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Research paper

Do local enhanced services in primary care improve outcomes? Results from a literature review

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ABSTRACT

Objective This paper aims to examine the role of local enhanced services (LES) as a financial incentive in improving clinical and process outcomes in primary care with a view to discussing their future in light of the Health and Social Care Act.

Methods A literature review was conducted to identify LES commissioned in the UK in any disease area and to evaluate common themes relating to their impact on outcomes. The literature review consisted of two stages: an initial reference database search (MEDLINE, MEDLINE IN-PROCESS and EMBASE) and a more general internet search. The internet search used free text augmented by a targeted search of key health organisations' websites. Data were extracted from the LES to provide information on the background and context of the LES before going on to describe the incentive structure, health and economic outcomes and limitations of the LES.

Results Although a number of LES were identified in the online search, only 14 reported any data on outcomes. These LES programmes related to 10 different disease areas, with cancer, alcohol dependence and chronic obstructive pulmonary disease (COPD) being the most common health needs. Three common factors between the selected LES emerged that appear to influence the extent of the impact on local health or economic outcomes: (1) a national framework supporting the LES, (2) existing service provision, and (3) the size of the financial incentives.

Conclusion The common themes emerging from the literature review suggest that, following the Health and Social Care Act 2012 and newly established national standards, given sufficient attention to planning service specifications, LES could continue to be important in reducing health inequalities and preparing poorly performing general practices for longer term changes directed at improving outcomes and standards in healthcare.

Keywords: delivery of healthcare, health policy, health services research, primary healthcare

How this fits in with quality in primary care

What do we know?
Economic incentives have been central in primary care policy since 2004. Local enhanced services (LES) have formed part of a wider range of programmes designed to expand service coverage and meet health outcome targets. Following the Health and Social Care Act 2012, additional financial resources in national frameworks have been offered to general practitioners for achieving improvements in health indicators.

What does this paper add?
The literature on financial incentives in primary care has tended to focus on national programmes. This paper describes a targeted review undertaken to identify the different types of LES and their role in driving health and economic outcomes. The article discusses common factors that may have influenced LES outcomes and suggests that LES may play an important role in the new commissioning system in paving the way for a higher standard of care as a short-term catalyst for developing service provision pathways.

Introduction

Economic incentives have been central to policy towards general practice since the General Medical Services (GMS) contract of 2004,[1] with the aim of incentivising providers to expand service coverage and meet health outcome targets in high-priority clinical areas. The Health and Social Care Act (HSCA) 2012 overhauled the structure of primary care commissioning and placed clinicians at the forefront of commissioning in the National Health Service (NHS). In addition to the minimum practice income guarantee, the GMS contract continues to offer general practitioners (GPs) additional financial resources for participation in the Quality and Outcomes Framework (QOF), direct enhanced services (DES) and local enhanced services (LES).[2] Since April 2013, this has been supplemented by the Quality Premium, which awards payments for achieving improvements in health indicators based on the NHS Outcomes Framework.[3]

The QOF is a national incentive scheme commissioned by NHS England through the GMS contract, consisting of payments for meeting target thresholds.[4] DES are nationally specified schemes, also commissioned by NHS England, that aim to enhance the quality of the essential, additional or out-of-hours services set out in the GMS contract; or to provide such services that are not currently included in the GMS. Unlike the QOF, DES provision is mandatory and non-participation is penalised by reductions in GPs' global sum payment.[2]

LES, commissioned for the same purpose as DES, are determined in response to local health priorities in the jurisdiction of the local commissioning body. Prior to the HSCA 2012, primary care trusts (PCTs) commissioned LES from any appropriate service provider in the local community and specified the payment structure for fulfilment of LES goals. The HSCA changed the structure of primary care commissioning and placed NHS England, a newly established arm's length non-departmental body, at the centre of the commissioning of NHS services. NHS England has the ability to commission LES, but may delegate this responsibility to clinical commissioning groups (CCGs). PCTs and CCGs jointly managed LES in the transitional period following the introduction of the HSCA.[5]

Payments for successful outcomes are common to most LES specifications, although LES may differ in the number of outcomes assessed. Some LES may entail an initial start-up payment or a closing fee.[6–10] Where the aims of an LES overlap with national directives, an LES could help a GP practice prepare for longer term changes required to meet national targets and to meet existing coverage gaps.[1] However, LES payments may be regarded as a permanent payment for an activity that may have been undertaken regardless of an incentive scheme and LES have been criticised for their complex incentive arrangements.[1]

