

Taking The Pulse Of Health Care Systems: Experiences Of Patients With Health Problems In Six Countries

Patients' voices can provide policy leaders with a window onto what is happening at the front lines of care.

by Cathy Schoen, Robin Osborn, Phuong Trang Huynh, Michelle Doty, Kinga Zapert, Jordon Peugh, and Karen Davis

ABSTRACT: This paper reports on a 2005 survey of sicker adults in Australia, Canada, Germany, New Zealand, the United Kingdom, and the United States. Sizable shares of patients in all six countries report safety risks, poor care coordination, and deficiencies in care for chronic conditions. Majorities in all countries report that mistakes occurred outside the hospital. The United States often stands out for inefficient care and errors and is an outlier on access/cost barriers. Yet no country consistently leads or lags across survey domains. Deficiencies in transition care during hospital discharge and coordination failures among patients seeing multiple physicians underscore shared challenges of improving performance across sites of care.

ADVANCED INDUSTRIALIZED COUNTRIES around the world share the quest for health reforms that improve the performance of their medical care systems.¹ Clinical and pharmaceutical advances that have improved medical care have at the same time fueled more complex, specialized, and fragmented care, with accompanying risks to patients and increased costs. In each country, health spending is highly concentrated among patients with chronic care needs, who are often hospitalized or receive major surgery. These patients often see multiple physicians across sites of care, which heightens the risk of errors or breakdowns in care coordination.

Patients' experiences can provide feedback on the "pulse" of health care systems as countries seek to redesign care delivery, payment, or insurance. From pa-

Cathy Schoen (cs@cmwf.org) is senior vice president, Research and Evaluation, at the Commonwealth Fund in New York City. Robin Osborn is vice president and Phuong Trang Huynh, associate director, International Health Policy and Practice; Michelle Doty is a senior analyst, also at the Commonwealth Fund. Kinga Zapert is a vice president at Harris Interactive in New York City, where Jordon Peugh is senior research manager. Karen Davis is president of the Commonwealth Fund.

tients' perspectives, a health system is likely to be judged by timely access, affordability, safety, responsiveness to preferences, efficient care coordination, and perceived clinical outcomes. As patients move across sites of care, their voices can provide policy leaders with a window onto the front lines of care.

To provide a patient and cross-national perspective, the 2005 Commonwealth Fund International Health Policy Survey interviewed adults in six countries who had recently been hospitalized, had surgery, or reported health problems. The eighth in a series of cross-national surveys, the 2005 survey for the first time includes Germany in addition to Australia, Canada, New Zealand, the United Kingdom, and the United States.² Conducted in countries with distinct insurance and care delivery arrangements, the study examines country systems' performance, with a focus on safety, coordination, access, and chronic disease management.³

Overall, the findings reveal strikingly similar deficiencies in care in many areas. Medical errors and failures to coordinate care, especially during transitions, emerge as shared concerns, along with missed opportunities to elicit patients' views and engage chronically ill patients in their care. However, the study also finds sizable differences across countries. The United States often stands out with high medical errors and inefficient care and has the worst performance for access/cost barriers and financial burdens. In contrast, Germany often ranks high for timely access. Yet no country is consistently worst or best across all dimensions included in the survey. Performance deficiencies indicate the shared challenges countries face as they seek to redesign twenty-first-century systems to provide safer and more effective, responsive, and efficient care and increase the value of society's investment in health care.

Study Design And Methods

■ **Sample and study design.** The survey screened initial random samples of adults age eighteen or older to identify those who met at least one of four criteria: rated their health as fair or poor; reported that they had a serious illness, injury, or disability that required intensive medical care in the past two years; or reported that in the past two years they had major surgery or had been hospitalized for something other than a normal pregnancy.

The final study includes 700–750 adults in Australia, Canada, and New Zealand and 1,500 or more in the United Kingdom, United States, and Germany. The study sponsors included larger sample sizes in the latter three countries to enable future within-country analyses. The Commonwealth Fund funded the core study and partnered with the Health Foundation to expand the U.K. sample.⁴ The German Institute for Quality and Economic Efficiency in Health Care funded the German sample. One-fourth to one-third of adults who were initially contacted met at least one eligibility criterion (Exhibit 1).

