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# Impact of initiatives to improve access to, and choice of, primary and urgent care in the England: A systematic review

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## ABSTRACT

**Background:** There were ten initiatives in the primary and urgent care system in the English NHS during the New Labour government, 1997–2010, aimed at delivering higher quality, more accessible and responsive care by expanding access, increasing convenience and introducing greater patient choice of provider. We examine their impact on demand, equity, patient satisfaction, referrals, and costs.

**Methods:** Studies were systematically identified through electronic databases and reference lists of publications. Studies of all designs were included if published between 1997 and 2013, and with empirical data on the impacts above.

**Results:** Nineteen studies of ten initiatives were included. Innovations often overlapped, complicating care. There was some demand for new provision on grounds of convenience, but little evidence of substitution between services. Patient satisfaction varied across schemes. There was little evidence on the costs and benefits of new versus existing provision.

**Conclusion:** New services generated a more complex system where new and existing providers delivered overlapping services. The new provision did not induce substitution and was likely to have increased overall demand. Initiatives to improve access to existing provision may have greater potential to improve access and convenience at lower marginal costs than developing new forms of provision.

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## 1. Introduction

Internationally, health systems have pursued improvements in quality, access and responsiveness by expanding choice and widening access to providers in the last 25 years. However, evidence that greater choice widens access and improves quality is inconclusive. In Scandinavia, for example, greater choice was expected to increase competition

but robust evidence of impact is scant; the evidence in relation to primary and urgent care has largely been limited to the rate of switching between providers, with uptake highest in densely populated urban areas and dependent on the quality of information available to patients [1]. After New Labour came to power in the UK in 1997, the government similarly sought to develop better quality, more accessible and more responsive patient-centred care in the English NHS. Traditionally, there were two ways to access primary and urgent care in England: patients were registered with a general practice for all routine and non-urgent care during normal business hours; or they could attend a hospital A&E department at any time (for care that was not always clinically appropriate), leaving considerable space for alternatives. Although much attention has been devoted

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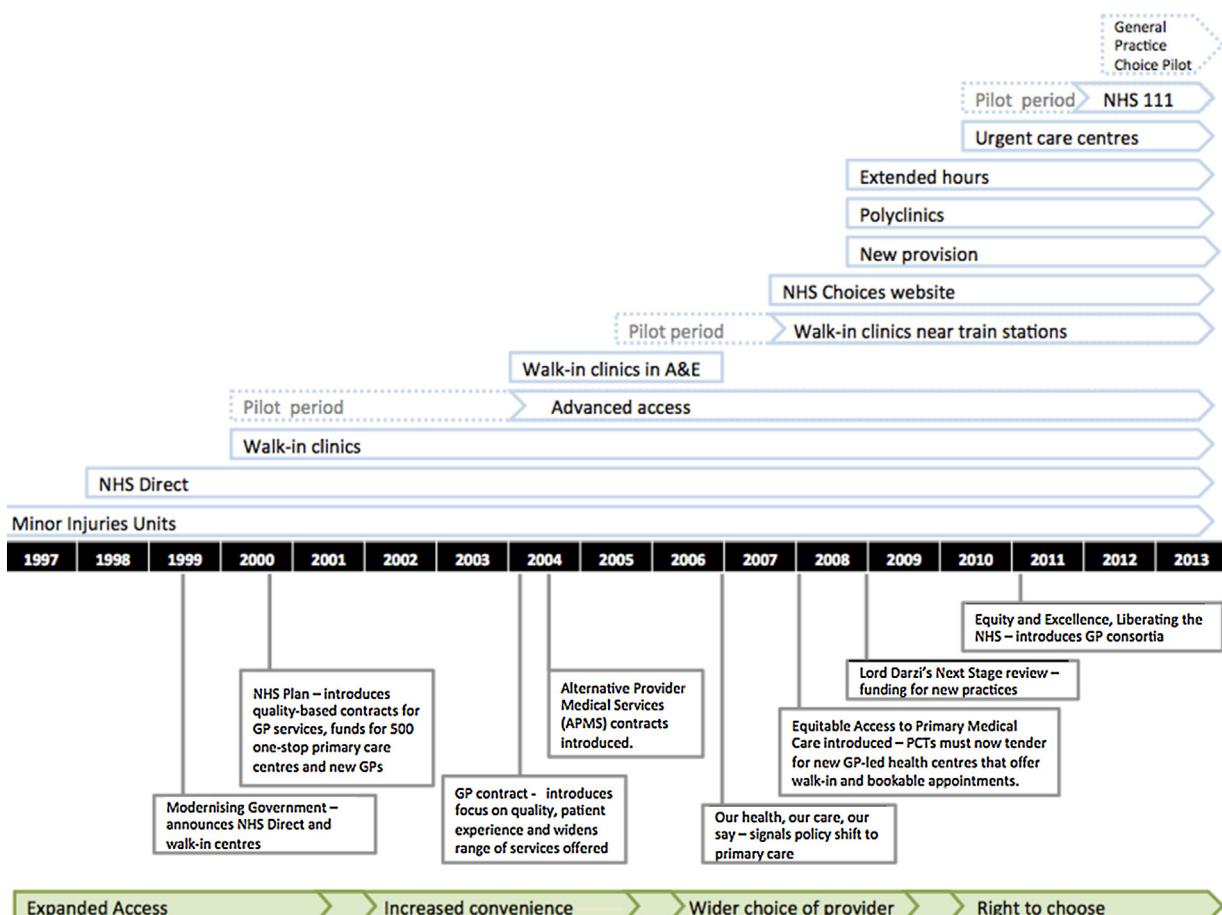