The literature on financial incentives for performance in primary care has tended to focus more on national frameworks than on local services. The aim of this paper is to examine the role of LES as a financial incentive in improving clinical and process-related outcomes in primary care with a view to discussing their role following the HSCA 2012 reforms. The paper describes a targeted literature review consisting of a bibliographic database search and online grey literature search undertaken to identify the different types of LES that have been commissioned in the UK. The article outlines the methods used to search and identify LES programmes and discusses the common themes in their pre-HSCA 2012 role in driving health and/or economic outcomes and how this could affect their future role in the new commissioning landscape.

Methods

The methods below describe the searches for documents that met the following inclusion criteria: relating to an LES or community based service commissioned for children or adults with any medical condition and including data on relevant LES outcomes, such as uptake rates, disease prevalence, economic outcomes, health outcomes and quality of life (QOL). All publication types were considered and geography was restricted to the UK.

Searches were carried out in MEDLINE and MEDLINE IN-PROCESS and EMBASE using the Ovid SP® service provider on 24 May 2013. Search strategies combined free text terms for all enhanced services and controlled vocabulary terms for primary care and physician incentives, and are presented in Table 1. A total of 459 abstracts were identified and were screened for relevance by an experienced reviewer according to the eligibility criteria described above (Figure 1). Any queries about inclusion were discussed with a second reviewer. Where abstracts only met some of the eligibility criteria, the publication was ordered for full paper review. The references of the three selected publications were searched to identify relevant LES publications.

Because there is a large amount of grey literature relating to commissioning in the NHS, a targeted search of online sources was undertaken to identify relevant information that was unlikely to be found in bibliographic databases. The targeted search was conducted between 29 May and 5 June 2013 on the websites of the local and national health organisations listed in Table 2. The search was undertaken in the transitional period as the HSCA 2012 came into effect. Few of the PCT websites searched were fully functional and some had been recently decommissioned. In such cases, an archived version of the website on the UK National Web Archive was searched for relevant LES documents. This search was supplemented by using free text terms based around LES disease areas and outcomes in Google to identify relevant publications (Table 1). LES-related documents were only included and extracted if outcomes of the LES were reported.

Information in selected LES publications on the author, publication year, disease area, commissioning organisation, year of introduction and aims were extracted to provide some background on the LES. The incentive structure, outcomes and limitations of the LES were also extracted to provide further information. These were then qualitatively synthesised to examine any common factors that influenced the outcome of an LES.

Results

A total of 14 selected LES programmes were identified and described in 14 publications. Of these 14 relevant documents, three were retrieved using the database search and 11 through the online search. The materials identified through the online search comprised seven reports published by the organisation commissioning the LES, two case studies, one letter and one slide deck. Of the seven retrieved reports, two reported the outcomes and payments of the same LES and one reported outcomes of three distinct LES.[11–13] The letter obtained in the online search described the same LES as one of the documents retrieved in the database search.[6,7]

The selected LES studies are presented in Table 3. The most common disease area for the extracted LES was cancer, with three LES (all cancer types, breast cancer and prostate cancer), followed by alcohol misuse and chronic obstructive pulmonary disease (COPD). In six of the LES, the aim was to build on a national policy in the disease area. Devereux[14] built on an earlier DES for cancer, which provided baseline information and raised awareness of referral guidelines. Keep Well/Enhanced Data Group[13] stated that the purpose of the three LES for diabetes, stroke and coronary heart disease (CHD), respectively, was to extend GMS QOF into important health-related behaviour areas. Both LES for COPD were supported by QOF targets for diagnosing and managing the disease.[6–8] Falzon used data on COPD prevalence from the national QOF database as a measure of locally observed diagnoses and reported that an objective of the LES was to ensure that practices provided a quality of care in line with the National Institute of Health and Care Excellence (NICE) guidelines.[6]

Table 4 presents the incentive structure, outcomes and limitations of the identified LES programmes. The type of payments made or a description of the incentive structure in place were extracted for eight out of 14 LES, although the RCGP publication did not state the specific amounts paid to GPs. Mookherjee[15] did not report details of the incentive structure, although a description of payments made was found under a brief profile of the Lewisham LES on the Alcohol Learning Centre website.[10]

