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Strengthening Primary Care: Recent Reforms and Achievements in Australia, England, and the Netherlands

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ABSTRACT: Recent reforms in Australia, England, and the Netherlands have sought to enhance the quality and accessibility of primary care. Quality improvement strategies include postgraduate training programs for family physicians, accreditation of general practitioner (GP) practices, and efforts to modify professional behaviors—for example, through clinical guideline development. Strategies for improving access include national performance targets, greater use of practice nurses, assured after-hours care, and medical advice telephone lines. All three countries have established midlevel primary care organizations both to coordinate primary care health services and to serve other functions, such as purchasing and population health planning. Better coordination of primary health care services is also the objective driving the use of patient enrollment in a single general practice. Payment reform is also a key element of English and Australian reforms, with both countries having introduced payment-for-quality initiatives. Dutch payment reform has stressed financial incentives for better management of chronic disease.

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With well-developed primary care systems that have track records of strong performance, Australia, England, and the Netherlands offer some potentially useful lessons to the United States as it implements health care reforms. This brief outlines how primary care is provided in those three countries, it evaluates data on a range of primary care system performance indicators, and it examines the three countries' major strategies for strengthening primary care:

- Promoting coordination of care
- Reforming primary care payment
- Improving quality and access.

PRIMARY CARE DELIVERY IN AUSTRALIA, ENGLAND, AND THE NETHERLANDS: BACKGROUND

Australia, England, and the Netherlands all provide universal access to primary care services that are free of charge to all (in England and the Netherlands) or to most patients (Australia). In all three countries, family physicians known as general practitioners (GPs) provide primary care services and act as “gatekeepers” for patients’ access to most specialist services and hospitals. This gatekeeper requirement places primary care at the center of the health system, effectively ensuring that almost all patients have a regular primary care doctor or GP group. Often, the patients need look no further—about nine of 10 have their health care problems fully managed within general practice without referrals to medical specialists or hospitals. Thus all three countries have a strong primary care infrastructure based on three pillars: GPs operating as gatekeepers, encouragement of patient enrollment, and management of most health care needs by GPs (see Exhibit 1 for key elements of the countries’ primary care provisions). These three components are neither systemically encouraged nor commonly practiced in the United States.

General practices in Australia, England, and the Netherlands are effectively small private businesses providing a range of family medicine services—including, for example, pediatrics, psychiatry, and geriatric services. These practices receive most or all of their funding from the government (Australia and England) or through universally mandated private insurance coverage (the Netherlands).

One notable difference in primary care provision between the three countries is the average size of GP practices. Dutch practices tend to be smaller than their English and Australian counterparts, with 40 percent of Dutch GPs operating solo. In contrast, the share of GPs in solo practices in Australia has halved over the decade from 2000–01 to 2009–10, with about six of every 10 practices now employing five or more GPs. Larger general practices have been fostered in Australia by the introduction in the late 1990s of general practice accreditation and a trend toward “corporatization,” whereby

commercial chains buy out solo practitioners and operate larger group practices in multiple locations.^{1,2} Another significant organizational change has been the growing presence of practice nurses, who now are part of the general-practice landscape in all three countries.

Comparative Performance on Primary Care Access

The organization of primary care services in the three countries appears to be associated with improved performance in primary care access. Exhibit 2 shows the relative performance of Australia, England, and the Netherlands, and contrasted with that of the United States, on a series of access measures from the Commonwealth Fund’s 2009 international health policy survey of primary care physicians. With the exception of Australian performance on same- or next-day access, all three countries perform better than the United States on this range of access measures. In particular, the United States lags considerably behind the others in ensuring access to after-hours care and in providing a team-based approach to primary care. In addition to expediting timely access, the three countries’ increasing use of multidisciplinary teams in primary care is viewed as contributing significantly to better coordination and management of care for people with chronic disease.

In the United States, the holy grail of health policy has long been the achievement of improved access through universal coverage.³ As illustrated in Exhibit 2, access is no longer the paramount concern of health care policymakers in Australia, England, and the Netherlands (although some primary care access issues remain). Instead, the predominant policy discourse there involves how to achieve, or at least improve, health service integration—including *horizontal* integration across different types of primary care services and *vertical* integration across primary care physicians, specialists, and hospitals.⁴ Other important primary care policy objectives in the three countries include quality improvement and long-term sustainability (sometimes expressed as cost-effectiveness and often involving new approaches to the delivery of primary care services).

Exhibit 1. Key Elements of the Primary Care Systems in Australia, England, and the Netherlands

Key feature	Australia	England	Netherlands
Enrollment of patients with a GP practice encouraged	No	Yes	Yes
Copayments for GP consultations	For about 80% of consultations with GPs, there is no copayment ¹	Zero copayment	Zero copayment
Average size of GP practices	Solo (9%) ² 2–4 GPs (30%) 5–9 GPs (41%) 10+ GPs (20%)	Solo (15%) ³ 2–4 GPs (44%) 5–9 GPs (36%) 10+ GPs (5%)	Solo (40%) 2 GPs (32%) 3+ GPs (28%) ⁵
Proportion of patients/problems managed within general practice (without referral to specialists or hospitals)	88% ²	90% ⁴	98% ⁶
Practice nurses in GP practices	79% of GPs work in practices with at least one practice nurse ²	All practices have access to a practice nurse	85%–90% of GP practices have one part-time practice nurse (estimate) ⁷
Payment of GPs	Mainly fee-for-service	Capitation and performance-related pay plus some limited fee-for-service (e.g., for immunizations)	Mainly capitation, but with fee-for-service accounting for about one-third of payments
Employment status of GPs	Private practitioners	Independent contractors (partners or salaried)	Private GPs with own practice (75%); private GPs without practice (15%); salaried GPs (10%) ⁵
Payment for quality	Practice Incentives Program	Quality and Outcomes Framework	Included in contracts with preferred health insurer
Provision of after-hours care	Deputizing services (53%); by each practice (29%); or by cooperative arrangement between practices (18%) ²	Provided mostly by cooperatives	Organized through regional cooperatives

Sources:

¹ Medicare Australia, *Medicare Bulk-Billing Statistics 2009–10, 2010*, <http://www.medicareaustralia.gov.au/provider/medicare/files/medicare-bulk-billing.pdf>.

² H. Britt et al., *General Practice Activity in Australia 2000–2001 to 2009–2010: 10-Year Data Tables, 2010*, Bettering the Evaluation and Care of Health (BEACH), Australian Institute of Health and Welfare and University of Sydney: Canberra. Data are for 2009–10.