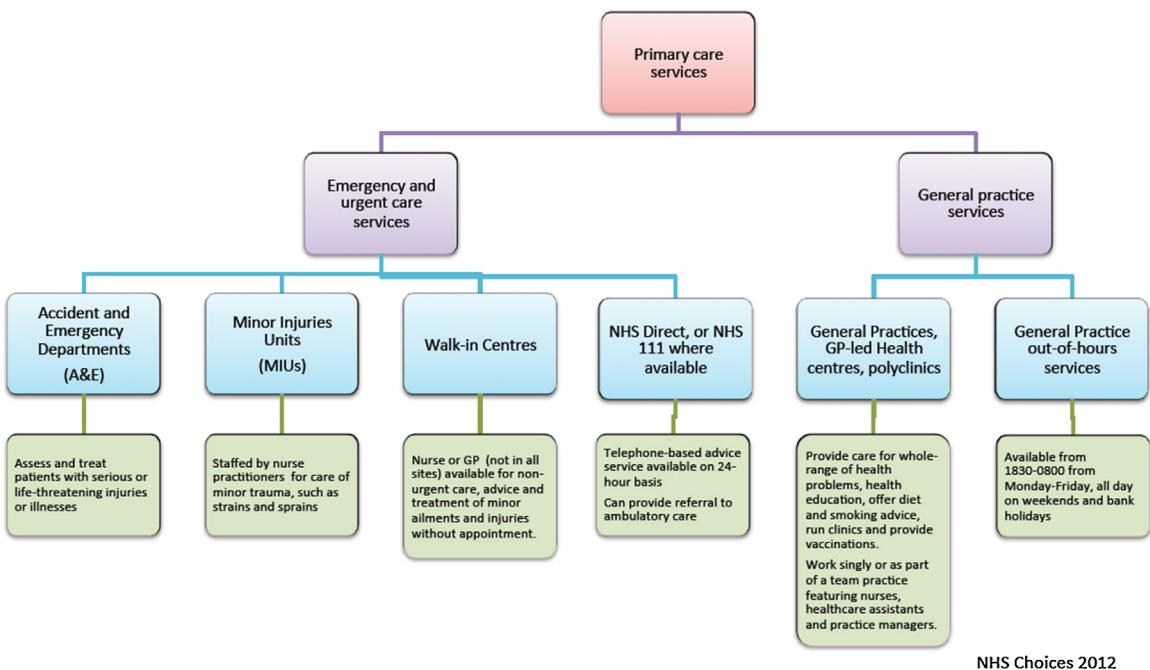
Fig. 1. Initiatives to improve access and choice in urgent and primary care in the English NHS.

to the quasi-market reforms in hospital care [2,3], reform also included ‘modernising’ primary and urgent care by expanding the range of options between traditional general practice and local A&E departments. Here the focus was on correcting perceived problems in access to, and choice of, services, such as growing public concern about timely access to general practitioners (GP) during and outside clinic hours, and the perceived inflexibility of traditional general practice, leading to inappropriate use of different sources of urgent care, especially the hospital accident and emergency department (A&E). The coalition government that followed New Labour in 2010 has continued to focus on improving patient access to primary and urgent care; notably through a pilot where patients can either register with, or use, general practices beyond the catchment area of their local general practices [4,5], with out of area registration becoming available across England from October 2014 [5] and pilots of extended general practice care including seven-day working [6,7]. Fig. 1 and Appendix 1 summarise the reforms of 1997–2013.

Between 1997 and 2004, a series of initiatives was developed in response to the perceived limitations of access to primary and urgent care in the NHS. NHS Direct (1998) opened a new telephone access route for primary care advice, especially outside practice hours. NHS walk-in

centres (1999) aimed to provide more convenient access to primary and urgent care without an appointment [8]; some were co-located with accident and emergency (A&E) departments (2004) to improve access where patients chose to attend for urgent care, and further walk-in centres were located at, or within walking distance of, commuter train stations from 2005. NHS Direct and walk-in centres established new pathways for primary and urgent care, and offered a protocol-driven service for patients who could not, or chose not to access their registered GP practice. The Advanced Access scheme (2000) intended to reduce waiting times for GP appointments. There was also investment in training additional GPs and modernising existing practices in the NHS Plan [9]. A new General Practice NHS contract (2004) was introduced to address issues in contracting and payment, standardise quality and modernise IT infrastructure. The new contract featured incentives to shorten waiting time for a GP appointment to 48-h and the Quality and Outcomes Framework (QoF) which included targets relating to levels of patient satisfaction. By 2005–2006, investment in primary medical care had increased by well over £2 billion when compared to the financial year 2002–2003 [10].

From 2007, further policies were introduced to support and offer greater patient choice, including in primary care.



**Fig. 2.** Current pattern of urgent and primary care services in the English NHS.

The NHS Choices website and GP extended hours access scheme were introduced in 2007. The introduction of PCT tendering for new GP practices and new health centres (from 2008), polysystems (2007–2009), urgent care centres (2010) and the NHS 111 service (2010), all designed to increase accessibility or patient choice of provider, rapidly followed. The 2008 *NHS Next Stage Review* outlined new opportunities for patients to choose their general practice and called for the removal of practice boundaries [11]. These plans have been taken forward in modified form by the coalition government through its general practice choice pilot of 2012–2013 [4]. Fig. 2 illustrates the current wide range of ways to access primary and urgent care in the English NHS.

This review assesses the initiatives designed to improve access and patient choice between 1997 and 2010 in terms of their impact on demand (uptake), equity, patient satisfaction, referrals, and costs, with a view to informing future policy in this area. These impacts were chosen on the grounds that they seemed likeliest to influence health system policymakers' decisions to retain, expand or discontinue initiatives in this field.