The questionnaire was designed by researchers at the Commonwealth Fund and Harris Interactive, with advice from experts in each country. Except for minor

EXHIBIT 1
Screening Questions And Final Sample Characteristics, Commonwealth Fund
International Health Policy Survey Of Sicker Adults, 2005

	AUS	CAN	NZ	UK	US	GER
Adults initially contacted for screening (N)	2,074	2,877	2,301	4,733	5,253	4,085
Results of four survey screening questions						
Rate health fair or poor	17%	12%	10%	20%	17%	21%
Had serious or chronic illness, injury, or disability	20	15	18	20	16	21
Hospitalized in past 2 years	16	12	16	15	12	18
Major surgery in past 2 years	9	8	9	9	9	9
Percent yes to any of the screening questions	34	26	29	36	28	36
Final survey sample of sicker adults (N)						
Rate health as fair or poor	50% ^{c,d,e,f}	46% ^{c,d,e,f}	33% ^{d,e,f}	56%	59%	58%
Has any of 6 chronic illnesses, doctor diagnosis	72 ^c	72 ^{c,d}	62 ^{d,e,f}	67 ^{e,f}	73	73
Hypertension	33 ^{c,e,f}	32 ^{e,f}	27 ^{d,e,f}	33 ^{e,f}	40 ^f	44
Heart disease, including heart attack	14 ^{e,f}	15 ^{e,f}	14 ^{e,f}	12 ^{e,f}	18 ^f	25
Diabetes	13 ^e	14 ^{c,e}	10 ^{e,f}	12 ^{e,f}	20 ^f	16
Arthritis	37 ^{c,d,f}	34 ^{c,d,f}	26 ^e	29 ^e	37 ^f	28
Lung problems (asthma, emphysema, etc.)	21 ^f	18 ^f	18 ^f	19 ^f	19 ^f	14
Depression	24 ^{c,d,f}	22 ^{c,d,f}	13 ^{d,e}	17 ^e	26 ^f	15
Has two or more chronic illnesses (out of 6)	42 ^{b,c,d,e}	39 ^{e,f}	30 ^{e,f}	36 ^{e,f}	49 ^f	45
Age 50 or older	48 ^{b,d,e,f}	53 ^{d,f}	52 ^{d,f}	56 ^e	54 ^f	58
Health care system contact (in past 2 years)						
Hospitalized for other than normal pregnancy	48% ^{d,e}	44% ^{c,f}	54% ^{d,e}	40% ^f	41% ^f	50%
Hospitalized more than once	19	15	20	16	16	17
Had major surgery	28	29 ^d	30 ^{d,f}	25 ^e	32 ^f	26
Number of different doctors seen in past two years						
1	11 ^{b,d,e}	15 ^f	12 ^{d,e,f}	18 ^f	18 ^f	9
2-3	43 ^d	47 ^d	45 ^d	36 ^{e,f}	46	44
4 or more	44 ^{b,e,f}	35 ^d	40 ^{e,f}	42 ^{e,f}	35	32
Number of prescriptions used regularly						
0	34 ^{b,d,e,f}	27 ^{c,f}	32 ^{d,e,f}	26 ^f	23	22
1-3	39	41 ^e	45 ^{e,f}	41 ^e	36	39
4 or more	26 ^{d,e}	31 ^{c,e}	22 ^{d,e,f}	32 ^e	40 ^f	30

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2005.

NOTES: Reading from left to right starting with Australia, the letter indicates that the country differs from countries to the right at $p < .05$, as indicated.

^b For difference with Canada.

^c For difference with New Zealand.

^d For difference with United Kingdom.

^e For difference with United States.

^f For difference with Germany.

wording changes to reflect country-specific terminology, the same instrument was used in each country. Interviews were conducted by telephone between 17 March and 9 May 2005 in the five English-speaking countries and between 9 May and 12 June 2005 in Germany. Interviews averaged seventeen minutes. The survey was conducted in German in Germany and English in the five other countries, with the option of French in Canada and Spanish in the United States.⁵

In the analysis, final samples were weighted to reflect the distribution of the adult population based on initial screening demographics.⁶ The margin of sample error for country averages are approximately ± 4 percent for Australia, Canada,

and New Zealand; ± 3 percent for Germany and the United States; and ± 2 percent for the United Kingdom at the 95 percent confidence level. Exhibits indicate where differences are significant at the .05 percent level or better.

■ **Sicker adults profile.** The study design included adults with a high incidence of chronic disease and recent, intensive use of the medical care system. Two-thirds to three-fourths of sicker adults in each country reported a diagnosis of at least one of six chronic illnesses. Reflecting the increasing prevalence of health problems with age, half or more were age fifty or older. Forty to fifty percent had been hospitalized in the past two years (Exhibit 1).

In each country, these adults typically had seen multiple physicians during the past two years, and patterns were similar across countries. A majority reported taking medications regularly; half or more reported taking multiple medications.