³ The NHS Information Centre, “General and Personal Medical Services, Detailed Results, England,” 2010, http://www.ic.nhs.uk/webfiles/publications/010_Workforce/nhsstaff9909/GP/General%20Practice%20Staff%202009.%20Detailed%20Result.pdf. Data are as of Sept. 30, 2009.

⁴ Department of Health (U.K.), *The Future Regulation of Health and Adult Social Care in England: A Consultation on the Framework for the Registration of Health and Adult Social Care Providers: Partial Impact Assessment on Primary Care*, 2008.

⁵ L. Hingstman and R. J. Kenens, *Cijfers uit de registratie van huisartsen: peiling 2010* (Figures from Registration of General Practitioners: Survey 2010) (Utrecht: NIVEL (Netherlands Institute for Health Services Research), 2010), <http://www.nivel.nl/oc2/page.asp?PageID=10959&path=/Startpunt/Home%20NIVEL/Publicaties>.

⁶ M. Cardol, L. van Dijk, J. D. de Jong et al., *Tweede Nationale Studie naar ziekten en verrichtingen in de huisartspraktijk. Huisartsenzorg: wat doet de poortwachter* (Second National Study on Diseases and Interventions in General Practice. Primary Care: What Is the Gatekeeper Doing?) (Utrecht/Bilthoven: NIVEL/RIVM, 2004).

⁷ Authors' estimate.

Exhibit 2. Access to Primary Care Services, 2009

Country	Doctors reporting that almost all patients can get same- or next-day access	Practice has arrangement for patients' after-hours care to see doctor/nurse	Practice's physicians, nurses, and medical assistants share responsibility for managing patients' care
Australia	36%	50%	88%
Netherlands	62%	97%	91%
United Kingdom	64%	89% ¹	98%
United States	44%	29%	59%

¹ In England, primary care trusts (PCTs) are legally required to ensure 24-hour access to a GP.

Source: Commonwealth Fund 2009 International Health Policy Survey of Primary Care Physicians.

Against this backdrop of strong primary care systems, England and Australia are embarking on major changes to the operation and financing of general practice. These developments are a consequence of elections that resulted in changes of national government in Australia (in 2007) and England (in 2010).

In sections that follow, we discuss the three major primary care reform strategies being implemented in the three countries: promoting coordination of care; reforming primary care payment; and improving quality and access.

PROMOTING COORDINATION OF CARE

Amid growing concerns about the rising prevalence of chronic diseases, governments in the three countries have implemented a range of structural approaches to promoting continuity of care of individual patients and to improving the integration of health services at an organizational or regional level. Common approaches have

included patient enrollment and the creation of primary care organizations that operate at a regional level with a whole-population focus.

Patient Enrollment

Enrollment of patients in a single general practice has been a long-standing feature of the English National Health Service,⁵ whereby patients are encouraged to register with a GP and have the right to register with any local GP practice. However, they can be registered with only one practice at a time. One of the proposals for the health reforms currently under way in England is that patients will be free to enroll instead with a nonlocal practice. This reform may be particularly appealing to commuters, who will in future be able to register with a practice near their workplace. It is also designed to promote choice and competition among GP practices⁶ (see box).

NHS Reforms in England

Soon after coming to power in 2010, the coalition government announced a set of radical reforms for the National Health Service (NHS) in England.⁷ Under the proposals, the fundamental principles of the NHS are untouched—namely, health care for all is funded from general taxation and free at the point of delivery. However, the proposals, which are decidedly pro-market, are felt by some to amount to a substantial and potentially risky reorganization of the NHS.⁸

In the future, NHS hospitals, private health care providers, and family doctors would all compete for patients. Primary care trusts and strategic health authorities would be scrapped, and instead GPs would form consortiums that controlled 80 percent of the NHS budget. A new NHS commissioning board would oversee the consortiums and commission certain highly specialized health services. An economic regulator called the Monitor would promote competition, regulate prices, and safeguard the continuity of services.

The proposals are proving highly contentious,⁹ and in April 2011 the government announced a two-month “listening exercise” to “pause, listen, reflect, and improve” the NHS reform plans.¹⁰ Following the release of a report on the listening exercise,¹¹ the government has announced some refocusing of the proposed reforms. In particular, there is to be more balance between cooperation and competition, increased opportunities for clinical participation, and a phased and more flexible approach to the implementation of the reforms.¹²

In the Netherlands in 2006, patient enrollment was made mandatory for the whole population. This regulation operates in parallel with other health reforms, such as the obligation of all adults to buy health insurance (children up to age 18 are insured for free). Before 2006, only patients with incomes below a certain level and covered by social health insurance were obliged to register (with one practice). As that group constituted about two-thirds of the Dutch population, the change in 2006 was not perceived as dramatic.¹³

Patient enrollment is more controversial in Australia. The Australian Medical Association is strongly opposed to enrollment, arguing that it limits patient choice, interferes with the doctor–patient relationship, and places GPs in a position where they may be forced to ration services.^{14,15} Enrollment would also represent a potentially significant shift in payment arrangements for GPs, moving from an open-ended (by price and volume) fee-for-service system to some capping of GP payments.

Recent reform proposals to introduce patient enrollment in Australia have been progressively watered down. In 2009, the National Health and Hospitals Reform Commission (NHHRC, an independent inquiry established by the Australian government) recommended the introduction of voluntary enrollment in a single primary health care service only for certain groups (including people with chronic conditions and indigenous Australians), estimated at about 7 million people.¹⁶ To counter the expected opposition, the NHHRC enrollment proposals were based on the continuation of fee-for-service payments—complemented by new outcome payments and other grants to support enrolled patients—and on the long-term development of episodic payments that bundle enrolled patients' cost of care.

In May 2010, the Australian government announced that voluntary enrollment would commence in 2012–13, but only for people with diabetes, and it estimated that about 260,000 people would be enrolled by mid-2014.¹⁷ However, in November 2010 the government indicated that even this limited rollout of enrollment would be deferred; instead, there would be a three-to-four-year pilot of coordinated care for diabetes, due to commence in 2011.¹⁸

Primary Care Organizations

A second major approach to improving coordination of care has been the establishment of primary care organizations. They include primary care trusts (PCTs) in England (shortly to be abolished in favor of new GP-commissioning consortiums announced under the 2010 reforms), divisions of general practice in Australia (due to be replaced by Medicare Locals by July 2012), and regional GP cooperatives in the Netherlands. Exhibit 3 summarizes these primary care organizations in the three countries.

Despite similarities in the sizes of the populations they serve, these organizations have evolved very differently. On a scale of increasing complexity:

- The Dutch GP cooperatives are directly involved in providing care to patients.
- The Australian organizations provide infrastructural support and tools for GPs but have no direct service delivery role for patients.
- The English primary care organizations have had various roles, which include providing community health services, planning and developing new primary health care and public health services, contracting with GPs, and commissioning secondary health services.

