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A Survey Of Primary Care Doctors In Ten Countries Shows Progress In Use Of Health Information Technology, Less In Other Areas

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ABSTRACT Health reforms in high-income countries increasingly aim to redesign primary care to improve the health of the population and the quality of health care services, and to address rising costs. Primary care improvements aim to provide patients with better access to care and develop more-integrated care systems through better communication and teamwork across sites of care, supported by health information technology and feedback to physicians on their performance. Our international survey of primary care doctors in Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Switzerland, the United Kingdom, and the United States found progress in the use of health information technology in health care practices, particularly in the United States. Yet a high percentage of primary care physicians in all ten countries reported that they did not routinely receive timely information from specialists or hospitals. Countries also varied notably in the extent to which physicians received information on their own performance. In terms of access, US doctors were the most likely to report that they spent substantial time grappling with insurance restrictions and that their patients often went without care because of costs. Signaling the need for reforms, the vast majority of US doctors surveyed said that the health care system needs fundamental change.

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Health care reforms in high-income countries have increasingly focused on redesigning primary care as part of system-wide efforts to achieve the “Triple Aim”:¹ improving population health and health care experiences, while addressing rising costs. Efforts to redesign primary care typically have as their goals both enhancing practices’ capacity to provide ready access to care and manage chronic conditions and developing more-integrated care systems that foster coordination and teamwork among primary care providers, specialists, and hospitals.²

Countries differ in the role primary care has

historically played in their health care delivery systems—including the scope of services and the use of nurses and referrals for specialized care.^{3,4} However, there has been conceptual convergence in recent years on the need to redesign primary care to meet the health care needs of aging populations and address the increased prevalence of chronic disease.

To explore the experiences of physicians as health reform policies unfold, we surveyed primary care physicians in the following ten countries in 2012: Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Switzerland, the United Kingdom, and the United States. The survey builds on a

2009 survey of primary care physicians that included all of this study's countries except Switzerland.⁵

The current study focuses on physicians' responses concerning patient access, health information technology capacity, communication across sites of care, feedback on practice performance, and satisfaction practicing medicine and overall views of the health system. These areas have all been central to health reforms. With diverse initiatives under way in health systems in different countries, primary care physicians provide front-line perspectives that are helpful in assessing the impact of reforms and identifying areas to improve.

The Countries

The surveyed countries vary in the extent to which primary care physicians are the gateway to more specialized care and in the way primary care physicians are paid. In Australia, the Netherlands, New Zealand, Norway, and the United Kingdom, patients go through primary care for referrals to specialists and, except in Australia, are required to register with primary care practices. Canada, France, and Germany use financial incentives to encourage registration with primary care practices and coordinated referrals.

Australia, Canada, France, Germany, Switzerland, and the United States typically pay fee-for-service for health care and, to varying degrees, employ performance incentives for physicians.² In contrast, the Netherlands, New Zealand, Norway, and the United Kingdom use a blend of capitation, fees for visits, and extra incentives (see the Technical Appendix for a summary).⁶ In the United States, public and private initiatives to support primary health care teams and infrastructure for patient-centered medical homes have also spread the use of such blended payment approaches.⁷

The countries that were surveyed differ notably in practice size, with Australian, Canadian, Norwegian, UK, and US doctors the most likely (40 percent or more) to be in practices with five or more doctors. The majority of Dutch, French, German, and Swiss doctors are in very small practices (fewer than two full-time doctors), and groups as large as five are rare, based on responses to the survey (Technical Appendix 1).⁶

The countries also vary in the extent to which patients face cost sharing for primary health care. Except for Switzerland and the United States, national insurance standards generally encourage patient access to primary health care, ranging from full coverage with no cost sharing in Canada, the Netherlands, and the

United Kingdom to relatively modest cost sharing in other countries.

Swiss and US patients often face substantial deductibles as well as cost sharing, although Swiss health insurance standards reduce rates for low-income people and limit out-of-pocket liability to levels well below those in the United States.⁸ The United States is alone among the study countries in segmenting the population by income and age for government-sponsored health insurance and in its lack of coordinated policies across multiple private and public insurers.

The survey findings indicate that national policies make a difference, particularly for patient access, physicians' use of health information technology, and availability of information regarding practice performance. Yet the study also points to the common challenge across countries of improving communication and teamwork across sites of care to ensure patient-centered and efficient health care systems.