## 2. Methods

We searched government documents to develop a list of the initiatives. We then systematically searched the published literature using bibliographic databases – Google Scholar, PubMed and the King's Fund Library Database. The initial search was undertaken from June to August 2012 and updated in November 2013. We used broad search terms, with combinations of initiative names (e.g., walk-in centres or Advanced Access) and “English NHS”. We conducted a further search using search terms “primary

care reform,” “patient choice,” and “access to primary care” with “English NHS” in Google Scholar. Searches were performed in English for all fields and for all dates without restrictions. Titles and abstracts were scanned for inclusion in the review. All studies on secondary care choice of provider, patient preferences and studies outside England were excluded. Other relevant studies were identified by hand-searching the reference lists of publications identified through the systematic search. The review included studies of all designs provided that they included empirical data of the impact of any of the initiatives on demand, equity, patient satisfaction, referrals, and costs. This review is based on forty papers from nineteen studies on ten initiatives (Table 1). The studies focussed on the following initiatives: walk in centres (5), NHS direct (4), use of different forms of urgent care (3), EAPMC-led new provision (2), Advanced Access, extended hours, NHS 111, polysystems, and urgent care centres (1 each). Data were extracted onto standard forms structured according to the main impacts, above. Studies were not formally assessed for quality since the range of impacts included was diverse and different types of studies were appropriate for assessing different impacts. Given the diversity of initiatives, impacts of interest and types of study, it was decided to present the findings in narrative form, and to discuss the strengths and weaknesses of the evidence in the Discussion.

## 3. Results

### 3.1. Demand

#### 3.1.1. Demand for telephone-based services

NHS Direct, a nurse-led telephone helpline, was introduced in 1998 to address unmet demand for health

**Table 1**  
Summary of studies included.

Study (n=19)	Service	Year	Design	Specific methods	Impacts studied	Results
Munro et al., 2003 (1)	NHS Direct	1997–2002	Before and after comparative/controlled evaluation	Population surveys, analysis of clinical data and local services usage	Demand, equity, patient satisfaction, referrals	Less demand for calls to GP cooperatives and OOH services; no significant reduction in A&E attendance or demand for A&E ambulance services. Single gateway service could exacerbate inequity in population subgroups (e.g., 65+, non-native English speaking etc.). Demand rose with increasing deprivation but fell in areas of highest deprivation. Some evidence of inequity in use.
Burt, Hooper and Jessopp, 2003 (2)	NHS Direct	Sept 2001–Feb 2002	Cross-sectional ecological study/survey	Analysed pattern of NHS Direct use by area deprivation characteristics of users	Demand, equity	Demand increased with deprivation but fell for calls about children (<4 years) in areas of highest deprivation. Some evidence of inequity in use.
Cooper et al., 2005 (3)	NHS Direct	July 2001, Jan 2002	Cross-sectional ecological study/survey	Analysed pattern of NHS Direct use by area deprivation, age and sex of users	Demand, equity	Potential inequity of use among ethnic minority groups, non-native English speakers, those in ill health and lower socio economic groups.
Ring and Jones, 2004 (4)	NHS Direct	2002	Cross-sectional survey		Equity	No evidence of impact on demand or access. Patient satisfaction lowest for older patients and those in less deprived areas. No difference in satisfaction for patients seeking appointments on specific day or with preferred GP or nurse between Advanced Access and control practices.
Salisbury, Banks et al., 2007 (5)	Advanced Access	2004–2005	Contemporaneous controlled evaluation	Qualitative case studies, discrete choice experiment, cross-sectional surveys (of users, staff, non-users), and review of appointments records	Demand, equity, patient satisfaction, referrals	Demand varied across 39 sites. No significant reduction in consultations at A&E, general practice or OOH services. Higher socioeconomic groups and young men were highest users. Walk-in centres had higher rate of referral to A&E than general practice, but lower than NHS Direct. High mean costs per visit.
Salisbury et al., 2002 (6)	Walk-in centres, wave 1	2000–2001	Contemporaneous controlled with before and after evaluation	Qualitative case studies, interviews, site visits, standardised patients, cross-sectional surveys (of users, staff), quality assessment using standardised patients, time-series analyses, and analysis of clinical data	Demand, equity, patient satisfaction, referrals, costs	No significant difference in rate of emergency GP consultations, access to routine appointments, or use of OOH services between the towns. Significantly higher rates attending MIU and A&E in town with walk-in centre.
Hsu et al., 2003 (7)	Walk-in centres, wave 1	2000–2001	Contemporaneous before and after controlled/comparative study	Compared activity levels for primary and urgent care in two towns	Demand	Some substitution away from GP practices and new service use. Increase in overall demand for GP services.
Jackson et al., 2005 (7)	Walk-in centres wave 1	2000–2001	Qualitative study	Qualitative semi-structured interviews, constant comparative method of analysis		No evidence that walk-in centres resulted in shorter GP waiting times.
Maheswaran et al., 2007 (8)	Walk-in centres, waves 1 and 2	Apr 2003–Dec 2004	Cross-sectional survey	Analysed pattern of waiting time to next GP appointment to examine whether proximity to a walk-in centre is associated with a shorter waiting time for general practice appointment	Demand	Over half (55%) unaware they had attended a walk-in centre. No evidence user satisfaction increased.
Salisbury, Hollinghurst et al., 2007 (9)	Walk-in centres, wave 2	2004–2005	Controlled before and after study	Site visits, collection of routine data, and patient records	Demand, patient satisfaction, costs	Variation in demand between sites, some underutilised. Costly way to meet commuter demand for primary care. Most users were young adults, few from minority ethnic groups outside London. Unlikely to deliver value for money due to high costs and low activity levels.
Chalder et al., 2007 (9)	Walk-in centres, wave 2	Jan–Jun 2005	Cross-sectional survey	Postal questionnaire to users	Patient satisfaction	
O'Cathain et al., 2009 (10)	Walk-in centres, wave 3	2007	Contemporaneous comparative evaluation	Site visits, qualitative interviews compilation of costs and activity data. Impact of 6 walk-in centres on their local health economies	Demand, patient satisfaction, costs	

Table 1 (Continued)