Of the three countries, the simplest model of a primary care organization is the Dutch GP cooperatives, which are regional entities usually located within or near hospitals. Their main role is to provide after-hours care, though they have also evolved to support GP practices; as such, they may offer a range of administrative, information technology (IT), and professional services to GP practices. More recently, they have entered into contracts with health insurers to provide disease management services for patients. Reflecting their local origins, there is diversity among GP cooperatives in regard to these secondary functions. For example:

- The Veenendaal GP cooperative directly employs practice nurses so that patients with chronic diseases may more readily receive health education and counseling.¹⁹

Exhibit 3. Primary Care Organizations in Australia, England, and the Netherlands

Country: Organization	Establishment	Population size	Roles	Funding
Australia: Divisions of general practice	Early 1990s	Average of 200,000 ¹	Provide services and support to general practices at the local level (includes IT support, professional development and education, projects to improve service integration)	Core funding by the Australian government, with additional project funding
Australia: Medicare Locals ²	About 15 (one-quarter) were due to start in July 2011, 15 in January 2012, and 32 in July 2012	Estimated average of 380,000	Improve coordination of primary health care in local communities; undertake local health planning and address service gaps	Anticipated to be about \$170 million (US\$180 million) annually in core funding from the Australian government
England: Primary care trusts (PCTs)	Primary care groups (established in 1997) evolved into primary care trusts (1999) ³	Average of 300,000 ⁴	Improve the health and well-being of the local population and reduce health inequalities. Within allocated resources, must contract and pay for a comprehensive range of health services for the population. These services must be of high quality, responsive, and efficient, and must span all service sectors (primary, secondary, and community health care). Until March 31, 2011, PCTs also directly provided community health services.	“Responsible” for £80 billion (US\$130 billion), or 80% of NHS budget ⁴
England: GP-commissioning consortia ⁵	Shadow consortia to commence in 2011–12, with full operation beginning in April 2013	Still to be determined	Be responsible for commissioning most NHS services, including acute hospital care, community health care, and rehabilitation services. The National Commissioning Board will commission certain highly specialized services and will authorize GP consortiums.	To be funded by the National Commissioning Board according to a person-based risk- adjusted formula ⁶
The Netherlands: GP cooperatives ⁷	GP cooperatives grew out of local GP rosters for after-hours care in about 2000	100,000– 500,000	Provide after-hours care; coordinate disease management	After-hours care is funded under the “basic care package”; GP cooperatives receive extra payments for disease management under contracts with health insurers.

Sources:

¹ Based on 111 Divisions and Australian population of about 22.5 million as of March 2011.

² Department of Health and Ageing, *Guidelines for the Establishment and Initial Operation of Medicare Locals* (Canberra: Australian Government, 2011).

³ J. McDonald, G. Powell Davies, J. Cumming et al., “What Can the Experiences of Primary Care Organisations in England, Scotland and New Zealand Suggest about the Potential Role of Divisions of General Practice and Primary Care Networks/Partnerships in Addressing Australian Challenges?,” *Australian Journal of Primary Health*, 2007 12(2):46–55.

⁴ Kings Fund, *What Can We Learn from Previous Commissioning Models?*, 2010, http://www.kingsfund.org.uk/current_projects/the_nhs_white_paper/gp_commissioning.html.

⁵ Department of Health, *Equity and Excellence: Liberating the NHS* (London: The Stationery Office Limited, 2010).

⁶ Nuffield Trust, *Developing a Person-Based Resource Allocation Formula for Allocations to General Practice in England* (London: The Nuffield Trust, 2010).

⁷ M. Willekens, P. Giesen, E. Plat et al., “Quality of Out-of-Hours Primary Care in the Netherlands: Adherence to National Guidelines,” *BMJ Quality & Safety*, Jan. 5, 2011.

- The Middle Brabant GP cooperative assists GP practices with accreditation, IT support, personnel management, and data collection and feedback.²⁰

The clarity of purpose of GP cooperatives—focused mainly on providing after-hours care—is probably a testament to their “bottom-up” origins. The growth of GP cooperatives in the Netherlands was a response to growing dissatisfaction with the difficulties experienced by small GP practices in providing after-hours care on an individual basis or via call rotations among groups of five to 10 GPs.²¹ While GP cooperatives were established on a voluntary basis, this change was supported with financial incentives through reimbursement of organizational and material costs. As shown above in Exhibit 2, GP cooperatives have been highly successful in improving access to after-hours care. Their success is consistent with the low rates of avoidable hospital admissions in the Netherlands compared with those of most other European countries.²²

The success of Dutch GP cooperatives in achieving high-quality after-hours access can be attributed to several factors.²³ First, after-hours services are obtained through a single regional telephone number for each GP cooperative, with most services situated close to hospitals. About 45 percent of after-hours consultations are telephone-only, another 40 percent involve patient visits to the GP cooperative, and the remaining 15 percent result in a home visit by a GP. Second, continuity of care is strongly promoted through shared electronic health records, with the patient’s usual general practice receiving information on any after-hours consultations so as to ensure a complete patient record. Third, nurses undertaking telephone triage at the GP cooperative have access to national evidence-based clinical guidelines.

Turning to Australia, divisions of general practice were established by the federal government in the early 1990s with very wide-ranging objectives, including providing professional support for GPs, promoting the involvement of GPs in local health planning, and encouraging integration between general practice and other health services. Annual surveys of these divisions illustrate

the range and diversity of the roles they undertake. For example, in 2007–08:

- 94 percent of divisions contracted with allied health professionals to deliver services to patients.
- 95 percent of divisions were involved in at least one structured “shared care” program, defined as a collaborative approach to coordinating patient care across specialist and primary care providers.
- 99 percent of divisions engaged in activities to improve collaboration between GPs and hospitals, such as improving notification of hospital admission/discharge.
- 87 percent of divisions provided support to GP practices in the use of clinical information systems.
- 100 percent of divisions provided support to practice nurses, who were mainly employed directly by GP practices, with the support including education, mentoring, and induction into general practice.²⁴

The diversity of these functions is mirrored in their funding arrangements. Divisions receive core funding from the Australian government, though most of their funding is tied to the delivery of projects or is conditional on service enhancements under numerous incentive programs. For example, some divisions have been funded to employ allied health staff in rural areas in order to improve access to services such as physiotherapy. A 2007 evaluation found that divisions had accounted for statistically significant improvements in general practice infrastructure (such as the employment of practice nurses and IT support) and influenced up to about two-thirds of the change in selected primary care performance measures.²⁵