Survey Findings

■ **Hospital and discharge experiences.** In each country, sizable shares of adults who had recently been hospitalized indicated deficiencies in care. Responses regarding hospital experiences were often similar or varied within a narrow range across countries (Exhibit 2).

Asked about explanations of risk or efforts to manage their pain well during their hospital stay, more than one in four patients in each country (range 28–32 percent) said that risks were not completely explained, and nearly one in five or more reported inadequate pain management. Further indicating risks, 7–10 percent of patients in all but Germany said that they developed an infection while hospitalized (Exhibit 2).

On two questions about information exchange between staff and patients, 19–26 percent of patients in the six countries reported communication gaps. Further indicating gaps in patient-centered care, at least one in six patients in all countries said that they would have liked greater involvement in decisions about their care.

Failures to coordinate care during discharge emerged in all countries. At least one-third of patients in each country said that they did not receive instructions about symptoms to watch for, did not know whom to contact with questions, or left without arrangements for follow-up care. Half of German patients said that there had been no follow-up arrangements.

Concerns about transition care extended to medications. Patients in all countries were often given a new medication when discharged, with U.S. patients the most likely to report new medications. Yet in all but Germany, at least one in four patients said that nobody had reviewed the medications they were taking before their hospitalization.

Signaling potential quality concerns as well as transitional care deficiencies, at least one in ten patients in all countries said that they were readmitted to the hospital or visited the emergency room as a result of complications after hospital care. Rates varied greatly across countries: German rates were the lowest and signifi-

EXHIBIT 2
Hospital Experiences Among Sicker Adults In Six Countries, 2005

	AUS	CAN	NZ	UK	US	GER
Base: Hospitalized in past 2 years (N)	351	328	389	711	674	752
Before hospital treatment or procedure, risks were explained						
Completely	65%	57% ^{e,f}	61%	62%	66%	65%
To some extent	10 ^f	11 ^f	13 ^f	14 ^f	15 ^f	20
Not at all	18 ^f	21 ^{e,f}	17 ^f	16	14	12
Developed an infection while in the hospital	8 ^f	7 ^f	10 ^f	10 ^f	7 ^f	3
Hospital staff did everything they could to control your pain						
Always	82 ^{c,d,e}	79 ^e	76	77 ^e	74 ^f	81
Sometimes, rarely, or never	17	19	21	21	26	18
Communication failures: reports when doctors or nurses						
Failed to communicate about your care to each other	16	13	17 ^f	17 ^f	17 ^f	12
Failed to communicate information about your care to you	12 ^c	15	20	15	17	17
Experienced either communication failure	22	19	26	22	25	23
Doctors or nurses DID NOT involve you as much as you wanted in decisions about your care	22	27	19	22	16 ^f	21
Discharge experiences: when discharged						
Did not receive clear instructions about symptoms to watch for	18 ^{d,e}	17 ^{d,e,f}	14 ^{d,e,f}	26 ^e	11 ^f	23
Did not know whom to contact for questions about treatment	9	12	9	12	8	12
Hospital did not make arrangements for follow-up doctor visits	23 ^f	30 ^{d,f}	23 ^f	19 ^{e,f}	27 ^f	50
Any poor discharge coordination	36 ^f	41 ^{c,e,f}	33 ^f	37 ^f	33 ^f	60
Prescription medication care at discharge						
Given new Rx when discharged	43 ^{b,d,e}	55 ^{e,f}	49 ^{e,f}	53 ^{e,f}	63 ^f	42
New Rx: no one discussed medications used before being admitted (Base: new Rx and taking Rx before)	23 ^{b,e,f}	28 ^f	31 ^f	2 ^f	3 ^f	14
After discharge, went to ER or was readmitted to hospital as a result of complications during recovery	20 ^{e,f}	16 ^f	15 ^f	17 ^f	14	10
ER only	5	9 ^{c,f}	4 ^e	6	8 ^f	4
Readmitted to hospital	15 ^{b,e,f}	7	11 ^{e,f}	11 ^{e,f}	6	6

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2005.

NOTES: Reading from left to right starting with Australia, the letter indicates that the country differs from countries to the right at $p < .05$, as indicated. ER is emergency room.

^b For difference with Canada.

^c For difference with New Zealand.

^d For difference with United Kingdom.

^e For difference with United States.

^f For difference with Germany.

cantly lower than four of five countries, and Australian rates the highest—double the levels reported by German patients.