Study (n=19)	Service	Year	Design	Specific methods	Impacts studied	Results
Coster et al., 2009 (10)	Walk-in centres, wave 3	2007	Cross-sectional survey	User questionnaire in two parts, filled in before and after consultation	Patient satisfaction	Overall satisfaction was high (69%) but lower (80%) than that for the first wave of walk-in centres.
Morgan and Beerstecher, 2011 (11)	Extended hours	2009	Retrospective before and after study	Compared practices with/without extended hours using national GP patient survey, 2008–2011	Demand, patient satisfaction, costs	Patient satisfaction was slightly higher in practices where extended hours were offered. No evidence this provided value for money.
Coleman et al., 2011 (12)	New provision (EAPMC)	2009–2010	Qualitative study	Two qualitative case studies, interviews and documentary analysis	Demand, costs	New practices struggled to recruit patients, some ran at a loss. Practices over-performed on high cost walk-in services.
Arain, Nicholl and Campbell, 2013 (13)	New provision (EAPMC)	Sept–Oct 2011	Cross-sectional survey	Cross-sectional survey, qualitative interviews and A&E data analysis	Demand, patient satisfaction	Patients were satisfied with their visit, opening hours and convenience. Overall satisfaction significantly associated with patients' perceptions of a convenient location.
Peckham et al., 2012 (14)	Polysystems	2010	Mixed method, including controlled before-and-after evaluation	Multi-level comparative case studies, cross-sectional surveys, comparative before and after analysis of activity and clinical data	Demand, patient satisfaction, referrals costs	No change in demand among patient groups or how patients accessed services. Some evidence of duplication. No evidence co-location provided better integration or continuity. Cost-effectiveness analysis not conducted due to insufficient data.
Carson, Clay and Stern, 2012 (15)	Urgent care centres	2009/10	Qualitative study	Qualitative interviews, site visits	Demand, referrals, costs	UCCs faced steady demand, but clinicians viewed overall productivity as low. No consistent patterns of referral across UCCs due to variation in staffing (ranging from nurse-led to more specialised clinical services). Unable to obtain reliable data to conduct cost comparisons.
Turner et al., 2012 (16)	NHS 111	2010–2011	Contemporaneous controlled before and after evaluation	Process and outcome evaluation, cross-sectional patient surveys, qualitative interviews with local stakeholders, cost-consequence modelling	Demand, patient satisfaction, referrals, costs	Reduction in calls to NHS Direct, increased use of 999 emergency ambulance services. Performed to quality standards. Did not result in higher user satisfaction. Led to limited cost savings. NHS Direct cost savings offset by costs of other emergency services.
Coleman, Irons and Nicholl, 2001 (17)	Use of different forms of urgent care	Oct–Dec 1997	Prospective controlled study	Case note review of patients triaged into low need category, cross-sectional survey	Demand	Patients attended A&E for non-urgent health problems instead of alternative providers based on previous patterns of consulting behaviour, experiences of other health services and perceptions of the seriousness of health problems.
O'Cathain, Coleman and Nicholl, 2008 (18)	Use of different forms of urgent care	2006	Prospective qualitative study	Focus groups and face-to-face interviews	Demand	Patients had limited understanding of the options available in the primary and urgent care system, and of which were most appropriate to their needs.
Knowles, O'Cathain and Nicholl, 2011 (18)	Use of different forms of urgent care	July 2007	Cross-sectional survey	Telephone survey of general population using quota sampling and randomised digit dialing	Demand, patient satisfaction	Most patients moved through the care system on advice of health professionals, sought alternate advice if health problems changed or they wanted second opinion. Satisfaction decreased as patients moved between service providers in the urgent care system.
Penson et al., 2011 (19)	Use of different forms of urgent care	Sept–Oct 2006	Prospective controlled study	Case note review of patients triaged into low need category, cross-sectional survey	Demand	Of patients attending A&E for minor conditions, 47% had previously sought advice from GP or nurse-led facility, 17% had called NHS direct. Patients classified severity and urgency of their symptoms differently than physicians.

services, provide referral to appropriate care and deter inappropriate attendances at A&E departments [8]. A national evaluation found that calls to GP cooperatives fell after the introduction of NHS Direct, but there was no reduction in A&E department attendance. NHS Direct was rarely used (6% in 2001) for unplanned (i.e. potentially urgent) episodes of care [12–14].

In 2010, NHS 111 was introduced as a pilot, telephone-based screening service, using non-clinical advisors to help individuals seeking care to reach the most appropriate provider in one region. There was a reduction in calls to NHS Direct, but an increase in the use of the 999 emergency ambulance service in the pilot. The evaluation raised the possibility that NHS 111 might not reduce use of existing emergency services, despite being designed to direct callers towards more appropriate services [15].

### 3.1.2. Demand for walk-in services

Walk-in centres, established to complement NHS Direct, were launched in January 2000; within the first year, 39 centres were opened. All were nurse-led and staffed by a combination of nurses and nurse-practitioners. GPs were employed at a small percentage [16–18]. By August 2001, the average number of monthly visits was 2556, or 82 per day, ranging from 32- to 130 per day. There was little evidence of a formal patient and population needs assessment during the bidding process [16,18]. It is possible that centres were poorly sited and/or that potential demand was over-estimated.

A study sought to determine the impact of NHS walk-in centres on demand for local primary care services by comparing two similar Leicestershire towns with and without a walk-in centre. This study found no significant difference between the daily rate of emergency general practice consultations, access to routine appointments, or use of out of hours services in the two towns, but a significantly higher rate of attendance at the Minor Injury Unit and A&E department in the town with the walk-in centre. The authors concluded that the new provision had increased overall demand. The study also revealed two subsets of patients who preferred to use walk-in centres [19]. One group attended with a specific goal in mind (e.g. to obtain a prescription for a specific asthma medication), while the other wanted professional advice or reassurance on the nature and severity of their condition, and treatment if necessary, rather than “bothering” a GP, or wasting NHS resources. While walk-in centres led to some substitution away from attendance at GP practices, they also generated new service use, in part because patients were not required to justify their need for an appointment as they would have been required to do with a GP practice receptionist or at A&E [20].