Four of the eight LES incentive structures extracted entailed a retainer fee or start-up cost, varying from £600 to £2000.[6–10] Only two LES were reported to include a closing fee (£250 to £600) for concluding the service.[8,14] The two patient referral LES for cancer, Devereux[14] and Wright, reported similar amounts paid per patient of £75 for each completed Cancer Patient Referral Analysis,[14] and £80 per patient transferred from a urology department to a general practice for follow-up.[16]

Table 1 Search strategy

Source, date searched	Search strategy/terms
MEDLINE and MEDLINE IN-PROCESS 24 May 2013	((direct$ or local$ or national) adj2 enhanced service$).ti,ab. (local$ adj2 commission$ adj2 service$).ti,ab. (nhs or national health service).ti,ab. enhanced service$.ti,ab. 3 and 4 *Physician Incentive Plans/ *Physicians, Primary Care/ec [Economics] *Preventive Health Services/ec [Economics] *Community Health Services/ec [Economics] or/6–9 exp Great Britain/ 10 and 11 1 or 2 or 5 or 12
EMBASE 24 May 2013	((direct$ or local$ or national) adj2 enhanced service$).ti,ab. (local$ adj2 commission$ adj2 service$).ti,ab. (nhs or national health service).ti,ab. enhanced service$.ti,ab. 3 and 4 *general practitioner/ *preventive health service/ *primary health care/ *health service/ *community care/ or/6–10 economics/ 11 and 12 exp United Kingdom/ 13 and 14 limit 15 to abstracts 1 or 2 or 5 or 16 limit 17 to english language conference.so. 18 not 19
Google search 31 May – 5 June 2013	Local enhanced service Local enhanced service audit Local enhanced service outcomes Local enhanced service report Local enhanced service results Local enhanced service assessment Local enhanced service commissioned Local enhanced service Scotland Local enhanced service agreement Local enhanced service influenza Local enhanced service cancer Local enhanced service screening Local enhanced service cancer Local enhanced service infectious disease Local enhanced service communicable disease