■ **Patient safety.** The quest to improve safety stands at the center of efforts to improve the performance of medical care systems.⁷ The high rates of patient-reported errors in each country indicate that there is much room for improvement. Although attention to date has tended to focus on safety during hospitalization, including infection rates, the survey finds that errors often happen outside the hospital and extend to lab and diagnostic care (Exhibit 3).

Patient-reported medical and medication errors were high in all six countries and varied within a narrow range. In each country, 17–22 percent of patients reported a time that they believed a medical mistake had been made in their care or that they had been given the wrong dose or prescription in the past two years. In

EXHIBIT 3
Medical, Medication, And Lab Errors Among Sicker Adults In Six Countries, 2005

	AUS	CAN	NZ	UK	US	GER
Unweighted N	702	751	704	1,770	1,527	1,503
Medical mistake made in your treatment or care	13%	15%	14%	12% ^e	15%	13%
Given the wrong medication or wrong dose	10	10	9 ^e	10 ^e	13 ^f	10
Either type of error was made	19	19	18 ^e	17 ^e	22 ^f	19
Among those reporting a mistake or medication error						
Mistake or medication error caused serious health problem	51	46	54 ^{d,f}	42	45	41
Recent mistake or medication error occurred outside hospital	63 ^e	60 ^e	63 ^e	67 ^e	77 ^f	63
Was NOT told by doctors involved in your care about the medication or medical mistake	70	74	61	72	75	83
Lab errors						
Had blood test, x-rays, or other tests in past 2 years	92 ^d	93 ^d	90 ^d	85 ^{e,f}	90	92
Given incorrect results for a diagnostic or lab test	5 ^e	7 ^{c,d,e}	4 ^e	3 ^{e,f}	10 ^f	5
Experienced delays being notified about abnormal test results	10 ^{b,e,f}	15 ^{c,d,f}	11 ^{e,f}	9 ^{e,f}	16 ^f	5
Either type of lab error was made	14 ^{e,f}	18 ^{c,d,e,f}	14 ^{e,f}	11 ^e	23 ^f	9
Combined medical, medication, or lab errors						
Reported medical mistake, medication error, or lab error	27 ^{d,e}	30 ^{c,d,e,f}	25 ^e	22 ^e	34 ^f	23
Medical mistake, medication error, or lab error by number of doctors						
1 doctor	12 ^a	15 ^a	14 ^a	12 ^a	22 ^a	14 ^a
4 or more doctors	37	40	35	28	48	31
Wrong medication or wrong dose by number of doctors seen						
1 doctor	6 ^a	5 ^a	7 ^a	9 ^a	11 ^a	8 ^a
4 or more doctors	28	27	27	22	34	29
Percent lab error by number of doctors seen in past two years						
1 doctor	12	15	12	4 ^a	19 ^a	11
4 or more doctors	16	22	19	13	30	10

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2005.

NOTES: Reading from left to right starting with Australia, the letter indicates that the country differs from countries to the right at $p < .05$, as indicated.

^a Within-country error-rate difference significant between 1 doctor and 4 or more doctors ($p < .05$).

^b For difference with Canada.

^c For difference with New Zealand.

^d For difference with United Kingdom.

^e For difference with United States.

^f For difference with Germany.

all countries, a sizable majority (60 percent or more) said that these errors occurred outside the hospital.

Despite studies that patients value discussion about mistakes or errors, most patients (61–83 percent) in each country said that the doctor or health professional involved did not tell them about the mistake.⁸ Countries differed greatly on the likelihood of discussions: New Zealanders were the most likely and Germans the least likely to report that conversations had occurred.

Diagnostic and lab tests were also a source of errors in all countries, based on patients' reports of receiving incorrect test results or delays in receiving abnormal results. Lab-error rates varied across countries: U.S. patient-reported lab error rates were significantly higher than the other five countries, with rates double those reported in Germany and the United Kingdom. Lab error rates were also relatively high in Canada.

On a composite variable including three types of errors—medication or medical mistakes or lab errors—U.S. patients were the most likely and U.K. patients the least likely to report errors. Driven up by relatively high medication and lab or test errors, at 34 percent, the spread between the United States and the countries with the lowest error rates was wide as well as statistically significant. Yet in all countries, more than one of five sicker adults reported at least one of the three types of errors, with patients often reporting more than one type of error.

Reflecting the risks of adverse events for those in the midst of complex care, the incidence of patient-reported errors rose sharply with the number of physicians seen. In each country, patients seeing four or more physicians were three times as likely to report at least one type of error as those seeing one physician. (Relative risk ratios ranged from 2.7 to 4.5 across countries; data not shown.)