Maheswaran et al. found no evidence that a practice's distance from a walk-in centre was associated with its achievement of the 48-h GP waiting time target [21], supporting Hsu et al.'s findings that walk-in centres did not shorten waiting times for access to primary care. Chalder et al. found no statistically significant reduction in consultations at A&E, general practice, or out of hours services associated with the presence of a walk-in centre [22].

In 2004, eight walk-in centres were opened in or alongside A&E departments, to provide health services where patients chose to present themselves. Few had a distinct visible presence, only three were locally known as walk-in centres and several were rebranded existing services. Most managers and doctors interviewed thought the centres were established to reduce demand on A&E, not to increase choice of urgent care, while some sites resisted the concept of providing a more convenient-walk in service at A&E because greater accessibility could increase demand [23]. The majority of patients (79%) had presented to the A&E department before being redirected to the walk-in facility through the A&E department's triage process. Of those, 55% were unaware that they had received treatment at a walk-in centre [24]. This initiative presented an opportunity for A&E departments to meet the English NHS 4-h waiting time target for treatment or discharge, by redirecting non-urgent care to the walk-in centre, rather than meeting the policy's aims of increasing choice and access of provider. There was no evidence of a significant change in attendance rates, processes, outcomes or costs between study and comparison sites. The co-located centres were disbanded within two years of introduction because hospitals did not implement the concept in the way that national policy makers had hoped [23,25].

In 2005, seven new walk-in centres were located within walking distance of London Underground and national rail stations primarily to improve access for commuters by placing services in convenient locations that suited their daily lives. They were operated by the private sector on behalf of the NHS. All had GPs available and opened 7am–7pm daily. Most patients used this service because it was easier to get an appointment than at their own GP surgery, or because it was in a more convenient location. However, only 12% chose this service because they travelled to work through the particular train station [26]. Usage varied widely in and outside London, where half of the users were commuters, but only a sixth travelled to work by train. In London, nearly two-thirds of users were commuters, 38% of whom travelled by train to work. Signage and publicity played an important role in shaping demand for the centres' services, Centre managers reported an average of 87 visits per day (ranging from 33–128 visits per day). Centres were underutilised and were a costly way to meet commuter demand for primary care [25].

### 3.1.3. Demand for primary and urgent care

Initiatives were also developed to adapt and improve access to existing primary care services, classified below in Fig. 3.

The Advanced Access scheme of 2000 was an organisational model promoted by the National Primary Care Development Team (NPDT) to help practices meet patient demand for appointments, prepare for fluctuations in demand, and enable continuity of care between GPs and patients by allowing patients to book advance appointments [27–29]. Operationally, the Advanced Access scheme became conflated with the 48-h target in the NHS general practice contract's Quality and Outcomes Framework (QOF), set in 2004, and focussed on providing rapid appointments rather than developing a plan to improve

New form of provision	Adaptation of conventional practices in primary and urgent care	Additions to general practice
<ul style="list-style-type: none"> <li>• NHS Direct</li> <li>• Walk-in centres</li> <li>• Polysystems</li> </ul>	<ul style="list-style-type: none"> <li>• Walk-in centres – co-located with A&amp;E departments</li> <li>• Walk-in centres – located near train stations</li> <li>• Urgent care centres</li> <li>• NHS 111</li> </ul>	<ul style="list-style-type: none"> <li>• Advanced Access</li> <li>• Extended GP practice hours</li> <li>• Choice of GP pilot</li> </ul>

**Fig. 3.** Classification of initiatives to improve access to urgent and primary care services.

access and continuity equally. By 2003, 67% of practices claimed to have implemented Advanced Access, but had done so by restricting advance bookings rather than managing capacity [27,30]. A survey of 47 practices found that general practices met the 48-h QOF target by withholding 30% or fewer ( $n=28$ ), or up to 50% ( $n=12$ ), of their daily appointments to ensure that capacity was available for same-day appointments contrary to the intention of the scheme [31]. The evaluation found that practices operating Advanced Access offered appointments to patients slightly sooner than control practices, but there was no evidence that access improved greatly [29].

Equitable Access to Primary Medical Care (EAPMC) (2007) provided resources to increase GP practices and GP-led health centres in convenient locations, especially in the lowest performing quartile of PCTs, i.e. those with few GPs, low patient satisfaction with access and poor health outcomes [32]. All PCTs were required to use Alternative Provider Medical Services (APMS) contracts to tender for new GP practices and when establishing GP-led health centres that offered advance bookable and walk-in appointments to registered and non-registered patients. APMS and the EAPMC were introduced to promote choice and competition in primary care while filling gaps in provision. By October 2008, over 100 practices held alternative provision contracts. GP-led companies and social enterprises held the majority of these contracts; corporate providers held contracts for just ten new practices [33].

There is some evidence of low levels of demand for the services of APMS and EAPMC practices. Case studies of two PCTs in 2010–2011, found that many practices struggled to grow their list size, even in under-doctored areas, suggesting demand for new practices may have been overestimated. PCT staff suggested that GP-led health centres overperformed on their walk-in services but struggled to recruit new registered patients and meet list size targets and that this high use of walk-in services represented a financially “unsustainable lowering of the threshold for seeking help” rather than an expression of unmet need. A survey at one centre on patient use of walk-in services at GP-led health centres reported that patients attended for minor ailments that they could have managed on their own [34,35].

The evaluation examined the effect of NHS Direct's first year on existing NHS immediate care services and found no change in trends of use for first attendance at A&E and emergency ambulance journeys. NHS Direct did reduce use of, and prevented an increase in demand for, out of hours services [12]. The evaluation team modelled the estimated reduction in calls to out of hours general practice services

between 1998 and 2001, finding a reduction in calls to the out of hours service, but a negligible impact on the volume of demand for 999 ambulance services and hospital A&E departments. The number of patients requiring in-person consultations was constant [14].