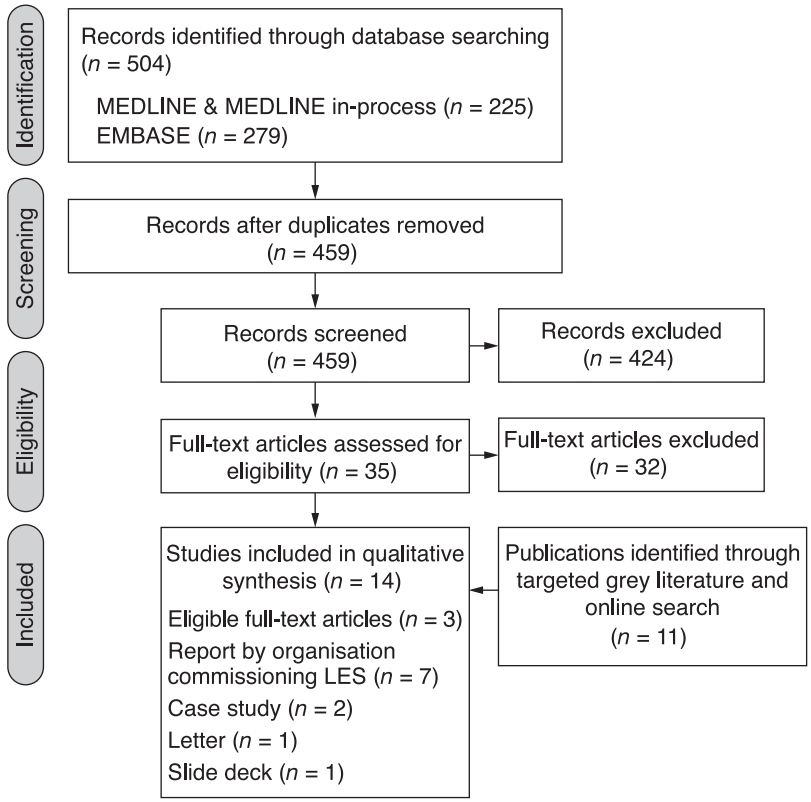

Figure 1 Literature flow diagram

Table 2 Organisations searched

Organisation	Region
PCT	Ashton, Leigh and Wigan; Barking and Dagenham; Barnet; Barnsley; Bassetlaw; Bath and North East Somerset; Berkshire East; Berkshire West; Bexley Care; Birmingham East and North; Blackburn with Darwen; Blackpool; Bolton; Bournemouth and Poole; Bradford and Airedale; Brent Teaching; Bristol; Brighton and Hove; Bristol; Bromley; Buckinghamshire; Bury; Calderdale; Cambridgeshire; Camden; Central and Eastern Cheshire; Central Lancashire; City and Hackney Teaching; Cornwall and Isles of Scilly; County Durham; Coventry Teaching; Cumbria; Darlington; Derby City; Derbyshire County; Devon; Doncaster; Dorset; Dudley; Ealing; East and North Hertfordshire; East Lancashire; East Riding of Yorkshire; East Sussex Downs and Weald; Eastern and Coastal Kent; Enfield; Gateshead; Hastings and Rother; Mid Essex; North East Essex; South Tyneside; Sunderland; West Essex
CCG	Airedale, Wharfedale and Craven; Ashford; Aylesbury Vale; Barking & Dagenham; Barnet; Barnsley; Basildon and Brentwood; Bassetlaw; Bath and North East Somerset; Bedfordshire; Bexley; Bolton
Scottish National Health Board	Ayr and Arran; Grampian; Greater Glasgow; Highland
Other	Department of Health; NHS; NHS England; British Medical Association; RCGP; NHS Institute for Innovation and Improvement

Table 3 Selected LES studies

Study ID	Disease area	Organisation commissioning the LES year	Primary aim of LES
Devereux, 2009	Cancer	NHS Tayside, 2008–09	To identify and build upon good practice to ensure that quick access to specialist services and support at primary care level are available to those with cancer; and optimise urgent referrals for those most likely to have cancer with possible reference to the Scottish Referral Guidelines for Suspected Cancer (2007).
Quinn, 2009; Whatley, 2010	Breast cancer screening	NHS Doncaster, 2009	To gather baseline data on Gypsy Traveller women aged between 50 and 70 years and test communication methodologies and develop an action plan to encourage the uptake of breast cancer screening.
Wright, 2004	Prostate cancer	Worthing NHS Trust and Worthing PCT, 2004	To relieve pressure on urology departments in follow up of patients with stable uncomplicated prostate cancer or raised prostate-specific antigen with negative biopsy by carrying out follow up in primary care.
Coetzee, 2011	Alcohol misuse	Wandsworth PCT, 2008/09	To deliver treatment for mild to moderate alcohol dependency within a primary care setting.
Mookherjee, 2007	Alcohol misuse	Lewisham PCT, 2006	To introduce opportunistic screening for alcohol misuse in primary care; increase referrals and awareness among primary care staff of alcohol services; motivate and empower staff to use brief interventions.
Falzon, 2011, 2013	COPD	Kensington & Chelsea PCT, 2008–09	To build on activities already provided by practices under the QOF and to further enhance treatment and care to ensure that disease management is optimised and that disease progression and adverse outcomes are minimised; and to ensure that all practices in Kensington and Chelsea are reviewing COPD patients as per NICE guidelines and that COPD patients are accessing all the services they require to be optimally managed in line with the guidance.
NHS North Central London, 2013	COPD	Islington PCT, 2012/13, 2011/12, 2010/11	To support and improve COPD clinical leadership and learning in practices (Indicator: COPD 1); identify patients with undiagnosed COPD (COPD 2); improve patient self-management and increase referrals to pulmonary rehabilitation (COPD 3); improve management of people with very severe COPD (COPD 4).
Royal College of General Practitioners* [Year not reported (NR)]	Care homes	NHS Sheffield, 2008	To enhance the level of GP care available to residents in care homes to help reduce avoidable hospital admissions and provide a proactive approach to developing residents' healthcare goals.
Keep Well/ Enhanced Services Data Group, 2010	CHD; diabete; stroke	NHS Greater Glasgow and Clyde, 2008–09	To extend clinically based GMS QOF into the all-important health-related behaviour areas, using the practice nurse annual interview to screen for problems and support onward referral to appropriate services who can provide ongoing support for individuals.