■ **Care for adults with chronic disease.** The advent of more complex pharmaceutical care intensifies the need for physician review and discussions with patients to minimize risks and help patients adhere to medication regimens. Restricting the survey sample to adults who reported at least one of six chronic conditions, 80 percent of chronically ill adults said that they were taking medications regularly, and one-third to half reported four or more medications (Exhibit 4). Despite the evidence of often complex medication regimens, sizable majorities of chronically ill patients in all countries said that their physicians had not always reviewed all of their medications during the past year, and one-third or more reported infrequent reviews (sometimes, rarely, or never). Patients' reports also indicate sizable gaps in physicians' explanations about side effects. Among those taking multiple medications, this lack of review raises the risk of adverse drug interactions as well as potentially undermining the effectiveness of care.

In addition to inadequate medication review, chronically ill patients indicate shortfalls in meeting care management goals on multiple dimensions. Efforts to improve chronic care outcomes have demonstrated the importance of having a self-management plan and using teams to help coordinate care.⁹ Yet the survey found that advice for patients on self-management is not routine in any country. Asked whether the health professionals they see had given them a plan to help manage their care at home, one-third or more of chronically ill patients said “no” in each country. German and U.K. patients were the least likely and Canadians the most likely to report a self-management care plan (Exhibit 4).

Countries also varied widely on the extent to which physician practices involve nurses in managing chronic care conditions. About half of German and U.K. chronically ill adults reported that a nurse from their doctor's practice helps them manage their care, compared with fewer than one-fifth of Australian and Canadian patients.

To compare condition-specific experiences, the survey asked diabetics about receipt of four screening tests/exams during the past year and asked adults with hypertension about two services. Among diabetics, the percentage receiving all

**EXHIBIT 4
Prescription Medication And Care Management Experiences Among Sicker Adults
With Chronic Diseases In Six Countries, 2005**

	AUS	CAN	NZ	UK	US	GER
Base: Adults with at least 1 chronic condition (N)	515	536	465	1,218	1,146	1,101
Prescription medications						
Takes prescription medications regularly	79% ^{b,d,e,f}	84% ^{d,e,f}	82% ^{d,e,f}	88% ^f	88% ^f	81%
Takes 4 or more medications	34 ^{b,d,e,f}	41 ^{e,f}	34 ^{d,e,f}	44 ^{e,f}	53 ^f	40
In past year, how often have your doctor(s)						
Reviewed all medications, including those prescribed by other doctors						
Always	36 ^{b,f}	39 ^f	37 ^f	36 ^{e,f}	41	45
Sometimes, rarely, or never	46 ^{b,f}	38	42 ^f	42 ^f	40 ^f	35
Explained the side effects of medications						
Always	53 ^{b,d,e,f}	41 ^{e,f}	49 ^{d,e,f}	40 ^f	38 ^f	31
Sometimes, rarely, or never	36 ^{d,e,f}	40 ^{c,d,e,f}	33 ^{d,e,f}	48	49	47
Care management						
Was given plan to manage care at home	50% ^{b,e,f}	65% ^{c,d,e,f}	56% ^{d,f}	45% ^{e,f}	58% ^f	37%
Nurse is involved in management of condition	16 ^{c,d,e,f}	19 ^{c,d,e,f}	36 ^{d,f}	52 ^e	41 ^f	47
Adults with diabetes (n)						
Hemoglobin A1C checked in the past six months	97	103	69	207	296	238
Feet examined in the past year	86%	90%	79% ^{e,f}	85%	90%	91%
Eye exam in the past year	57 ^d	52 ^{d,e,f}	66	75	70	65
Cholesterol checked in past year	73 ^f	73 ^f	66 ^{d,f}	83 ^e	69 ^f	85
Percent who received all 4 services	93	91	87 ^f	92	92	95
Percent who received all 4 services, by care plan or nurse	41 ^{d,e,f}	38 ^{d,e,f}	40 ^{d,e,f}	58	56	55
Plan for self-management or has nurse	– ^g	– ^g	– ^g	65 ^a	64 ^a	61 ^a
Neither self-care plan nor nurse	– ^g	– ^g	– ^g	25	27	41
Adults with hypertension (n)						
Cholesterol checked in past year	244	238	215	586	636	673
Blood pressure checked in past year	80% ^f	86% ^{c,d,f}	77% ^{e,f}	73% ^{e,f}	86% ^f	92%
Percent yes to both tests	95 ^f	98	98	96 ^f	97	99
Percent of adults with hypertension receiving both services by care plan or nurse	78 ^{e,f}	85 ^{c,d,f}	77 ^{e,f}	72 ^{e,f}	85 ^f	91
Plan for self-management or has nurse	83 ^a	88 ^a	82 ^a	81 ^a	89 ^a	95 ^a
Neither self-care plan nor nurse	70	78	66	54	74	85

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2005.