Study Data And Methods

SURVEY SAMPLES The survey consisted of interviews with primary care physicians using a common questionnaire that builds on a 2009 primary care physician survey.⁵ The definition of *primary care physician* included general practice and family practice physicians in all countries, as well as general internists and pediatricians in Germany and the United States.⁹ Practicing physicians were selected randomly from public and private lists typically used in each country.¹⁰

Exhibit 1 shows final sample sizes. By design, completed samples ranged from 500 to more than 2,000, with larger samples supported by country sponsors for within-country analyses.¹¹

Using the same questionnaire, Harris Interactive and country contractors interviewed physicians by a combination of mail and telephone during March–July 2012. Mail surveys only were conducted in Canada, Germany, the Netherlands, Norway, and the United States. Phone recruitment and surveys by mail were used in Australia and New Zealand. French, Swiss, and UK interviews were by phone.

The analysis weighted final samples to reflect the distribution of physicians by age, sex, region, and primary care specialty.¹² For samples of 1,000 and 500, the margin of sample error is 2–4 percent at the 95 percent confidence level. Exhibits 1–5 show the country results. These are repeated in Appendixes 5–9⁶ with chi-square tests that compare each country to the other nine ($p < 0.05$).

LIMITATIONS This was a rapid-response survey

EXHIBIT 1
Primary Care Physicians' Perceptions Of Patient Access In Ten Countries, 2012

Percent of physicians reporting that patients:

Country (n)	Have access to practice		Often experience access barriers			Can electronically access practice		
	>80% patients can get same/next-day appointment when sick	Practice has arrangements for after-hours care ^a	Difficulty paying ^b	Long waits to see specialists	Difficulty getting specialized diagnostic tests	E-mail questions or concerns	Request appointments or referrals online	Request Rx refills online
AUS (500)	38	81	25	60	16	20	8	7
CAN (2,124)	22	45	26	73	38	11	7	6
FRA (501)	86	76	29	59	41	39	17	15
GER (909)	56	89	21	68	27	45	22	26
NETH (522)	61	94	42	21	7	46	13	63
NZ (500)	59	90	26	75	59	38	13	25
NOR (869)	42	80 ^c	4	60	10	26	51	53
SWI (1,025)	62	78	16	10	3	68	30	48
UK (500)	55	95	13	28	14	35	40	56
US (1,012)	47	34	59	28	23	34	30	36

SOURCE 2012 Commonwealth Fund International Health Policy Survey of Primary Care Physicians. **NOTES** Significance tests are available in online Appendix 5 (see Note 6 in text). ^aPractice has arrangement for patients to see doctor or nurse after hours without going to emergency department. ^bFor medications or other out-of-pocket costs. ^cIn Norway, respondents were asked whether their practice had arrangements or there were regional arrangements.

with relatively short field times, ranging from one to four months. Response rates overall ranged from 48 percent in the Netherlands to 20 percent in Germany. In several countries, relatively low response rates or smaller samples indicate the need for caution in interpreting results as representative of all primary care physicians.¹³ Differences in data collection methods as well as response rates introduce an unknown bias.

Finally, this survey represents the experiences and perceptions of physicians. A more robust study would include actual waiting times that sick patients experience when trying to see their physicians, specialist use patterns by patients, and patient-reported access to primary health care services.

Study Results

PATIENT ACCESS Primary health care practices offer an entry point to the health care system, providing a key source of preventive and ongoing care as well as referrals for more-specialized care. Doctors' responses to the survey indicate wide differences across countries on access to and affordability of health care services.

For example, 59 percent or more of doctors in France, the Netherlands, New Zealand, and Switzerland reported that their patients could get same- or next-day appointments when sick

(Exhibit 1). In sharp contrast, only 22 percent of Canadian physicians said that their patients could almost always be seen the same or the next day.

Asked about availability of after-hours primary health care services, just 34 percent of US doctors reported that their practice had any arrangement for patients to be seen without going to a hospital emergency department (Exhibit 1). Canadian practices' rates for after-hours services were also relatively low. In contrast, at least 89 percent of doctors in Germany, the Netherlands, New Zealand, and the United Kingdom reported that their practices had arrangements to enable patients to receive after-hours care.