Table 3 Continued

Older People's Mental Health Steering Group, 2011	Dementia	NHS Doncaster, 2009	To identify patients early so a timely referral could be made to the Memory Clinic for appropriate diagnosis and intervention if required.
Sohal, 2008	STI	City and Hackney PCT, 2002–05	To increase diagnosis of STIs in general practice.
Grant* [Year NR]	Smoking cessation	NHS Greater Glasgow and Clyde, 2008	To support smokers who have relapsed during past NHS quit attempts.

Table 4 Aims, outcomes and limitations of LES

Study ID	Disease area	Description of payments/incentive structure	Outcomes
Devereux, 2009	Cancer	Practices received: £75 for each completed Cancer Patient Referral Analysis submitted by a general practice. £250 for participating practices for completing summary report audit and concluding work.	98% of NHS Tayside practices participated in the LES and 97% completed a summary report. Improved quality referrals and faster process, improved efficiency. Delays in referral process identified and local solutions developed. Improved coordination of care and improved communication in practice team. **Limitations** 28% of practices felt that the LES did not represent good value for money as they had already been referring appropriately. 27% were unsure of the value of the LES. Retrospective review impacting on the ability to get notes and recall detail as well as medical records after patient's death. Need more introduction and guidance to using it; preparation was onerous and LES was time-consuming.
Quinn, 2009; Whatley, 2010	Breast cancer screening	Not reported.	16 women were identified as being aged 50–70, only one of whom had attended screening and this equates to take-up on invitations to breast cancer screening identified as 6.25%, compared with 73.2% national uptake and 76% Doncaster uptake rate over 2007–08. Baseline data improved, action plan was developed and telephone was identified as the preferred method of communication. **Limitations Not Reported**
Wright, 2004	Prostate cancer	Payment of £80 per patient per year; £20 paid quarterly at end of quarter patient is entered onto scheme.	Hospital-based administrative processes reduced because pathology results are now sent only to the GP. 80% of current follow-up patients elected to change when offered the opportunity to change to primary care follow-up as it is more convenient for patients. Potential to free up as many as 2000 urology outpatient appointments per year. **Limitations Not Reported**

Table 4 Continued

Study ID	Disease area	Description of payments/incentive structure	Outcomes
Coetzee, 2011	Alcohol misuse	GPs were paid: £1.50 for every patient screened. £10 for every brief intervention offered. £200 for every completed detoxification. One-off £1000 for 'signing on'.	6 of 49 practices signed up to the LES. 8 treatment episodes were encountered versus 76 in the Fresh Start Model. Completion rate, abstinence and other outcomes not recorded. **Limitations** LES payments not seen as an incentive, possibly because further development needed in service provision pathway to treat patients identified through LES.
Mookherjee, 2007	Alcohol misuse	Not recorded in document. £1000 retainer paid to each practice, project has overall budget of £10 000 for training (Alcohol Learning Centre).	18 of 32 practices that submitted data referred to Local Agencies for alcohol services – however, most practices recorded this data poorly. 167 patients were referred. 20 of 32 practices returned evaluation questionnaires. 60% of these practices gave routine alcohol consumption checks and 85% of practices recorded information electronically. 100% of practices gave advice to patients after identifying alcohol misuse. **Limitations** More systematic training and follow-up support needed for practices. Recording process needs to be simplified and clearer. Practices reported difficulties in using audit tool for screening. Five Shot tool recommended instead.
Falzon, 2011, 2013	COPD	Initial start-up payment of £1000, subject to financial clawback if achievement payment is less than upfront payment. Payment for known/ confirmed COPD patients: £80 per patient for spirometry, oximetry and full patient review. Payment for screening: £10 per patient (not given for new cases of COPD).	Based on 2005/08 trend in COPD prevalence in Kensington and Chelsea, predicted 2009 prevalence would have been 0.87%, whereas following the introduction of the LES it was 0.98%. Diagnosed COPD prevalence has continued to rise in Kensington and Chelsea PCT at a faster rate than in Westminster PCT and compared with London Strategic Health Authority (SHA) or England. The cost of screening per new diagnosis was estimated at £94 (including start-up payment). The incremental cost-effectiveness ratio (ICER) for opportunistic case-finding was estimated at £814 per quality-adjusted life year (QALY), much lower than many funded healthcare interventions. **Limitations** Political will to create appropriate structures and individual motivation for health professionals to make the diagnosis and manage the workload. Education of healthcare professionals. Access to spirometry as well as its interpretation.