NOTES: Reading from left to right starting with Australia, the letter indicates that the country differs from countries to the right at $p < .05$, as indicated.

^a Within-country error-rate difference significant ($p < .05$).

^b For difference with Canada.

^c For difference with New Zealand.

^d For difference with United Kingdom.

^e For difference with United States.

^f For difference with Germany.

^g Sample size too small for subgroups.

four services fell short of recommended care in all countries. Yet the percentage varied significantly across countries, ranging from a high of only 55–58 percent in Germany, the United States, and the United Kingdom to lows of 38–41 percent in Canada, New Zealand, and Australia. Adults with hypertension were more likely to have received the two screening tests named in the survey, but gaps emerged for these patients as well (Exhibit 4).

Self-management plans and involvement of nurses were associated with higher

rates of adherence to care targets in all countries. The percentage of diabetics or adults with hypertension receiving recommended care increased significantly with care management plans or nurse involvement compared with those having neither support.

■ **Physician-patient communication.** Effective communication between patients and their physicians can support more active patient involvement in care and promote adherence. Although the vast majority of patients in all six countries reported having at least one physician whom they considered their usual source of care, communication gaps emerged as they did with hospital care. Across countries, one-sixth to one-fourth of patients said that their physician only sometimes, rarely, or never makes the goals of care and treatment clear or gives them clear instructions (Exhibit 5). Conversations about preferences are rarer, with one-third (New Zealand) to half (United Kingdom, United States) of patients saying that their physician does not often tell them about treatment options or involve them in care decisions. The relatively low rates of patient engagement reported in the latter two countries repeat patterns observed in the 2004 primary care survey.¹⁰

■ **Care coordination.** For patients in the midst of complex care, coordination and information flow across sites of care are instrumental for provision of efficient and safe care. In addition to transitional care during discharge, patient reports point to coordination failures in community care, particularly when patients see multiple doctors. Measured by patients saying that test results or medical records were not available at the time of appointments or that physicians duplicated tests, at least one-fifth of patients in all countries experienced breakdowns in coordination.

Coordination gaps occur most frequently in the United States, where one-third of patients reported one or both of these coordination failures. Rates were relatively high on both questions. Among the other countries, duplicate test rates were also comparatively high in Germany, and duplication rates were low in the United Kingdom, repeating a U.K. pattern observed in 2004.¹¹ In all countries, the likelihood of coordination failures increased significantly with the number of physicians seen. Here, too, U.S. coordination failure rates stood out.

■ **Timely access and financial burden.** Access and waiting times differed significantly across the six countries, with wide differentials between the top- and bottom-performing countries (Exhibit 6). Asked about waits to see their doctors when sick, sicker adults in Canada and the United States were significantly less likely to report rapid access and more likely to wait six days or longer for an appointment than patients in the other countries. The percentage receiving same- or next-day appointments ranged from a high of 70 percent or more in Germany and New Zealand to below half in Canada and the United States.

Ease of access to care after hours or on weekends also varied widely, with 70 percent or more New Zealand and German patients and more than half of U.K. patients saying that access is “easy.” In contrast, more than half of sicker adults in the United States, Canada, and Australia said that it is difficult to get after-hours care.

EXHIBIT 5
Doctor Communication And Care Coordination Among Sicker Adults In Six Countries, 2005