US and Canadian physicians' responses to questions regarding after-hours arrangements mirror patients' experiences: In the 2010 international population survey on patient experience with health care services, Canadian and US patients were more likely than those in other countries to have used emergency departments and among the most likely to say that it was difficult to obtain health care after hours.⁸

In 2012, 59 percent of US physicians said that their patients often have difficulty paying out-of-pocket costs for medical care (Exhibit 1)—a percentage well above that in any other country and similar to US physician reports in 2009. Forty-two percent of Dutch physicians were also

concerned about cost-related barriers to care—an increase since the 2009 survey.⁵ Norwegian, Swiss, and UK doctors were the least likely in 2012 to say that their patients often could not afford care.

Primary care physicians' reports of whether their patients had difficulty getting specialized care varied by country and type of service. In Australia, Canada, France, Germany, New Zealand, and Norway, more than half of the doctors said that patients often faced long waiting times to see specialists (Exhibit 1). Although rates were significantly lower in the other four countries, at least one-fifth of doctors in all countries except Switzerland said that patients' waits were often long.

Fifty-nine percent of New Zealand doctors said that their patients had difficulty getting specialized diagnostic tests (Exhibit 1), followed by French (41 percent) and Canadian doctors (38 percent). In contrast, fewer than 10 percent of Swiss and Dutch doctors reported such difficulty.

In the United States, physicians' perceptions of affordability or difficulties getting specialized care varied by patients' insurance mix. Doctors with high proportions of uninsured or Medicaid patients were the most likely to say that their patients often faced long waits for specialized care (see Technical Appendix 2).⁶

Increasingly, primary care practices can offer new forms of electronic access beyond office visits, such as through e-mail and web-based portals. Physicians' reports reveal wide variations across countries in the availability of such access. Two-thirds of Swiss doctors and nearly half of Dutch and German doctors said that their patients could use e-mail to contact them about medical questions or concerns, compared to about one-fourth or fewer doctors in Canada, Australia, and Norway (Exhibit 1).

Fifty-one percent of Norwegian physicians and 40 percent of UK physicians reported that they allowed patients to request appointments or referrals online, compared to no more than 30 percent of physicians in the other countries. About half or more of the physicians in the Netherlands, Norway, Switzerland, and the United Kingdom reported that patients could refill prescriptions online, compared to about one-third or fewer of the physicians in the other countries.

In each area, Canadian and Australian doctors were the least likely to report offering electronic access. US doctors were generally in the middle of the range of countries.

CAPACITY IN HEALTH INFORMATION TECHNOLOGY Physician practices in all ten countries have been investing in health information technology

to provide information tools and decision support. Some physician practices, such as those in the Netherlands, began this investment several decades ago and have been adding functions and capacity over time.¹⁴ Other countries, including Canada and the United States, have recently enacted national policies to spur the spread and use of health information technology.

To examine current rates of adoption and the diversity of capacity, the survey asked about basic electronic medical records and included fifteen questions about functions that health information technology systems potentially provide. We grouped these electronic functions into the following four domains: the generation of patient information, such as lists of patients' medications; the generation of patient registry and panel information, such as a list of patients due for preventive care; order entry management, such as electronic prescribing; and decision support, such as alerts about potential adverse drug interactions.

We categorized practices reporting that they used electronic medical records and at least two electronic functions in each of the four domains listed above as having "multifunctional" health information technology capacity. Exhibit 2 summarizes the findings, and Technical Appendix 3 provides details by function and domain.⁶

Nearly all primary care physicians in Australia, the Netherlands, New Zealand, Norway, and the United Kingdom reported using electronic medical records, as they did in the 2009 survey findings (Exhibit 2). In 2012 two-thirds or more of French, German, and US physicians reported using electronic medical records.

There was a substantial increase in the United States in use and multifunctional capacity, compared to three years ago. Although the United States and Canada still lag behind countries with near-universal adoption, the spread has been rapid in both countries, with a 50 percent increase in the rates of use of electronic medical records since 2009. In 2012 Swiss doctors trailed those in the other countries, with rates of adoption similar to those in the United States and Canada three years ago.