Table 4 Continued

NHS North Central London, 2013	COPD	Payment for each indicator: COPD 1: £600 lump sum per practice. COPD 2: £20 per case-finding. spirometry up to max of 75 per average list size. COPD 3: £400 per average sized practice. COPD 4: £50 per patient. £600 per average sized practice for completion of audit.	Impact of 2010/11 LES: Overall recorded prevalence of COPD increased by 0.2 percentage points (April 2010 to March 2011), reducing gap between expected and recorded prevalence by 13%. Highly significant 54% increase ($P < 0.005$) in referrals to Pulmonary Rehabilitation Services in 2010/11 compared with the previous year. Interim evaluation of 2011/12 LES: 583 case-finding spirometry measurements and 226 new COPD diagnoses June to December 2011. 262 referrals to Pulmonary Rehabilitation April to December 2011 compared with 181 referrals during the same period the previous year. **Limitations Not Reported**
Royal College of General Practitioners* [Year Not Reported]	Care homes	Additional payments to GPs based on number and type of beds covered, size of payments not reported.	97% of family members agreed that the person they cared for received better care as a result of the LES and 97% of care home staff agreed that relationship with GPs had improved. In the scheme's first year, there was a reduction in emergency admissions of 6 per 100 care home beds ($\sim 9\%$) compared with the previous year, resulting in gross savings of £145 000 in one year for the 500 care home beds taking part in the LES. Reduction of 15% in number of hospital admissions from care homes in April to October 2011 compared with the same period in 2009. **Limitations Not Reported**
Keep Well/ Enhanced Services Data Group, 2010	CHD/ Diabetes/ Stroke	Not reported.	Evidence of considerable progress in achieving more even distribution of intermediate clinical outcomes as a result of LES programmes: Healthy cholesterol values range from 77.1% to 81.5% for CHD patients; 72.8% to 77.2% for diabetes patients; and 70.6% to 78.5% for stroke patients. Healthy BMI range from 22.4% to 30.4% for CHD patients; 12.0% to 18.4% for diabetes patients; and 26.9% to 36.9% for stroke patients. Although some inequality continues to persist: Proportion of smokers referred to smoking cessation services range from 13% to 61% for CHD patients; 8.7% to 63.8% for diabetes patients; and 13.3% to 60.7% for stroke patients. **Limitations Not Reported**
Older People's Mental Health Steering Group, 2011	Dementia	Not reported.	Referrals to Memory Clinic have increased almost 100% from 277 to 544 per year from 2006 to 2011. Patient numbers identified on GP registers with diagnosis of dementia have increased from 1290 to 1803 since the service commenced. Significant increase in referrals to Young Onset Dementia Service: 146 referrals and 81 assessed cases in 2010/11 compared with 97 referrals and 173 assessed cases in 2009/10. **Limitations Not Reported**

Table 4 Continued

Study ID	Disease area	Description of payments/incentive structure	Outcomes
Sohal, 2008	STI	GPs were paid: Annual retainer fee of £2000. £150 per positive STI diagnosis.	Upward trend in testing prior to LES and diagnoses remained stable throughout duration of study. Eightfold difference in the number of positive chlamydia diagnoses per 1000 practice population between LES and non-LES GPs. The number of STI tests performed in primary care increased by a third. **Limitations** The LES is not believed to have had significant effect on STI testing, reason for this is not reported.
Grant* [Year NR]	Smoking cessation	Not reported.	One month follow-up: 62.8% of patients had relapsed with the enhanced service compared with 74.1% with the basic service. Kaplan–Meier estimates show that probabilities of relapsing as a smoker are lower in the enhanced pharmacy service than with the basic service. **Limitations** Low number of patients participating in the enhanced service (148) compared with the basic service (9621); unsure whether the better outcome was due to length of intervention, dual NRT or patient having had > 1 quit attempt.

The COPD LES differed in the number and size of payments and the eligibility indicators for payments to be made. Practices participating in the LES in Kensington and Chelsea received up to £10 per patient screened and £80 per patient if a full COPD review was undertaken. For new patients screened and diagnosed with COPD, only the £80 fee was paid.[6,7] By contrast, practices in Islington had six COPD management indicators to meet with payments varying from £20 per case-finding using spirometry to £50 for improved management of each patient with severe COPD, in addition to lump sum payments of £600 for start-up and audit completion.