	AUS	CAN	NZ	UK	US	GER
Unweighted N	702	751	704	1,770	1,527	1,503
Have regular doctor(s)	92 ^{d,e,f}	92 ^{d,e,f}	94 ^{d,e,f}	96 ^e	84 ^f	97
With same doctor 5 years or more	61 ^{d,e,f}	65 ^{e,f}	61 ^{d,e,f}	69 ^{e,f}	50 ^f	78
Doctor-patient communication						
Regular doctor makes clear the specific goals for care or treatment						
Always or often	76	76	80	67	71	75
Sometimes, rarely, or never	21 ^{c,d,e}	22 ^{c,d,e}	16 ^{d,e,f}	27 ^f	27 ^f	22
Regular doctor gives clear instructions about symptoms, when to seek further care						
Always or often	76	73	82	69	70	75
Sometimes, rarely, or never	19 ^{b,d,e}	24 ^c	16 ^{d,e,f}	27 ^f	28 ^f	21
Regular doctor tells you about care, treatment choices and asks opinions						
Always or often	50	56	59	43	48	53
Sometimes, rarely, or never	46 ^{b,c}	40 ^{d,e}	37 ^{d,e,f}	50 ^f	50 ^f	42
Coordination experiences						
In the past 2 years there was a time when Records/results did not reach doctor's office in time for appointment	12 ^{b,d,e}	19 ^f	16 ^{e,f}	16 ^{e,f}	23 ^f	11
Doctors ordered medical test that you felt was unnecessary because test had already been done	11 ^{d,e,f}	10 ^{d,e,f}	9 ^{d,e,f}	6 ^{e,f}	18	20
Either coordination problem	19 ^{e,f}	24 ^{d,e}	21 ^{e,f}	19 ^{e,f}	33 ^f	26
Coordination problems by number of doctors						
1 doctor	15	16 ^a	7 ^a	11 ^a	22 ^a	23
4 or more doctors	27	31	30	26	43	30

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2005.

NOTES: Reading from left to right starting with Australia, the letter indicates that the country differs from countries to the right at $p < .05$, as indicated.

^a Within-country error-rate difference significant between 1 doctor and 4 or more doctors ($p < .05$).

^b For difference with Canada.

^c For difference with New Zealand.

^d For difference with United Kingdom.

^e For difference with United States.

^f For difference with Germany.

Canadian and U.S. patients were the most likely and German patients the least likely to report emergency room (ER) visits in the past two years, with rates notably low in Germany. Moreover, one-fifth of Canadian and one-fourth of U.S. sicker adults said that they went to an ER for a condition that could have been treated by their regular doctor if available—rates significantly higher than reported in other countries. Also, Canadians stood out for long ER waiting times.

Asked about waits for specialists or elective surgery, German and U.S. patients reported similar rapid access, with other countries lagging behind the United States as they have in past surveys in the series. The relatively positive German patient experience with rapid access to specialized care as well as physician visits and after-hours care places Germany among the country leaders for timely access

EXHIBIT 6
Access, Waiting Times, And Costs Among Sicker Adults In Six Countries, 2005

	AUS	CAN	NZ	UK	US	GER
Unweighted N	702	751	704	1,770	1,527	1,503
Ability to get an appointment to see a doctor						
Same day	49% ^{b,c,e,f}	23% ^{c,d,e,f}	58% ^{d,e}	45% ^{e,f}	30% ^f	56%
Next day	17	13	23	16	17	13
6 days or more or never	10 ^{b,c,e}	36 ^{c,d,f}	3 ^{d,e,f}	15 ^e	23 ^f	13
Difficulty getting care nights, weekends, holidays without going to ER (Base: sought care)						
Very difficult	36 ^{b,c,d,f}	29 ^{c,d,e,f}	13 ^{d,e}	22 ^{e,f}	39 ^f	11
Somewhat difficult	22	24	15	17	21	14
Very or somewhat easy	40	42	70	57	38	72
Went to ER in past 2 years	46 ^{b,e,f}	60 ^{c,d,f}	42 ^{e,f}	45 ^{e,f}	55 ^f	28
Went to ER for condition that could have been treated by regular doctor if available	15 ^{c,e,f}	21 ^{c,d,e,f}	9 ^e	12 ^e	26 ^f	6
Time waited to be seen in ER						
Less than 1 hour	47 ^f	39 ^{c,d,e,f}	55 ^f	50 ^f	53 ^f	66
4 hours or more	17 ^{b,f}	24 ^{c,d,e,f}	12 ^f	14 ^f	12 ^f	4
Wait for specialist appointment (Base: needed to see specialist in past 2 years) (N)	552	592	552	1,207	1,179	1,181
Less than 1 week	11% ^{c,e,f}	10% ^{c,e,f}	17% ^{d,f}	11% ^{e,f}	20% ^f	27%
More than 4 weeks	46 ^{b,d,e,f}	57 ^{c,e,f}	40 ^{d,e,f}	60 ^{e,f}	23	22
Wait for elective surgery (Base: Needed non-emergency, elective surgery in past 2 years) (N)	179	165	181	231	352	235
Less than 1 month	48% ^{b,c,d,e,f}	15% ^{c,d,e,f}	32% ^{d,e,f}	25% ^{e,f}	53%	59%
4 months or more	19	33	20	41	8	6
Access problems because of cost in past 2 years						
Did not fill a prescription	22 ^{d,e,f}	20 ^{d,e,f}	19 ^{d,e,f}	8 ^{e,f}	40 ^f	14
Did not visit a doctor when sick	18 ^{b,c,d,e}	7 ^{d,c,e,f}	29 ^{d,e,f}	4 ^{e,f}	34 ^f	15
Did not get recommended test or follow-up	20 ^{b,d,e,f}	12 ^{c,d,e}	21 ^{d,e,f}	5 ^{e,f}	33 ^f	14
Reported any access problems due to cost	34 ^{b,d,e,f}	26 ^{c,d,e}	38 ^{d,e,f}	13 ^{e,f}	51 ^f	28
Out-of-pocket expenses for medical bills in the past year, U.S. \$ equivalent						
None	10 ^{b,d,e,f}	22 ^{c,d,e,f}	9 ^{d,e,f}	65 ^{e,f}	15 ^f	5
More than \$1,000	14 ^{c,d,e,f}	14 ^{c,d,e,f}	8 ^{d,e}	4 ^{e,f}	34 ^f	8
Out-of-pocket expenses for Rx in past month, U.S. \$ equivalent (Base: take drugs regularly)						
None	11 ^{b,d}	24 ^{c,d,e,f}	12 ^d	74 ^{e,f}	15	13
More than \$100	9 ^{b,c,d,e,f}	16 ^{c,d,e,f}	3 ^e	3 ^{e,f}	30 ^f	5