Physicians' answers to questions regarding electronic functions that they routinely used revealed significant differences across domains and functional capacity. Across countries, most physicians with electronic medical records reported the ability to generate patient and panel information, and they routinely used electronic order entry for lab tests and prescription drugs. Decision support for physicians, however, was less common. In particular, in Germany and Norway, only 13 percent and 12 percent, respectively, of doctors reported at least two of four

EXHIBIT 2
Primary Care Physicians' Electronic Health Information Capacity In Ten Countries, By Practice Size, 2009 And 2012

Country	Reporting they use electronic medical records		With multifunctional electronic health information capacity, 2012 ^a				Reporting they can electronically exchange patient summaries and test results with doctors outside their practice, 2012
	2009	2012	All practices	<2 FTEs	2 to <5 FTEs	≥5 FTEs	
AUS	95	92	60	48 ^c	60	65	27
CAN	37	56	10	7	12	12	14
FRA	68	67	6	5	7	— ^b	39
GER	72	82	7	5	8	— ^b	22
NETH	99	98	33	36	32	— ^b	49
NZ	97	97	59	42	61	69	55
NOR	97	98	4	2 ^c	5	4	45
SWI	— ^d	41	11	7	16	24 ^c	49
UK	96	97	68	59 ^c	69	68	38
US	46	69	27	11	25	38	31

SOURCES 2009 and 2012 Commonwealth Fund International Health Policy Surveys of Primary Care Physicians. **NOTES** Significance tests are available in online Appendix 6 (see Note 6 in text). FTE is full-time equivalent physicians. ^aUses electronic medical records and at least two electronic functions in each of the following four domains: generating patient information, generating panel information, order entry management, and routine clinical decision support. See Appendix 3 (Note 6 in text) for further details. ^bVery small sample size ($n < 50$). ^cSmall sample size ($n < 100$). ^dSwitzerland was not included in the 2009 survey.

decision support functions (see Technical Appendix 3).⁶

Of the five countries with near-universal uptake of electronic medical records, the United Kingdom stands out. More than two-thirds of UK doctors reported multifunctional electronic health information capacity, followed by more than half of doctors in Australia and New Zealand (Exhibit 2). The share of US practices reporting multifunctional capacity nearly caught up to Dutch practices (27 percent and 33 percent, respectively). This stands in contrast to the 2009 survey, when the United States lagged behind. Canadian, French, German, Norwegian, and Swiss physicians were the least likely to report multifunctional capacity in 2012.

Examining health information technology functionality by practice size, we found that Australian, Canadian, New Zealand, Swiss, and US practices with five or more full-time-equivalent doctors were significantly more likely to have multifunctional capacity than practices with fewer than two full-time doctors (Exhibit 2).

Notably, the majority of UK practices with fewer than two full-time doctors and substantial shares of the small practices in Australia, the Netherlands, and New Zealand had multifunctional capacity. These countries have collaborative and regional policies to accelerate the spread and use of health information technology.^{15,16} The results indicate that even small practices can deploy electronic information systems if

they receive health policy support, incentives, and time to implement the systems.

Based on physicians' responses regarding whether they could electronically exchange patient summaries and test results with doctors outside their practice, the electronic exchange of patient information is not yet the norm in any country. The share of practices with information exchange capacity ranged from 55 percent in New Zealand to 14 percent in Canada (Exhibit 2). In the United States, the capacity for electronic exchange of patient information was concentrated in larger practices and those in integrated health systems (see Technical Appendix 2).⁶

TEAMS AND COMMUNICATION Teamwork, communication, and coordination of health care are major challenges for primary care doctors in all countries, including those with national health care systems. Lack of integration between primary care, specialty care, and hospitals can put patients at risk and result in duplicative care, particularly for patients with complex chronic illnesses.¹⁷

Within primary health care practices, the use of nurses and care teams to help deliver and coordinate care is at the core of the Chronic Care Model, which has been widely accepted internationally.¹⁸ More than two-thirds of doctors in the Netherlands, New Zealand, Switzerland, and the United Kingdom reported that their practice had engaged a nurse case manager—either employed directly by the practice or based in the

community—for patients with serious chronic conditions (Exhibit 3).

Use of nurse case managers was least common in Germany (20 percent). Doctors reported diverse arrangements for using such nurses in their practices, with physicians in Australia, the Netherlands, and New Zealand the most likely to employ nurses directly (data not shown).