Though new services had improved access and developed alternative pathways to care; evidence indicates that patients continued to present at A&E with minor conditions best treated in primary care. Coleman et al. assessed the projected impact of newly developed alternatives to A&E by examining why individuals triaged in A&E into the lowest priority categories had self-referred to A&E [36]. This study predicted that MIUs and walk-in centres could have provided appropriate care to 55% of patients who had presented at A&E but just 7% of these patients were likely to attend an MIU or walk-in clinic for a non-urgent health problem. A set of specific factors was closely linked to patient choice of A&E instead of an alternative provider: belief that a radiograph was necessary; patients' perceptions of the seriousness of health problems; previous patterns of consulting behaviour; and experience of other health services [36]. In 2006, Penson et al. conducted a follow-up study to ascertain why patients continued to present at A&E with minor health concerns. They found that for many A&E was not their first point of contact, or first attempt to consult health services, for the same issue. Forty seven percent had previously sought advice from a GP or nurse-led facility and 17% had contacted NHS Direct. Patients, who had previously attended A&E and were familiar with an on-site MIU, might be encouraged to present to the MIU in the future, knowing they would be close to A&E facilities if needed. This corroborated a 2001 study showing that patients classified the severity and urgency of their conditions differently from health professionals [37].

O'Cathain et al. investigated patients' understanding and experience of the widening range of emergency and urgent care, finding that patients had low awareness of the system, which limited their options in seeking care. If patients were aware of service options like NHS Direct, walk-in centres or A&E, they were unsure which was the most appropriate in different situations [38].

Knowles et al. investigated the general population's experiences of the emergency and urgent care system. Most patients entered the care pathway through contact with a daytime GP (59%), 10% contacted NHS Direct and 8% visited A&E. Most patients moved to another service because a service provider had instructed them to, they had sought alternative advice because their health problem

changed, were dissatisfied, wanted a second opinion or could not access the service they wanted originally. Satisfaction with care diminished as patients moved between service providers in the urgent care system [39].

Urgent Care Centres (UCCs) were developed to provide acute care that did require specialised A&E facilities and skills. The distinction between UCCs and MIUs is not always clear, particularly not to patients. In the only study of UCCs, involving 15 sites, they faced consistent demand, seeing 90–120 cases each day, although clinicians felt that productivity was low [40].

Polysystems were introduced to improve London's primary care infrastructure by establishing multi-disciplinary health centres with GP practice(s), community health services and elements of secondary care. There were no substantial changes in demand among patient groups, or in how patients accessed services as a result. At one site, less than 5% of patients had used more than one service during a single visit, although 92% expressed a strong preference that services be co-located. There was some evidence that the polysystem paid twice for registered patients who used its walk-in services when their preferred GP was unavailable for a booked appointment [41].

### 3.2. Equity

There was very limited and hard to generalise evidence on the impact of the initiatives on equity of access to health services by age, gender, ethnicity and socio-economic status of users. In part, this is because it is difficult to study patterns of use in relation to individuals' levels of 'need' for health care. In 2002, the National Audit Office expressed concerns that there might be inequitably low use of NHS Direct among ethnic minority groups, people with disabilities and low income groups [42]. Two ecological studies on equity of access present similar findings. One study compared South London call rates by area deprivation levels of callers' postcodes, finding that calls rose with increasing deprivation, but fell in areas with the highest deprivation [43]. Cooper et al. analysed calls to NHS Direct by area deprivation levels, and age and sex of callers in Yorkshire and the Midlands. Calls rose for working age adults (ages 15–64) with increasing deprivation, but fell for calls about children aged under 4 years in the most deprived areas [44]. Both studies found some reduction in use at the highest levels of deprivation, suggesting a degree of inequity in use.

Knowles et al. examined longer-term patterns of use in areas where NHS Direct had been established since 1998, finding that males, those 65 years or more, with low levels of education, not owning their home, not having access to a car or telephone, being hearing-impaired or not being native English-speakers were less likely to use telephone-based services. A single gateway service could thus exacerbate inequities in access in such groups [45]. Ring and Jones investigated service use among different ethnic and socioeconomic groups by sampling parents or guardians of children aged 0–5 years from two GP practices in North London. They found some potential for inequity in that patients from ethnic minority groups, those whose first language was not English, those from lower socioeconomic groups, and those in ill health were low users [46].

Walk in centres had notably high attendance rates among young men (e.g. at lunchtime) who are typically low users of primary care, suggesting that they were improving access to health services for people who might have found it more difficult to access their registered GP practice. There was some evidence from the user survey in the national evaluation that the population attending walk-in centres was of higher socio-economic status than those attending general practices in the same areas. The evaluation team suggested that these walk-in centres might improve access for those who are mobile or seeking convenient access to primary care rather than those with high needs, such as the elderly or those with chronic conditions. As a result, walk-in centres represented an investment that improved access, but not necessarily for those with the greatest need for care [16,18].

Commuter walk-in centres were introduced to improve choice and convenience, and add primary care capacity in areas where it was needed most [47]. Although the study of these centres did not directly assess the impact on equity, it found similar patterns of use to the first wave of walk-in centres. The majority of users were young adults (<45 years). There were few users over 65 years. The majority of users were white, although higher proportions of users came from minority ethnic groups in London [25].

### 3.3. Patient satisfaction and quality of care

#### 3.3.1. Patient satisfaction

Coster et al. assessed patient satisfaction with commuter walk-in centres using a questionnaire based on one used in a previous study [26]. Overall satisfaction rate was high, but lower than that reported in a previous study of walk-in centres in England (69% vs. 80%). Satisfaction was higher where a GP was present. Indeed, the lower overall satisfaction was most likely a reflection of lower levels of satisfaction with nurse-led walk-in centres, which do not offer prescriptions. Waiting times received the lowest satisfaction score with just 60% reporting as very satisfied [26]. A study investigated patient satisfaction with walk-in services at two similar GP-led health centres in Sheffield. Most patients were satisfied with their visit, the opening hours and convenience. Overall satisfaction was significantly associated with patients' perception of a convenient location. There was no significant difference between first-time and repeat service users [49].