Thirteen LES were associated with some improvement in outcomes, seven of which were related to clinical outcomes, such as increased diagnoses of COPD, dementia and sexually transmitted infections (STIs) and improvements in health inequalities.[6,8,9,13,17] The COPD LES in Kensington and Chelsea was estimated to be associated with an increased prevalence of COPD diagnoses in 2011 to 1.2%, compared with a projected 2011 prevalence without an LES of 0.9% based on pre-LES trends in Kensington and Chelsea.[7] The LES in Islington was estimated to have reduced the gap between observed and modelled local COPD prevalence in 2010/11 by 13%.[8] By contrast, the LES for cancer-related referrals and for prostate cancer provide examples of process-related outcomes as they were believed to have made some improvements in existing processes of referrals and follow-up,[14,16] and the LES for breast cancer screening identified some baseline data for the Gypsy Traveller community.[12]

Outcomes information was poorly reported for the two LES on alcohol misuse, with a lack of baseline information in a questionnaire completed by GPs on awareness of local alcohol services in Lewisham, and only participation data reported in Wandsworth. The authors believed that practice participation in Wandsworth was low because GPs did not see the payments offered as a sufficient incentive to identify and refer patients, particularly when improvements were thought to be required in the service provision pathway for specialist alcohol services.

Low uptake among smokers who had relapsed during past NHS quit attempts was seen as a limiting factor in the smoking cessation LES in NHS Greater Glasgow and Clyde. Despite the apparent improvement in smokers' relapse rates in the enhanced service,

only 421 patients participated in the enhanced service compared with 9621 patients in the basic service.[18]

An STI LES in City and Hackney[9] was believed not to have had a significant impact on testing in 2008 despite an eightfold difference in the number of positive chlamydia diagnoses per 1000 practice populations between LES and non-LES-participating GPs. The authors suggested that the apparent success associated with the LES had likely resulted from inequalities in service provision between practices that provided the LES and those that did not that pre-dated the introduction of the LES. While authors did not believe that the LES itself had a major impact on increasing STI diagnoses, they did suggest that the service might have been useful in supporting GPs who wished to increase testing.

Discussion

On reviewing the outcomes data of the selected studies, common themes emerged that may explain the success or failure of an LES. First, having a national framework already in place may have positive spillover effects for an LES. At the time that the COPD LES in Kensington and Chelsea was initiated, the National Service Framework for COPD and a QOF indicator for COPD had placed the disease high on the NHS agenda. As national targets for COPD management were already in place, improvements in COPD diagnoses through spirometry testing in the LES may have been less difficult to implement. While the existence of a national framework could suggest that the condition was of particular clinical importance, thereby explaining increased LES activity, the combination of the financial incentives may provide greater motivation for service provision than if no national framework were in place.

Second, existing conditions of service provision may affect both the clinical and process-related outcomes of an LES. The National Dementia Strategy formulated action plans to prioritise and to improve diagnosis and care in hospitals and care homes prior to the introduction of the LES scheme, possibly encouraging the LES's outcomes of early diagnosis and referral through supporting the subsequent treatment of referred patients. By contrast, Devereux[14] stated that 28% of practices participating in the cancer referral LES believed that the LES did not represent good value for money as these practices had already been referring patients appropriately.

Third, the size of the financial incentives may also play a major role in positively influencing an LES, particularly when other factors such as existing service provision are taken into account. The payments offered to GPs in Wandsworth for providing an LES for alcohol misuse were not considered to be enough to participate and increase diagnoses of alcohol misuse disorders without improved treatment pathways and reduced waiting times for entry into specialist alcohol services. The LES resulted in a low uptake rate of six of 49 practices and insufficient data gathered on abstinence and completion rates within participating practices. The 2008 LES to enhance GP care in care homes achieved a successful process-related outcome in reducing the overreliance of care homes on emergency services for crisis management.[19] Although the size of the payments is not reported, incentivising GPs to visit care homes more regularly based on additional payments per number and type of bed covered seemingly influenced care home staff's actions in crisis management, as the number of emergency admissions, following LES introduction, fell from the previous year.

Overall, although limited, the evidence from the studies identified suggests that the success of an LES was conditional more on GPs' willingness to participate than on patients', and that GPs' inclination to participate in an LES was motivated by the existing treatment delivery hierarchy necessary to support LES implementation as well as financial incentives.