Physicians' responses regarding communication with specialists and hospitals point to failures to coordinate care well in all of the countries surveyed. More than half of the doctors in France and Switzerland said that they always received a report with relevant information after one of their patients was seen by a specialist, compared to fewer than 20 percent of doctors in Germany, the Netherlands, and the United States (Exhibit 3).

When asked if they were always advised of changes that specialists made to their patients' medications or care plans, fewer than half of the doctors in any country said yes. Germany, the Netherlands, and the United States were at the low end of the country range of results. It is striking that at most, about one in four doctors in any country said that information from specialists was always timely and available when needed.

Physicians' responses regarding notification and information they receive from emergency departments and hospitals about their patients indicates further breakdowns in communication. Fewer than one in four Australian, French,

German, and US primary care doctors said that they were always notified when their patients had been to the emergency department, compared to more than half of doctors from the Netherlands and New Zealand (Exhibit 3). Dutch and New Zealand doctors were also the most likely to say that they were always notified when their patients were being discharged from the hospital.

When physicians were asked how long it took to get information needed to manage care after their patients were discharged, only in Germany and New Zealand did a majority say that they had the information within two days' time or less (Exhibit 3). French and Canadian doctors were the most likely to wait fifteen days or longer. In the Netherlands, New Zealand, and Norway, the majority of doctors had access to hospital discharge summaries electronically, but fax and mail were most common in the other countries (data not shown).

PERFORMANCE FEEDBACK Providing physicians with information on their performance can stimulate targeted improvement efforts. Indeed, studies indicate that comparative information can provide strong incentives and help engage physicians to undertake changes.¹⁹

Reflecting national efforts to make such information more routinely available, UK physicians stand out compared to physicians in the other countries for receiving information about their performance. The vast majority of UK doctors reported that they received and reviewed physician performance information, including data

EXHIBIT 3

Primary Care Physicians' Communication And Care Coordination In Ten Countries, 2012

Percent of physicians reporting that:

Country	Their practice uses nurse case manager ^a	When patient is seen by specialist, they always receive:			They are always notified when patient has been to ED	When patient is discharged from the hospital, they always receive:		
		Report with all relevant health information	Information about changes to patient's Rx/care plan	Information that is timely/available when needed		Notification of discharge	Needed information to manage patient	
						In ≤2 days	In ≥15 days	
AUS	59	32	30	13	23	24	36	9
CAN	44	26	24	11	29	24	15	26
FRA	— ^b	51	47	26	21	40	10	35
GER	20	13	12	4	22	29	67	6
NETH	73	13	5	1	59	63	42	8
NZ	68	41	44	15	55	49	56	2
NOR	51	26	22	4	34	34	14	8
SWI	68	59	44	27	31	31	40	13
UK	78	36	41	18	47	40	21	18
US	43	19	16	11	23	26	45	9

SOURCE 2012 Commonwealth Fund International Health Policy Survey of Primary Care Physicians. **NOTES** Significance tests are available in online Appendix 7 (see Note 6 in text). ED is emergency department. ^aFor patients with serious chronic conditions. ^bQuestion not asked in France.

on clinical outcomes, patient experience, and resource use such as patients' use of hospitals and emergency departments (Exhibit 4). UK rates were the highest on each of these areas of performance feedback.

The majority of doctors in Germany, the Netherlands, and New Zealand also said that they received data on clinical outcomes, compared to fewer than half of primary care physicians in the other six countries. More than half of Australian, New Zealand, and US doctors said that they routinely received data on patient experience. France had notably few doctors reporting that they routinely received or reviewed data in any of the three areas.

UK doctors also led in the ability to compare their practice's performance to that of other practices and to assess their performance annually against targets (Exhibit 4). More than half of New Zealand doctors also reported receiving comparative data.

In the other eight countries, fewer than half of physicians said that they had comparative information on other practices, with the lowest rates in Norway and Canada. Access to such comparative information in the United Kingdom and several other countries reflects national policies to establish performance benchmarks as an integral component of national quality improvement efforts.²⁰

Across countries, practices with more robust capacity in health information technology were more likely to report performance feedback (data not shown). In the United States, physi-

cians who said they were part of an integrated system were also more likely to receive performance information (Technical Appendix 2).⁶

PHYSICIANS' VIEWS OF THE HEALTH SYSTEM AND PRACTICE SATISFACTION To gauge primary care physicians' perspectives overall, the survey asked about their views of their country's health system, their satisfaction with the practice of medicine, and their perceptions of change in recent years. Repeating a pattern observed in earlier surveys,⁵ US and German physicians were the most negative about their health care systems, with only 15 percent and 22 percent, respectively, saying that the system needs only minor changes versus fundamental change or rebuilding (Exhibit 5). German and US physicians were also the least likely to say that they were satisfied or very satisfied with practicing medicine.