In response to a recommendation by the National Health and Hospitals Reform Commission, these divisions were scheduled to be replaced by new “Medicare Locals” over a year’s time (from July 2011 to July 2012). The Commission’s argument was that a comprehensive primary care platform should involve integration across

GPs and other primary health care service providers (such as nurses, allied health practitioners, community mental health services, maternity and early childhood services, and Aboriginal health workers). Accordingly, the new Medicare Locals will have more diverse membership across the full range of primary care providers, as opposed to focusing on general practice alone. The Australian government's guidelines for the establishment of Medicare Locals include five strategic objectives:

- Improve the patient journey through the development of integrated and coordinated services.
- Provide support to clinicians and service providers so as to improve patient care.
- Identify the health needs of local areas and the development of locally focused and responsive services.
- Facilitate implementation and successful performance of primary health care initiatives and programs.
- Be efficient and accountable, with strong governance and effective management.²⁶

However, there remains considerable uncertainty as to how these broad objectives will be translated into specific roles and functions. In addition, the Australian Medical Association is opposed to Medicare Locals administering budgets and taking on a purchasing role, as the primary care trusts (PCTs) in England do.

In many ways, English PCTs are more established and influential than their Australian or Dutch counterparts. Their prominence derives from their significant role in managing health expenditures within the National Health Service. Major changes to primary care trusts have been cyclical, often following changes of government, and have shifted purchasing power back and forth between general practices and trusts. However, the underlying philosophy over the past two decades has been based on an internal NHS market, with different providers competing to provide services to NHS patients. One major change of note has been a move from reliance on central government planning to a model driven by the

purchasing of health services at a local level—whether undertaken by general practices, primary care trusts, or health authorities and their various iterations.

Primary care trusts (or primary care groups, as they were originally called) were established by the incoming Labour government in the late 1990s as an alternative to the previous government's policy of fund-holding by individual general practices.²⁷ PCTs were theoretically able to overcome one of the weaknesses of GP fund-holding, namely the increased management and transaction costs experienced by small groups of GPs.²⁸ In 2006, when the number of PCTs was reduced from 303 to 152 to create larger PCTs, this was an acknowledgment that management costs were still too high; it was also a response to concerns that not enough staff with sophisticated commissioning skills were available.²⁹ However, the government also hedged its bets by introducing "practice-based commissioning" in 2005, whereby GPs received "indicative" budgets to commission services. These budgets were termed indicative because the PCTs actually held and administered the funds. This provision was designed to overcome some GPs' lack of engagement with PCTs as well as to strengthen clinical input into decisions about the purchase of health services.

This backdrop of cyclical policy change concerning the commissioning role of GPs versus that of PCTs forms the context for the new coalition government's proposal for radical reforms of the English NHS.

Performance on Care Coordination

The Commonwealth Fund's international surveys provide some insight into the performance on coordination of care in Australia, England, and the Netherlands versus that of the United States. Exhibit 4 shows the 2008 survey's reported levels of coordination problems involving medical tests or records of adults with chronic conditions.

Of course, it is difficult to attribute these specific results to particular reforms such as patient enrollment or the establishment of primary care organizations. Many factors may contribute to improved coordination of care, including the adoption of clinical guidelines, enhanced electronic record systems, new payment arrangements, and greater use of multidisciplinary teams. Nonetheless,

Exhibit 4. Coordination Problems with Medical Tests or Records in the Past Two Years (adults with chronic conditions)

Country	Test results/records not available at time of appointment	Duplicate tests: Doctors ordered test that had already been done
Australia	16%	12%
Netherlands	11%	4%
England	15%	7%
United States	24%	20%

Source: C. Schoen, R. Osborn, S. K. H. How et al., "In Chronic Condition: Experiences of Patients with Complex Health Care Needs, in Eight Countries, 2008," *Health Affairs Web Exclusive*, Nov. 13, 2008.

Exhibit 4 suggests that the first three countries have fewer coordination problems than does the United States. It is also noteworthy that the 2008 Commonwealth Fund survey found that in all of the countries evaluated, lower rates of coordination problems were reported when fewer doctors were seen (one to two doctors versus four or more). This situation is more likely to occur in Australia, England, and the Netherlands, owing to the gatekeeping role of the general practices described above.

REFORMING PRIMARY CARE PAYMENT

Payment has been a major element of primary care reform in all three countries studied. There have been payment-related initiatives in general practice to help improve the management of chronic diseases, engage in preventive health interventions, and encourage high-quality care. Using GP payments as an incentive for desired behaviors—a relatively new concept in these three countries—is occurring through the use of “blended” payment approaches in which new forms of payment are introduced but coexist with the predominantly capitation-based system (in England and the Netherlands) or fee-for-service (in Australia).

Paying for Quality in England and Australia

The most comprehensive and well-studied approach to GP payment reform is the English model, where the payment-for-quality scheme is known as the Quality and Outcomes Framework (QOF). Exhibit 5 compares the main elements of the QOF with the equivalent Australian scheme—the Practice Incentives Program (PIP). The Netherlands is not included in the exhibit

because payment-for-quality programs have been introduced in only a few regions as experimental studies.

While the QOF is a relative newcomer, it dwarfs the PIP in terms of the breadth of domains included in its payment framework and the magnitudes of its potential payments. The unusually high payments available through the QOF, which can constitute as much as one-third of a practice’s income, reflect the context of its introduction and implementation. The QOF was introduced as part of the new General Medical Services contract, which was intended to improve GPs’ pay, conditions, and satisfaction. Having made a decision to substantially increase the funding available to general practices, the government chose to make it conditional on performance—based in turn on quality indicators (originally 146, currently 131).³⁰ In reality, practices faced very limited real risk to their incomes because the indicator targets were set at what turned out to be readily achievable levels. For example, practices were scoring more than 95 percent of available points under the QOF by 2006–07,³¹ thereby reducing the income volatility that might otherwise be expected with large fractions of at-risk payments.

The Australian PIP payments represent a much smaller share (5.5 percent in 2008–09) of government funding for general practice. And although PIP payments initially represented a significant share of practice income, the Australian government’s spending on general practice has increased at a faster rate than have PIP expenditures, thereby eroding the value of PIP to general practice.³²

While not introduced with the same fanfare as the QOF, the Australian Practice Incentives Program is a

well-established part of payment arrangements for quality in general practice. The core elements of PIP relate to improved management of patients with asthma and diabetes and to increased uptake of cervical screening; these goals are encouraged through a complex mix of sign-on payments (indicating commitment to patient registers, recall and reminder systems, and guidelines on the recommended cycle of care³³), and service incentive payments (reflecting delivery of agreed-upon cycles of care for each patient). Most recently, a new e-health payment has been included under the PIP that rewards practices for having a secure messaging capability, the capacity to transfer sensitive personal health information, and electronic access to clinical resources.