A survey of patients registered with Advanced Access practices found a negative correlation between the proportion of same day appointments and patient satisfaction. There was an 8% reduction in the proportion of patients satisfied for each 10% increase in the proportion of same-day appointments. Patient satisfaction was lowest for older patients and in less deprived areas [31]. Despite this, there was no difference in satisfaction among patients obtaining an appointments on the day of their choice or seeing the doctor or nurse of their choice in Advanced Access versus control practices [50].

The GP extended hours access scheme (2007) provided financial incentives for practices to offer additional capacity outside 0800–1830 and at weekends. Participation was voluntary and practices were free to set additional hours

at their discretion. Morgan and Beerstecher used the GP Patient Survey (GPPS) in 13 PCTs to compare patient satisfaction in practices that did and did not offer extended hours, finding some evidence that patient satisfaction increased in practices offering any extended hours, but the difference was slight. This study was limited by its reliance on GPPS survey questions about satisfaction with opening hours as a measure of overall satisfaction with extended hours [51].

The London Polysystems evaluation found no evidence that co-location provided better integration or continuity of care between clinicians and community-based teams. At one study site, service providers still used four different IT systems, contributing to a fragmented clinical and administrative system that acted as a barrier to integration [41].

### 3.3.2. Quality of care

Grant et al. compared the quality of care in walk-in centres with NHS Direct and general practice using professional role players. Standardised calls to NHS Direct could be time-consuming and less than satisfactory; a quarter of calls (25 of 99 calls) involved call backs with a mean wait of 33 min. Overall, walk-in centres provided adequate, safe clinical care of similar quality to general practice and NHS Direct [48].

The evaluation of the pilot of NHS 111 undertaken in 2010 and 2011 found that the service met its own quality standards and was successful in directing callers to the right provider the first time. However, NHS 111 did not result in higher user satisfaction with urgent care or reduce the use of emergency services [15].

### 3.4. Impact on referrals

There were initial concerns about the appropriateness of advice and referrals by NHS Direct. Early on, one in eight callers received advice that led to inappropriate contact with health services. NHS Pathways, an assessment system containing the clinical content necessary to enable the transfer of calls to ambulance dispatch services without disconnecting patients, was developed in response to this finding [13].

Grant et al. found that walk-in clinics and NHS Direct referred a higher proportion of patients (26% and 82% respectively) than general practice in five clinical scenarios portrayed by professional role players. The rate of referral to A&E was highest from NHS Direct (13%), lower from walk-in centres (5%) and lowest in general practice which referred no scenario patients [48].

Chalder et al. matched towns with walk-in centres to towns without walk-in centres in England and assessed use rates over time, finding a non-significant reduction in consultations at A&E departments and in general practice, but no reduction in the use of out of hours general practice services in towns with walk-in centres [22].

The London polysystems evaluation found that many services still operated separately despite co-location. At one site, for example, GPs continued to send patients to a hospital-based cardiology outpatient clinic instead of the co-located community coronary heart disease service [41].

Since staffing at UCCs was variable, ranging from several GPs to an entirely nurse-led service, there was no consistent pattern of referral; patients at a rural UCC that was far from any A&E received a wide range of acute treatment and nurses at a limited case-mix UCC treated only routine cases, while at other UCCs, patients were referred back to their GP for routine care [40].

### 3.5. Costs

All iterations of walk-in centres had high costs and struggled to attract adequate levels of use to justify operation. The evaluation of the first walk-in centres deemed them poor value relative to their costs. However, costs per visit fell over time; the mean cost per visit, for centres that had been open for one year, was 20% lower than the average, and was predicted to fall further over time. It was not possible to determine whether walk-in centres could eventually offer value for money [18].

The evaluation of commuter walk-in centres similarly found low activity levels and high costs. Private providers ran these centres and accurate cost data were not available. Cost estimates were gathered through site visits, user surveys, commissioning managers, and estimated mean costs for clinical and non-clinical staff at each study site. Pilot walk-in centres were designed to meet a capacity of 150–180 (out and inside London) patients per day, with a projected cost per visit to the NHS to £33 and £34 (out and inside London). Evaluators estimated the actual cost per attendance at £52–£150 compared to £15 per GP visit. The evaluation concluded that co-locating walk-in centres with GP practices in areas of high worker density; providing workplace based GPs and nurses; or expanding the roles of pharmacists would be more cost-effective ways to deliver more convenient primary care [25].

Coleman et al. found that the majority of new EAPMC practices in two PCTs struggled to meet their list size targets and ran at a loss. On the other hand, APMS and EAPMC services tended to over-perform on their walk-in service contracts due to high demand and this was generally regarded as financially unsustainable. One study site struggled to recruit permanent medical staff and relied heavily on locum cover, incurring higher running costs and financial penalties for not ensuring continuity of care. Despite high costs, some PCT staff judged that APMS and EAPMC services exerted a positive effect on the local health system by pushing existing providers to offer extended hours [34].

There were no systematic evaluations of the performance of organisations receiving contracts for the EAPMC and APMS contracts. By 2011, some corporate providers had left the NHS primary care market due to low demand for services and difficulty in making profit, and several GP-led health centres and new practices with APMS contracts had also closed. For-profit providers had difficulties turning profits because the service delivery models required by PCTs in APMS contracts were difficult to meet within the available funding [33,34,52].

Practices in the GP extended hours access scheme received an annual payment of £2.95 per registered patient. Practices could also increase their income by improving

their QOF score based on patient satisfaction with opening hours. There was no evidence that any practices benefited from doing so. It was unclear if the GP extended hours access scheme offered value for money [51].

There was no evidence that polysystems in London offered value for money though it was not possible to conduct a cost-effectiveness analysis for lack of cost data. There was no evidence of a reduction in avoidable use of primary or secondary care. Three sites had a UCC available to treat out of hours patients. This did reduce A&E activity, but there were insufficient data to determine whether any cost savings had occurred [41]. The review of UCCs was unable to obtain comprehensive data reliable enough to conduct a true cost comparison with A&E [40].