Physicians in the other countries were significantly more positive about being a doctor and about their country's health systems. Compared to three years ago,⁵ Australian and Canadian doctors were much more positive about their health system and practice. US physicians' views and practice satisfaction have changed little since 2009 (Technical Appendix 4).⁶

Notably, satisfaction with primary health care practice appears to be related to physicians' perceptions of patients' access to care. Within eight of the study countries (all but Australia and France), doctors concerned about patient access were significantly less likely to be satisfied with practicing medicine (data not shown).

EXHIBIT 4

Primary Care Physicians' Receipt Of Performance Feedback In Ten Countries, 2012

Country	Percent of physicians reporting that:				They routinely receive information on their practice's clinical performance compared to other practices	Their clinical performance is reviewed against targets at least annually
	Their practice routinely receives and reviews data on:					
	Clinical outcomes	Patient satisfaction and experience	Patients' hospital or ED use	Frequency of ordering diagnostic tests		
AUS	42	56	39	33	25	53
CAN	23	15	30	16	15	41
FRA	14	1	9	7	45	43
GER	54	35	24	17	25	43
NETH	81	39	21	16	32	47
NZ	64	51	43	56	55	83
NOR	24	7	33	18	5	22
SWI	12	15	32	20	35	37
UK	84	84	82	56	78	96
US	47	60	55	32	34	67

SOURCE 2012 Commonwealth Fund International Health Policy Survey of Primary Care Physicians. NOTES Significance tests are available in online Appendix 8 (see Note 6 in text). ED is emergency department.

EXHIBIT 5

Primary Care Physicians' Satisfaction Practicing Medicine And Views Of The Health System In Ten Countries, 2012

Country	Percent of physicians reporting that:				
	System works well ^a	They were satisfied/ very satisfied practicing medicine	The quality of care their patients receive throughout the health system in past 3 years has:		Time they or their staff spend getting patients needed care because of coverage restrictions is a major problem
			Improved	Gotten worse	
AUS	45	80	30	20	10
CAN	40	82	26	19	21
FRA	37	76	9	37	17
GER	22	54	12	34	37
NETH	54	88	38	20	26
NZ	53	82	33	19	17
NOR	61	87	28	11	11
SWI	46	84	11	21	23
UK	46	84	35	21	9
US	15	68	21	25	52

SOURCE 2012 Commonwealth Fund International Health Policy Survey of Primary Care Physicians. **NOTE** Significance tests are available in online Appendix 9 (see Note 6 in text). ^aPhysicians agreeing with this statement: "On the whole the health care system works pretty well and only minor changes are necessary to make it work better." Physicians were asked which statement best expressed their overall view of the health system in their country, that statement or one of the following two options: "There are some good things in our health system, but fundamental changes are needed to make it work better"; and "Our health care system has so much wrong with it that we need to completely rebuild it."

When asked about the quality of care that patients receive throughout the health system compared to three years ago, about one-third or more of the physicians in Australia, the Netherlands, New Zealand, and the United Kingdom said that quality had improved, while about one-third of French and German doctors said that it had gotten worse (Exhibit 5). However, in all of the countries there was a diversity of opinion on changes in the quality of health care in the past three years.

As countries aim to reduce health care costs, some countries have looked to coverage restrictions on treatments or medications or to reviews of physician care decisions. Although such interventions may target the appropriateness of care, they can also have the unintended consequence of imposing time and administrative burdens on physicians. Among the study countries, US physicians were the most likely to say that such time concerns are major problem: More than half of US respondents said that they or their staff spend too much time getting patients care because of coverage restrictions on treatment or medications.

German doctors were also more likely to say that restrictions were a problem than physicians in the other eight countries. Notably, the share of Dutch doctors expressing concern about this issue has more than doubled since the 2009 survey⁵ (increasing from 10 percent to 26 percent). This suggests that problems are emerging with the growing complexity of health insurance practices in the Netherlands.