PIP payments coexist with other incentive arrangements under the Medicare Benefits Schedule.

These other incentives include provision of additional payments to GPs for the multidisciplinary management of patients with chronic disease, and partial reimbursement of patients for consultations with some allied health practitioners. As with other incentive programs, the PIP has been criticized for increasing the administrative burden on general practice; as a result, reviews now occur at a reasonable frequency and the program has been amended.³⁴ In any case, most participating practices believe that the PIP has contributed to quality care and improved access, and this view has been supported in recent evaluations of the program.³⁵ For example, there is better compliance with recommended cycles of care for the management of patients with moderate or severe asthma.

Exhibit 5. General Practice “Payment for Quality” Frameworks in England and Australia

Feature	Quality and Outcomes Framework (England)	Practice Incentives Program (Australia)
Year of introduction	2004	1998
Domains included in the payment-for-quality framework	Comprises four domains (4th revision): Clinical care (87 indicators covering 20 chronic diseases or conditions) Organizational (34 indicators spanning records, information for patients, education and training, practice management, and medicines management) Patient experience (1 indicator related to length of consultations) Additional services (9 indicators related to cervical screening, child health surveillance, maternity services, and contraception)	Comprises three domains: Quality stream (5 incentives relating to prescribing, diabetes, cervical screening, asthma, and Indigenous health) Capacity stream (5 incentives relating to e-health, practice nurses, after-hours care, teaching, and aged-care access) Rural support stream (3 incentives including rural loading, procedural GPs, and domestic violence)
Share of GP payments	Accounted for more than 25% of income for contractor (nonsalaried) GPs in 2006–07 ¹	Accounted for 5.5% of government funding for general practice in 2008–09 ²
Average payment	Average payment was more than £26,000 (US\$42,108) per contractor GP in 2006–07 ¹	Average payment was AUS\$61,600 (US\$65,111) per practice, or AUS\$19,700 (US\$20,823) per full-time-equivalent GP in participating practices in 2008–09 ²
Eligibility criterion	All practices are eligible, but payments are made to GP contractors, not salaried GPs	Practice must be accredited or registered for accreditation
Proportion of all practices participating in the payment scheme	In 2009–10, practices represented 99.7% of registered patients in England ²	Estimated to be 67% of all practices in 2007–08 (equivalent to all accredited practices), ³ providing almost 82% of GP patient care ³

Sources:

¹ T. Doran and M. Roland, “Lessons from Major Initiatives to Improve Primary Care in the United Kingdom,” *Health Affairs*, May 2010 29(5):1023–29.

² NHS Information Centre, Available, www.qof.ic.nhs.uk/faqs/#qof14.

³ Australian National Audit Office, *Practice Incentives Program*, Audit Report No. 5, 2010–11 (Canberra: Commonwealth of Australia, 2010).

As compared with the PIP, the QOF has a much stronger focus on clinical quality, with extensive coverage of a wide range of chronic conditions and a requirement for practices to establish disease registers. While both frameworks include process indicators such as the measurement of blood pressure, the QOF is more advanced than the PIP in including outcome measures such as targets for cholesterol levels in diabetes patients.

The QOF would appear to be superior to the PIP in at least two other dimensions: public reporting of the performance of individual general practices; and a robust process for including new indicators and refining or discontinuing existing indicators.

Patients in England can access information on how their GP practice compares with other practices in the region or nationally—for example, in managing people with chronic diseases or in need of palliative care services.³⁶ The value of this public reporting may be questionable: The National Quality Board has argued that, given uniformly high scores, the QOF “is not sufficiently able to discriminate between performance” among general practices.³⁷ Meanwhile, public reporting on PIP is limited to identifying the national participation rates for each of the PIP incentives, with no published data available on achievement against performance measures or on outcomes.³⁸

Finally, in England, the National Institute for Health and Clinical Excellence manages an evidence-based and consultative process to develop and review the QOF clinical indicators. In Australia, there is no equivalent mechanism. The Australian National Audit Office has criticized the lack of an overall strategy for evaluating the PIP, including the validity of specific performance indicators and benchmarking regimes.³⁹

Payment Reform in the Netherlands

Payment reforms in Dutch primary care have been particularly driven by the goal of reducing inequity among patients. The challenge is to find the right balance between capitation and fee-for-service. The capitation rate should be sufficient to offset the costs and investments needed, whereas the fee-for-service model should help GPs offer sufficient volume of care and prevent

negligence. Additional financial incentives have been introduced by health insurers to improve the quality of care in patients with chronic disease, including the delegation of tasks to practice nurses, in accordance with the Chronic Care Model.⁴⁰ Insurers pay GPs additional fees on a quarterly basis (about €40–€50 [US\$65–\$81] per patient with chronic disease), with GPs required to report against corresponding performance indicators. However, the maximum budget and most prices for primary care services are still determined by the government, which could be deemed as conflicting with the introduction of market principles—another driving force of the 2006 health reforms.

As part of the health policy to strengthen primary care, stakeholders in primary care have argued for abolishing budget caps; they suggest that higher volumes of primary care could reduce the total health budget, as prices for primary care are lower than those for hospital care. The debate about the budget continues, however, and is being complicated by the European financial crisis, which has affected the Dutch health care system. Nevertheless, Dutch citizens are satisfied with that system, and large reforms are not felt to be necessary.⁴¹

IMPROVING QUALITY AND ACCESS

Many of the reforms discussed under the first two strategies may also improve the quality and accessibility of primary care, whether at the level of individual patients or through strengthening the infrastructure of the primary care system.

The third strategy reflects the myriad other reform initiatives being used to directly drive improvements in primary care quality and access in the three countries. This strategy recognizes that improvements to quality and access require multilayered approaches; there is no single solution that can uniquely strengthen primary care. For example, policymakers can choose to:

- implement new funding models and financial incentives;
- craft regulations;
- institute changes to organization and governance;

- conduct educational and public information campaigns;
- influence professional norms and behaviors;
- change health workforce roles; or
- strengthen consumer engagement and participation.

Other Reforms Influencing the Quality of Primary Care

Regulation is a mainstay of efforts in all three countries to improve quality of primary care, with measures ranging from the establishment of general practices, owned and operated by GPs, to oversight of their ongoing operation (Exhibit 6). The entry requirements for general practice have been considerably strengthened with the introduction of postgraduate training programs for GPs, known as “vocational training.” These programs date from the 1970s in England and the Netherlands; the much-later introduction of vocational training in Australia was linked to access to higher Medicare rebates and hence to higher incomes for GPs. Vocational training specifies that practicing doctors undertake further extensive training to attain registration as vocationally trained

GPs. In addition to raising professional standards, vocational registration is important to improving the status of general practice, which is now effectively recognized as a medical specialty.