NHS 111 was expected to lead to limited cost savings. A cost-consequences analysis of NHS 111 in pilot sites versus other NHS services, including total activity at A&E, walk-in centres, urgent care centres, out of hours services, NHS Direct, 999 ambulance calls and 999 ambulance incidents showed that there was a statistically significant cost saving in three of four pilot sites due to a reduction in NHS Direct activity, but this was offset by the costs of other emergency services which rose and exceeded any savings from reduced demand for NHS Direct. The evaluation of the pilot concluded that NHS 111 was performing well for urgent care, but that it was difficult to predict its costs and benefits in the long term [15].

#### 4. Discussion

This is the first study systematically to review the evidence on the impacts of the primary and urgent care initiatives introduced by the New Labour government between 1997 and 2010. We found 19 studies resulting in 40 relevant papers on ten initiatives to improve patient access to, and choice of, primary and urgent care. Most papers resulted from DH-commissioned studies. There were a handful of analyses that compared two or three initiatives. The evidence was restricted to between the first and third year(s) of operation of schemes. There was little research on the GP extended hours access scheme, the impact of new provision through APMS and EAPMC, and urgent care centres. There were limitations in the quality of the evidence overall. There were no randomised control trials (RCTs) of the comparative effectiveness of initiatives versus the status quo. The majority of evaluations were mixed method, non-randomised studies contemporaneously comparing an initiative with existing services or comparison sites and/or patient groups, or simple before-and-after studies (Table 1). As a result, the findings of this review should be treated with appropriate caution.

The level of demand for the new programmes varied. There was some demand for walk-in centres, new provision of GP practices and GP-led health centres, Polysystems and extended practice hours. However, overall, planners struggled to predict the level of demand for new services. In most cases, demand was lower than predicted. It is difficult to ascertain how much unmet need the new services were meeting as against inducing new demand through greater service availability and accessibility.

There was little sign that the new forms of care were substituting appreciably for less appropriate forms of primary and urgent care. In particular, few patients were diverted from A&E departments by the availability of walk-in centres or urgent care centres. It appeared to be difficult to change patients' perceptions of the appropriate place of treatment by offering new forms of primary and urgent care. On the other hand, most of the initiatives did increase choice and convenience of urgent and first contact care.

The impact on equity of use is unclear. There was no clear evidence that equity improved for any segment of the population. Few studies examined whether equity of use improved as provision expanded; those that did varied widely in scope and methods. There was no evidence on changes in equity of use in relation to the initiatives designed to improve access in supposedly underserved areas.

There was high patient satisfaction with the new primary and urgent care services, despite the fact that most were underutilised. Under-use was generally attributed to the rapid pace of reform and the related inability to publicise new services sufficiently to increase use; a failure to conduct thorough community needs assessments; and poor siting. In future, it will be important for new services to demonstrate that they fill real gaps in provision and be thoroughly promoted to the relevant patient sub-groups. The evidence suggests that there was an ongoing conflict between national policymakers' goals to improve choice and convenience, and clinical perspectives over the appropriate threshold for seeking beneficial care, as well as over who in the community was most in need of better access to care (i.e. those seeking immediate and urgent care or those needing help in managing their long-term conditions).

There was no evidence on how the different initiatives affected each other. Patients faced an increasingly complex system of primary and urgent care, and there was likely to have been some duplication between new programmes. For example, there was evidence that the NHS paid twice for the primary care of patients in polysystems [41]. Increasing choice of primary and urgent care services meant that patients could access multiple services for the same indication. The widening range of similar services was also likely to have complicated referral pathways between primary and urgent care services, since there was no parallel integration of information systems and medical records.

There was little rigorous evidence on value for money compared with previous arrangements or between the new schemes, in part because it was often unclear what the most appropriate comparator might be. Walk-in services and new provision incurred higher costs than traditional general practice, but could be considered worthwhile if improved access or greater convenience were the main objectives and were valued highly.

Many centrally funded walk-in centres closed after their initial DH contracts expired due to the high costs per patient visit. Local health care providers held mixed views on the roles of these walk-in centres, with more providers close to walk-in centres being in favour than opposed to them [53]. Many walk-in services contracted through

EAPMC closed or had their operating hours reduced due to high costs per visit that were comparable to a GP practice's annual payment for a registered patient.

Monitor, the English NHS economic regulator, reviewed walk-in centre closures and found that 53 of the 238 walk-in centres opened since 2000 (including the EAPMC GP-led health centres) had closed between 2010 and mid-2013, including six of the eight commuter walk-in centres. A third of these were converted to UCCs, or co-located with A&E departments. Closures appeared to be the result of decisions not to 'pay twice' for patient access to primary care, the lack of a system-wide view of the pattern of urgent care, and payment mechanisms that did not encourage appropriate patient choice and competition between general practices [52].

## 5. Conclusion

New Labour's primary and urgent care initiatives resulted in an increasingly complex system with many overlapping initiatives. A wide range of new services was introduced to improve choice and access, but many were not well communicated to implementers or users. There remain substantial gaps in the evidence on their effects, particularly in terms of equity of use and their costs. Convenience improved, but, there was little evidence that these initiatives were cost-effective compared to previous arrangements. Future policy should start from the knowledge that it is difficult to induce efficiency-improving substitution between urgent care services, and that initiatives to increase greater patient choice and improve access are likely to increase overall use of services if they add to traditional general practice and other existing services. However, the value of this increased service use will be difficult to estimate. Initiatives to improve access to existing provision (e.g. extending general practice opening hours) may have greater potential to improve access and convenience at lower marginal costs than developing entirely new forms of provision. In any event, more effort needs to be made to estimate the level of demand for any new forms of primary and urgent care, and their potential costs and benefits as the NHS struggles to cope in an unprecedentedly harsh financial environment.

## Competing interests

The authors declare that they have no competing interests.

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## Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.healthpol.2014.07.011>.

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