Discussion

Overall, the survey findings and trends over time indicate that national policies—including those concerning insurance design, infrastructure to support primary care practices, health information technology, and performance feedback—make a difference to physicians in primary health care. Yet physicians' experiences also indicate that all countries face the challenge of how to connect primary care to more specialized care and ensure that information flows across sites of care to foster more patient-centered and efficient health care systems.

DIFFERENCES IN ACCESS TO CARE AND NATIONAL POLICIES The study found wide differences across countries in access to primary care and affordability, often reflecting national policies. Regarding after-hours access to primary health care services, all of the study countries except the United States and Canada have policies for after-hours coverage.² These policies include physician-run cooperatives in the Netherlands, walk-in centers and national help lines in the United Kingdom, targeted payment incentives to physicians to provide after-hours coverage in Australia, municipal collaboratives and after-hours rotation in Norway, and requirements for coverage in Germany and Switzerland. The low rates of after-hours arrangements reported by Canadian and US physicians indicate that such arrangements are slow to develop if they must depend on the actions of individual practices.²¹

Variations in patients' electronic access, in-

cluding making appointments or refilling prescriptions online, often track country policies to invest in such capacity. However, electronic access depends on physicians' acceptance and use of the technology, which may lag behind technical capacity.

Insurance design also matters. US physicians stand out, as they have in past surveys, for saying that their patients often have difficulty paying for care and that insurance restrictions on care decisions consume substantial doctor and staff time. The other countries in the study all provide universal coverage and, with the exception of Switzerland, have little or no cost sharing for primary care and essential medications. All of the other countries limit out-of-pocket expenses to levels well below those typical in US insurance.

In contrast to other countries with multiple insurers, US private insurers often use prior authorization and employ varying drug formularies and complex benefit designs, with little standardization. Recent studies confirm that the resulting insurance-related complexity adds substantially to US practice costs as a result of increased paperwork and time demands.²²

In patient surveys, the United States also stands out for insurance-related time concerns.⁸ US experiences provide a cautionary example for other countries regarding the time and resource costs of complexity.

INFORMATION SYSTEMS TO GUIDE AND INFORM PHYSICIANS Electronic health information technology systems have the potential to provide primary care physicians with tools to manage patient care and work in multidisciplinary teams. The rapid spread of health information technology capacity in the United States and Canada and the evolution of multifunctional capacity in many countries since the 2009 survey underscore opportunities for global learning as physicians become proficient users of health information technology systems.

Physicians in Australia, New Zealand, and the United Kingdom were more likely than those in other study countries to report having multifunctional systems. As yet, however, the presence of such systems does not appear to have translated into routine flows of patient information across sites of care. Assessing experience over time will help inform all countries about adapting health information technology systems to support teamwork across sites.

Country variations in the availability of performance information for primary care physicians offer further opportunities to learn. Based on the survey, the United Kingdom currently provides the most feedback to physicians, including about clinical outcomes, patients' experiences, and

comparative data on other practices.

To date, however, the focus in the United Kingdom and other countries has largely been on individual practices as the unit of analysis. As countries seek to emphasize improving population outcomes and performance across the health care system, physicians will need information beyond their own practices.

In the United States, integrated systems such as Kaiser Permanente increasingly have the capacity to provide real-time feedback to inform and guide health system performance. Robust capacity in health information technology with exchange of patient information offers a potential resource to extend this information capacity across health care systems.

SHARED RESOURCES FOR PHYSICIANS A substantial share of primary care physicians in all of the study countries work in small practices. Notably, in the Netherlands and New Zealand, small practices reported robust health information technology capacity, after-hours access, web portals, and the use of nurse case managers. To overcome the limits of scale, both countries have policies that support collaboration within geographic areas.

This practice is spreading: Examples include cooperatives in the Netherlands, primary health organizations in New Zealand, the formation of Medicare Locals—similar to accountable care organizations—in Australia, and general practice consortia in the United Kingdom.²³ In the United States, statewide policies in Vermont and North Carolina are also investing in geographic approaches to share staff and resources.²⁴ These innovations offer a path to redesign primary care and expand capacity at the community level.

NEEDED IMPROVEMENTS IN COMMUNICATION AND TEAMWORK Physicians' experiences in all of the study countries highlight the need to improve communication across the care continuum. A majority of doctors in all countries reported that they did not routinely receive information about care for their patients when they were seen by specialists or in hospitals (Exhibit 3).