Of the three countries, Australia has the longest track record of encouraging accreditation of general practices. Standards were developed by the Royal Australian College of General Practitioners in the early 1990s, with accreditation introduced on a voluntary basis. There are two agencies that accredit general practice,⁴² which has one of the highest accreditation rates of all Australian health services for which accreditation is voluntary;⁴³ the main reason for seeking this status is to gain access to additional PIP funding.⁴⁴

The Netherlands is also considering linking accreditation to payment contracts with insurers, which may increase accreditation rates; only about one-quarter of general practices were accredited in 2010. Recent reforms in England will dramatically alter the accreditation landscape, with all general practices required to register with the Care Quality Commission as of April 2012. This change is occurring in parallel with the development of a voluntary accreditation scheme by the Royal College of General Practitioners that will assess practices on non-clinical aspects of care.

Exhibit 6. Selected Reforms Affecting General Practice Quality: Australia, England, and the Netherlands

Quality initiative	Australia	England	Netherlands
Vocational training for GPs	Introduced in 1993, currently three years	Three-year postgraduate training for GPs became mandatory from 1976; ¹ due to increase to five years in 2011	Introduced 1973 (one-year training), expanded to three years in the 1990s
Accreditation of general practice	Introduced in early 1990s, with two accreditation agencies formed in mid-1990s	Voluntary accreditation scheme scheduled to be launched in 2011, plus all practices will be required to register with Care Quality Commission in 2012 ¹	Introduced in 2005; about 25% of practices accredited in 2010; practice visitation due to become mandatory in 2011
National quality agency	Australian Commission on Safety and Quality in Health Care	Care Quality Commission	Introduction of a National Quality Institute planned in 2013
Roles/approach of national quality agency	Leadership, education, and advocacy; public reporting (no regulatory functions)	Regulation, inspection, and monitoring of standards; registration of health services	Regulation, coordination, and monitoring of standards; public reporting

¹ The King's Fund, *Improving the Quality of Care in General Practice* (London: The King's Fund, 2011).

Beyond working through regulation, other quality reforms are based on influencing professional norms and behaviors; one example is the use of clinical guidelines. This has been a very strong element of Dutch efforts to improve primary care quality over the past two decades, with over 80 evidence-based guidelines having been developed and updated regularly by the Dutch College of General Practitioners.⁴⁵ These guidelines are disseminated to all GPs in the Netherlands through the College's scientific journal, and they are integrated into continuing medical education programs, practice accreditation processes, and local peer group meetings. Adherence to clinical guidelines is regularly monitored through a sample of Dutch general practices, with results indicating that adherence to primary care guidelines is better in the Netherlands than in England or the United States.⁴⁶

Benchmarking of primary care can be undertaken in a way that encourages professional engagement, or it can be quasi-regulatory in nature, with a focus on performance management. Australia offers an example of primary care benchmarking that is based on engendering professional support. Called the Australian Primary Care Collaboratives,⁴⁷ the program includes an 18-month cycle comprising measurement of baseline performance of participating practices, learning workshops, and action periods during which practices undertake quality improvement activities. Since 2005, more than 1,000 Australian general practices have participated, with demonstrated improvements in the management of chronic disease and access to primary care.⁴⁸

Other Reforms Influencing Access to Primary Care

Access to primary care is multidimensional. Problems with access can derive from the range of choice of provider, continuity of care, the timeliness with which care is provided, the extent to which there is continuity, the availability of primary care after hours, and geographic proximity and travel time to the source of care (especially critical in rural and remote locations).

In theory, Australia's reliance on fee-for-service remuneration of general practitioners should create stronger incentives to increase the volume of primary

care services provided, as compared with the predominantly capitation-based systems of England and the Netherlands. In practice, however, all three countries are facing significant access challenges resulting from aging populations, increased prevalence of chronic disease, and reduced access to GP services because of factors such as shorter working weeks and more part-time staff.

England is the only one of the three countries to have used national performance targets to drive improvements in timely access to general practice. Until the recent abolition of these targets by the new government, patients were guaranteed access to a primary care professional within 24 hours and to a primary care doctor within 48 hours. In a 2009–10 GP patient survey, 79 percent of respondents indicated that they were able to see a GP on the same day or within two days.⁴⁹

One important strategy for improving primary care access has been to expand the number and mix of general practice staff who share the primary care workload. As shown in Exhibit 1, most general practices in all three countries now employ or regularly contract with practice nurses. It has been estimated that the share of English general practice consultations undertaken by practice nurses increased from 21 percent in 1995/1996 to 35 percent in 2008–09.⁵⁰ Australian Medicare data indicate that more than 7 million practice nurse services are claimed annually, at a cost to the government of AUS\$83 million (US\$88 million). This expense is relatively minor (compared with the total of 117 million GP service items, entailing government expenditure of AUS\$4.85 billion [US\$5.13 billion]⁵¹), though these data on practice nurses significantly understate their contribution to Australian general practice, as Medicare does not record their input to many services billed by GPs.⁵²

Approaches to improving after-hours access to primary care services, described earlier (Exhibit 1), include a mix of formal deputizing mechanisms, collaborative arrangements across small groups of practices, and larger regional cooperatives. One important element of the Dutch regional cooperatives model is the reliance on telephone call centers for after-hours care (equivalent to U.S. medical advice lines); these entities are staffed mainly by nurses who triage patients using national guidelines. As

with practice nurses, health call centers are a relatively recent development, but they now contribute substantially to improving access and managing the primary care workload in all three countries.

The largest health call center internationally is England's NHS Direct, which commenced operations in 1998 and achieved national coverage in 2000. In 2009–10, NHS Direct answered about 5 million phone calls, with an estimated reduction of some 2.4 million appointments with GPs and other primary care services.⁵³ Health call centers are part of the broader trend toward encouraging self-management in primary care. There is also the Internet; about 5 million people annually use the online health and symptom checkers on the NHS Direct Web site. In Australia, state-based health call centers started in 1999 (HealthDirect in Western Australia), with national coverage achieved in the mid-2000s.⁵⁴

Another important trend has been government support of initiatives that enhance access to a broader range of primary care services or that encourage better integration between primary care and specialist services. The 2006 English “Care Closer to Home” policy encouraged the development of polyclinics—one-stop shops that provide a broad range of services, not only general practice but also including community mental health, prenatal and postnatal care, community care, and specialist advice. The Australian equivalents, known as “GP super clinics,” were introduced in 2007. GP super clinics are intended to offer a more extensive range of primary care services in one location, where there also is access to visiting medical specialists, extended hours, and significant capacity for interprofessional clinical training. While polyclinics and GP super clinics have been opposed by the national medical associations in England and Australia—on the basis that governments should not provide subsidies to new practices that compete with existing businesses—they represent a fundamental shift from the cottage industry of traditional general practice.

