day QOF template work,
Subtheme 5d: Perceptions and experience with changes to workflow and care delivery influences engagement	1, 2, 4, 5, 6, 8, 9, 10, 12, 13, 15, 20	<ul style="list-style-type: none"> • Influence on behavior in response to incentive: • promoting standardized care, • practice alterations in response to incentives, • health care systems infrastructure changes, • work required to achieve new targets, • making sure patients don't fall through the cracks, • practical implementation considerations, • differences between clinics serving safety net populations, • substantial time investment for measures of clinical care, • difficulty extracting data from the EMR, • positive changes in work environment: infrastructure, • Infrastructure needs to be in place prior to the start of the program, • concern about costs associated with care redesign and managing high-risk patients, • assume infrastructure to succeed is present before implementation begins before implementation
Subtheme 5e: Ability to adapt: evolution and routinization over time	10, 11, 12, 17	<ul style="list-style-type: none"> • Concerns about changes to clinical practice, • altered roles, responsibilities, and identities, • holism to quaternary prevention, • routinization of P4P, • more structured and planned care, • proactive planning, • more knowledgeable patients and improved patient education, • rhythm of the OOF during the year helps to structure the year, • provides practice opportunity to plan