Concerns that poor coordination raises costs of care and increases risks to patients have spurred initiatives to develop more patient-centered accountable care systems based on a foundation of primary care. In the United States, public and private insurers are looking to payment reforms to stimulate the development of provider-led networks accountable for access, quality, and costs. Reforms in the United Kingdom put general practitioners in place as leaders of consortia and granted physicians authority to commission services across the care continuum, including hospital and long-term care.²⁵

German and Dutch initiatives to coordinate care have focused on chronic care. Norway's recent "Coordination Reform" targets care coordination using incentives and assignment of responsibilities between the specialist and primary care sectors.² Multiple countries are also "bundling" payment to hospitals to include follow-up care and incentives for hospitals to connect to primary care.²⁶

CHANGE ENDORSED BY US PRIMARY CARE PHYSICIANS Redesigning primary care and health care systems requires a committed and engaged physician workforce. The United States spends far more than the other study countries on health care services. Yet US primary care physicians were the least likely to be satisfied with the practice of medicine or the health system overall. US studies indicate that primary care physicians' satisfaction increases and stress decreases when care is redesigned to improve access and support the use of teams, giving physicians time to focus on sicker patients.²⁷

In general, US primary care physicians' views and experiences endorse the need for reform, including enhanced access. US physicians who reported that their patients often faced cost or other access barriers were the most likely to say

that the system required major change.

An array of policies in the Affordable Care Act envision primary care as central to efforts to achieve the Triple Aim of better health, better care, and lower costs.¹ With major insurance expansion scheduled for 2014, there is the potential to lower access barriers for primary care and streamline insurance practices to free up physician and practice staff time to provide care.

Although US health information technology adoption has increased, the study points to the need for intensified efforts to link practice information systems to enable communication and collaboration across care sites. The lack of exchange capacity and US physicians' reports of gaps in communication with specialists and hospitals indicate that there is substantial room to improve.

In summary, the redesign of primary care is central to reforms aimed at improving health system performance. As a result, there are opportunities to learn from diverse efforts underway in the United States and other countries that are designed to achieve shared health reform goals. Listening to doctors on the front lines of primary care can help identify gaps and target reforms of health systems. ■

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NOTES

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- 6 To access the Appendix, click on the Appendix link in the box to right of the article online.
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- 11 The Commonwealth Fund provided core support, with cofunding from the Haute Autorité de Santé and Caisse Nationale de l'Assurance Maladie des Travailleurs Salariés (France); German Federal Ministry of Health and German National Institute for Quality Measurement in Health Care; Dutch Ministry of Health, Welfare, and Sport and the Scientific Institute for Quality of Healthcare at Radboud University Nijmegen; Norwegian Knowledge Centre for the Health Services; Swedish Ministry of Health and Social Affairs; and Swiss Federal Office of Public Health and Swiss Medical Association. Health Council of Canada, Health Quality Ontario, Quebec Health Commission, Health Quality Council of Alberta, and Canada Health Infoway provided support to expand the Canadian samples.
- 12 Data weights included sex and age in

all countries. Data were also weighted by urbanicity in New Zealand and Australia; population size in France; and region in Canada, Germany, Norway, Switzerland, and the United States.

- 13 Responses rates were as follows: Australia, 47 percent; Canada, 38 percent; France, 21 percent; Germany, 20 percent; the Netherlands, 48 percent; New Zealand, 47 percent; Norway, 44 percent; Switzerland, 38 percent; the United Kingdom, 24 percent; and the United States, 35 percent.
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In this month's *Health Affairs*, Cathy Schoen and coauthors report on the Commonwealth Fund's latest international survey, this one of primary care doctors in ten leading industrialized countries and an update of a similar 2009 survey. Among other findings, doctors in the United States reported notably greater use of health information technology within practices compared to US doctors in 2009, although major deficiencies remained in the

electronic exchange of health information. Communication gaps are a shared concern across countries, with a significant share of primary care physicians in all the countries reporting that they did not routinely receive timely information from specialists or hospitals. US doctors were the most likely to report that they spent substantial time grappling with insurance restrictions and that their patients often went without care because of costs—underscoring the views of 85 percent of US doctors that the health care system needs fundamental change.

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