INSIGHTS FOR HEALTH REFORM ELSEWHERE

This review of Australia's, England's, and the Netherlands' recent reforms and achievements in primary care can help guide others—the United States, for example—as they invest in and try to strengthen their own, sometimes underdeveloped, primary care services.

First, and fundamentally, all three countries have elevated the status of primary care by making GPs the gatekeepers through which patients gain access to most specialist and hospital services. The value of this underpinning policy—which is long-standing and not part of recent reforms—is reflected in the very high success rates (greater than 90 percent) of GPs managing patients without referral to more costly services such as specialists and hospitals. These rates, along with the intense utilization of health call centers and of practice nurses, testify to the value of primary care as the bedrock of the health care system and to the importance of investing in a broad primary care infrastructure.

A second lesson is that continuity of care in England and the Netherlands has been facilitated through patient enrollment in a single general practice, similar to a “medical home” in the United States. The Dutch model of using regionally shared electronic health records in after-hours care is particularly impressive. While patient enrollment in such practices is happening slowly in Australia, there may be some boost to continuity of care with the 2012 introduction of voluntary and personally controlled electronic health records.

Third, primary care has been made an attractive career choice for new medical practitioners. Its status as a distinct specialty has been raised through the implementation of vocational training and registration schemes, while governments have also invested strongly in primary care. In England, the government has significantly increased the remuneration of GPs while also allowing individual practices to opt out of providing after-hours care as long as they make alternative arrangements to ensure such access. The Australian government has essentially paid GPs more to employ practice nurses, thereby allowing them to hand over routine and nonclinical tasks. Additional investments in general practice in the Netherlands have been aimed at better coordination of care for patients with chronic diseases.

Fourth, all three countries have introduced changes to transform general practice from a cottage industry to what has been termed a postindustrial model—based on the three core elements of standardized care, performance measurement, and transparent reporting.⁵⁵ Examples of this shift include the payment-for-quality schemes in England and Australia, the strong reliance on clinical guidelines in the Netherlands, the encouragement of best practice through the Australian Primary Care Collaboratives, and England's public reporting of general practice performance against QOF indicators.

Fifth, and closely related to the shift from a cottage industry, governments in all three countries have either directly intervened (England and Australia) or supported developments (the Netherlands) to improve the economies of scale of general practice. The three countries are also taking steps to aid integration both within primary care and between primary care and other health services. These developments include the establishment of primary care organizations as a supporting infrastructure for individual general practices and the implementation of new models of primary care provision—for example, the polyclinics and GP federations in England and the GP super clinics in Australia.

The Dutch GP cooperatives have the benefit of relative simplicity, stability, and professional ownership. In contrast, the English and Australian governments are in the midst of major redesign of primary care organizations, with the structures of GP-commissioning consortiums and Medicare Locals still to be determined. In any case, it seems apparent that primary care organizations have provided a valuable platform that allows governments (or, in the Netherlands, insurers) to reshape primary care to meet changing policy objectives.

Finally, it is worth highlighting that the above strengths and lessons learned have manifested themselves in three countries with quite different underlying approaches to health system governance and influence. In broad terms, England has adopted a market-based approach; the Netherlands places strong reliance on professionalism coupled with localism; and Australia uses an economic rationalist/managerial model. Despite these differences in how power manifests itself in the health care system, there has been remarkable policy convergence in the primary care reform menu. This suggests that the international lessons in primary care reform discussed above could indeed translate to the United States and to other countries should policymakers be sufficiently motivated.

NOTES

- 1 P. Fitzgerald, "General Practice Corporatisation: The Half-Time Score," *Medical Journal of Australia*, 2002 177(2):90–92.
- 2 R. Anderson, P. Haywood, T. Usherwood et al., "Alternatives to For-Profit Corporatisation: The View from General Practice," *Australian Journal of Primary Health*, 2005 11(2):78–86.
- 3 D. M. Berwick, T. W. Nolan, and J. Whittington, "The Triple Aim: Care, Health, and Cost," *Health Affairs*, 2008 27(3):759–69.
- 4 See, for example: P. Thomas, G. Meads, A. Moustafa et al., "Combined Horizontal and Vertical Integration of Care: A Goal of Practice-Based Commissioning," *Quality in Primary Care*, 2008 16(6):425–32.
- 5 Until 2004, enrollment was with an individual GP, but the introduction of the new GMS contract changed enrollment to a practice basis.
- 6 U.K. Department of Health, *Equity and Excellence: Liberating the NHS* (London: The Stationery Office Limited, 2010).
- 7 U.K. Dept. of Health, *Equity and Excellence*, 2010.
- 8 Nuffield Trust, *The Coalition Government's NHS Reforms: An Assessment of the White Paper*, 2010, http://www.nuffieldtrust.org.uk/members/download.aspx?f=/ecomm/files/The_Coalition_Governments_NHS_Reforms.pdf.
- 9 M. Roland and R. Rosen, "English NHS Embarks on Controversial and Risky Market-Style Reforms in Health Care," *New England Journal of Medicine*, 2011 364(14):1360–66.
- 10 H. Mulholland, "Government to 'Pause, Listen, Reflect and Improve' NHS Reform Plans," *Guardian*, April 6, 2011, <http://www.guardian.co.uk/society/2011/apr/06/government-pause-listen-reflect-improve-nhs-reform>.
- 11 S. Field, "NHS Future Forum—Summary Report on Proposed Changes to the NHS," http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_127540.pdf.
- 12 See: <http://healthandcare.dh.gov.uk/government-response-to-nhs-future-forum/>.
- 13 G. P. Westert, J. S. Burgers, and H. Verkleij, "The Netherlands: Regulated Competition Behind the Dykes?" *BMJ*, 2009 339:839–42.
- 14 Australian Medical Association 2011, Federal Budget Submission 2011/12, <http://ama.com.au/budget2011-chronicdisease>.
- 15 Australian Medical Association 2004, Funding, AMA Position Statement 2004, <http://ama.com.au/node/1756#attachments>.
- 16 National Health and Hospitals Reform Commission, "A Healthier Future for All Australians: Final Report" (Canberra: Commonwealth of Australia, 2009).
- 17 Commonwealth of Australia, *A National Health and Hospitals Network for Australia's Future: Delivering Better Health and Hospitals* (Red Book) (Canberra: Commonwealth of Australia, 2010).
- 18 N. Roxon, "Early Pilot of Diabetes Coordinated Care to Begin July 2011," media release, Nov. 12, 2010.
- 19 See: "Cooperatie Huisartsen Veeneendal," http://translate.google.com.au/translate?hl=en&sl=nl&u=http://www.chv.praktijkinfo.nl/&ei=MRS5TaOJFMyIrAf2_tDdBA&sa=X&oi=translate&ct=result&resnum=1&ved=0CCAQ7gEwAA&prev=/search%3Fq%3Dhuisartsen%2Bcooperatie%26hl%3Den%26prmd%3Dvns.
- 20 See: "Regional Cooperatie Huisartsen Midden Brabant," <http://translate.google.com.au/translate?hl=en&sl=nl&tl=en&u=http%3A%2F%2Fwww.rchmbr.nl%2F>.
- 21 C. J. T. Van Uden, P. H. J. Giesen, J. F. M. Metsemakers et al., "Development of Out-of-Hours Primary Care by General Practitioners (GPs) in the Netherlands: From Small-Call Rotations to Large-Scale GP Cooperatives," *Family Medicine*, 2006 38(8):565–69.
- 22 G. P. Westert, M. J. van den Berg, S. L. N. Zwakhais, et al. (eds.), *Dutch Health Care Performance Report 2010* (Bilthoven: National Institute for Public Health and the Environment, 2010).
- 23 Ibid.