Financial incentives in healthcare have been criticised for crowding out clinicians' intrinsic motivations.[1] The HSCA has placed GPs at the forefront of deciding the allocation of healthcare resources and commissioning. These reforms were enacted in response to: (1) rising demand and treatment costs, (2) the need to improve health outcomes, and (3) austerity in public finances.[20] Whether LES have a foothold in the new commissioning structure remains to be seen.

One contributing factor to higher treatment costs is the increasing prevalence of long-term conditions in an aging population. The LES programmes identified in the review related to chronic conditions and entailed screening or periodic monitoring; suggesting that preventive LES could play a role in averting problems associated with long-term conditions and mitigate rising treatment costs. However, in an interview of 508 PCT employees, 18% of respondents doubted whether LES prioritise improvements in QOL and health outcomes for patients and believed that LES focused instead on rewarding activity.[1]

Overlap between similar goals in the same disease area under an LES and a national scheme has been criticised as paying twice for almost identical health outcomes. However, a counterexample to this criticism is the Influenza and Pneumococcal Immunisation Scheme DES,[2] which targets certain clinical risk groups with chronic conditions, but omits the following at-risk groups recommended by the Department of Health: healthcare workers, pregnant women, patients with chronic liver disease, and patients outside Wales with chronic neurological disease.[21] A LES for influenza

immunisation could be implemented to target these groups and complete any existing coverage gaps.

The increased presence of clinicians in primary care commissioning could mean that incentivising practices to provide or enhance services outside the GMS contract could rely more on appealing to clinicians' intrinsic motivation rather than the monetary-based incentive arrangements of an LES. As the GPs involved in CCG commissioning have less time to spend in clinical practice, there could be an increase in the commissioning of LES from other appropriate service providers, such as pharmacists. Alternatively, clinicians may continue to commission LES to enable practices that are otherwise constrained by resources to provide the required services, although this could lead to a persistence of inequalities in healthcare if some GPs, for example in more deprived areas, are unable to invest time themselves in advocating the commissioning of LES within a CCG.

Since 2004, the QOF has incentivised practices to participate voluntarily in expanding the coverage of certain services for clinical risk groups in return for additional payments.[22] However, in 2013–14, the total number of QOF points awarded for meeting targets fell from 1000 points in the previous year to 900 points. This may diminish motivation to extend coverage of healthcare services to clinical risk groups or even to participate in the QOF. Nonetheless, this may be offset by the universal introduction of a deduction from the global sum monthly payment if at least 150 QOF points are not achieved,[2] which may improve service provision for clinical risk groups in practices who had previously opted not to participate in the QOF.

In addition, two frameworks were introduced in order to support the drive for improved outcomes in the NHS: the NHS Outcomes Framework and the Quality Premium. The NHS Outcomes Framework contains five health and social care domains which will be used by the Secretary of State to hold NHS England to account for NHS quality and commissioning. Quality Premium payments reward CCGs for meeting four measures based on the NHS Outcomes Framework. The LES identified in the review fall under some of the domains of the NHS Outcomes Framework and Quality Premium measures, such as enhancing QOL of people with long-term conditions, reducing avoidable emergency admissions and preventing people from dying prematurely.[3,23]

LES may continue to have a role in future commissioning in providing resources to improve health outcomes in practices that are lagging behind nationally specified standards and in doing so, improve inequality in health outcomes. However, this review has identified that existing levels of service provision can influence the success of an LES. Capacity constraints in the rest of the service provision pathway were noted in Marks[1] and this is an issue that may affect poorly performing practices in particular. Whether this criticism could be counteracted by larger financial incentives is uncertain. That payments should be sufficiently large to incentivise GPs may make LES more susceptible to budget cuts. Furthermore, as they are not part of the core GMS contract, CCGs and NHS England may find it easier to withdraw this type of service provision to make cost savings within an ever-tightening public budget.

Whether LES will continue to play a role in clinical commissioning remains to be seen, although the continuation of existing national incentives and the addition of new national specifications, i.e. the NHS Outcomes Framework, Quality Premium, and the mandatory achievement of 150 QOF points, suggest that an LES with similar aims in the same disease area may be successful and could be critical in ensuring that there are no gaps in coverage of at-risk groups. Given the on-going nature of the health reforms and the justifications cited above for their enactment, LES could play an important role as a short-term catalyst in developing the service provision pathway for a higher standard of care and improved health and economic outcomes.

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