- ²⁴ S. Howard, A-L. Hordacre, C. Moretti et al., *Summary Data Report of the 2007–2008 Annual Survey of Divisions of General Practice* (Canberra: Primary Health Care Research and Information Service, 2009).
- ²⁵ A. Scott and B. Coote, *The Value of the Divisions Network, Melbourne: An Evaluation of the Effect of Divisions of General Practice on Primary Care Performance* (Melbourne: Melbourne Institute of Applied Economic and Social Research, University of Melbourne, 2007).
- ²⁶ Commonwealth Department of Health and Ageing, “Medicare Locals: Guidelines for the establishment and initial operation of Medicare Locals” (Canberra: Commonwealth of Australia, 2011).
- ²⁷ Introduced in 1991, the GP fund-holding scheme allowed participating practices to negotiate their own secondary-care contracts with their choice of providers and to keep any surpluses they generated. The scheme was abolished in 1998.
- ²⁸ I. Greener and R. Mannion, “A Realistic Evaluation of Practice-Based Commissioning,” *Policy & Politics*, 2009 37(1):57–73.
- ²⁹ House of Commons Health Committee, *Commissioning: Fourth Report of Session 2009–10 Vol. 1* (London: The Stationery Office Limited, 2010).
- ³⁰ S. Campbell and H. Lester, “Developing Indicators and the Concept of QOFability,” *Quality in Primary Care*, 2010 18(2):103–09.
- ³¹ T. Doran and M. Roland, “Lessons from Major Initiatives to Improve Primary Care in the United Kingdom,” *Health Affairs*, 2010 29(5):1023–29.
- ³² Australian National Audit Office, *Practice Incentives Program, Audit Report No. 5*, 2010–11 (Canberra: Commonwealth of Australia, 2010).
- ³³ The term “cycle of care” is used to describe the required stages of assessment, planning, and review that must be undertaken in the management of patients with a chronic condition in order for GPs to receive payments under the Practice Incentives Program.
- ³⁴ Australian National Audit Office, *Practice Incentives Program*, 2010.
- ³⁵ Ibid.
- ³⁶ See: <http://www.qof.ic.nhs.uk/index.asp>.
- ³⁷ National Quality Board, *Information on the Quality of Services, Interim Report* (London: Department of Health, 2010).
- ³⁸ See: https://www.medicareaustralia.gov.au/statistics/div_gen_prac.shtml.
- ³⁹ National Quality Board, *Information on the Quality of Services*, 2010.
- ⁴⁰ T. Bodenheimer, E. H. Wagner, and K. Grumbach, “Improving Primary Care for Patients with Chronic Illness,” *Journal of the American Medical Association*, 2002 288(14):1775–79.
- ⁴¹ C. Schoen, R. Osborn, D. Squires et al., “How Health Insurance Design Affects Access to Care and Costs, by Income, in Eleven Countries,” *Health Affairs* Web First, Nov. 18, 2010.
- ⁴² Australian Commission on Safety and Quality in Health Care, *Windows into Safety and Quality in Health Care 2008*, (Sydney: ACSQHC, 2008).
- ⁴³ Ibid.
- ⁴⁴ Australian National Audit Office, *Practice Incentives Program*, 2010.
- ⁴⁵ M. J. Faber, J. S. Burgers, R. Grol et al., “Achieving High Performance Quality in Primary Healthcare: The Dutch Example,” in E. Bell, G. Westert, and J. Merrick (eds.), *Translational Research for Primary Healthcare* (New York: NOVA Publishers, 2011).
- ⁴⁶ R. Grol, *Quality Development in Health Care in the Netherlands* (New York: The Commonwealth Fund, March 2006).
- ⁴⁷ D. R. Ford and A. W. Knight, “The Australian Primary Care Collaboratives: An Australian General Practice Success Story,” *Medical Journal of Australia*, 2010 193(2):90–91.
- ⁴⁸ Further information on the Australian Primary Care Collaboratives is available at <http://www.apcc.org.au/>.
- ⁴⁹ Results of the survey are available at <http://www.gp-patient.co.uk.surveystats>.

- ⁵⁰ J. Hippisley-Cox and Y. Vinogradova, *Trends in Consultation Rates in General Practice 1995–96 to 2008–09: Analysis of the QResearch Database* (Leeds, England: Information Centre, 2009).
- ⁵¹ H. Britt, G. C. Miller, J. Charles et al., *General Practice Activity in Australia 2000–01 to 2009–10: 10 Year Data Tables (Bettering the Evaluation and Care of Health)*, Cat. No. GEP 28 (Canberra: Australian Institute of Health and Welfare, 2010).
- ⁵² H. Keleher, C. M. Joyce, R. Parker et al., “Practice Nurses in Australia: Current Issues and Future Directions,” *Medical Journal of Australia*, 2007 187(2):108–10.
- ⁵³ NHS Direct, National Health Service Trust: Annual Report & Accounts 2009/10 (London: The Stationery Office, 2010).
- ⁵⁴ S. Duckett and S. Willcox, *The Australian Health Care System* (4th ed.) (Melbourne: Oxford University Press, 2011).
- ⁵⁵ S. Swensen, G. Meyer, E. Nelson et al., “Cottage Industry to Postindustrial Care—The Revolution in Health Care Delivery,” *New England Journal of Medicine*, 2010 362(5):e12, e-published Jan. 20, 2010.

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