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2005.

NOTES: Reading from left to right starting with Australia, the letter indicates that the country differs from countries to the right at $p < .05$, as indicated.

^b For difference with Canada.

^c For difference with New Zealand.

^d For difference with United Kingdom.

^e For difference with United States.

^f For difference with Germany.

across all sites of care in the survey.

As found in past surveys, the United States is an outlier for financial burdens on patients and patients forgoing care because of costs. Half of sicker adults in the United States said that they did not see a doctor when sick, did not get recommended treatment, or did not fill a prescription because of cost. On each access/cost question, the U.S. rate was 1.5 to double the forgone care rates reported in the

next-highest country. Moreover, the percentage of U.S. sicker adults forgoing care because of costs was much higher on all three indicators compared with the 2002 survey of sicker adults.¹² Despite these high rates of care forgone, one-third of U.S. patients spent more than \$1,000 out of pocket in the past year, a level rare in the other countries. Insured and uninsured U.S. patients were about equally likely to report expenditures this high (34 percent insured and 32 percent uninsured; data not shown). U.S. patients were also the most likely to pay \$100 or more each month for medications (Exhibit 6).

U.K. patients were the most protected against costs. Patterns in other countries tended to track insurance cost sharing and benefit designs for specific services.¹³

■ **Country views and care experiences.** Asked to rate their country's care system overall, the majority of sicker adults (66–85 percent) in all countries saw room for major improvement. Sicker adults in Germany and the United States were the most negative, followed by Australia (Exhibit 7). The negative views in Germany held across regions that comprise the former West and East Germany and were a marked decline from 1988, when the same question was asked in a general population survey in West Germany.¹⁴ As in past surveys in the English-speaking countries, U.K. adults held the most positive system views.

Although media reports, current policy debates, or recent changes in countries' care systems likely influence public opinion about these systems, the survey indicates that views also reflect personal medical care experiences. Compared with patients expressing positive views, those saying that their country's system should be rebuilt were significantly more likely to report negative care experiences as measured by errors, coordination failures, or access/cost barriers. Among countries with relatively long waiting times, the "rebuild" group was also more likely to have waited for care.

Discussion And Policy Implications

Providing a comparative view of experiences in six different systems, patients' reports indicate that improvement is needed to ensure safe, efficient, well-coordinated, and patient-centered care. In some areas, the survey found strikingly similar patterns across countries. In others, there were wide gaps between the top- and bottom-performing countries, although no country ranked highest or lowest across all dimensions of care in the study. Differences between countries as well as recurring patterns point to opportunities to learn from international as well as internal efforts to improve care for patients with complex care needs.

■ **Transitional care and care coordination.** Transitional care is a shared concern. In all six countries, at least one-third of patients who had been recently hospitalized reported failures to coordinate care well during hospital discharge. Poor transitional care can result in complications and increase the likelihood of readmission to the hospital, which raises concerns about costs as well as quality.¹⁵ The greater incidence of error among those seeing multiple physicians likely also reflects

EXHIBIT 7
Health System Views And Experiences Among Sicker Adults In Six Countries, 2005

	AUS	CAN	NZ	UK	US	GER
Unweighted N	702	751	704	1,770	1,527	1,503
Overall system view						
Only minor changes needed, system works well	23% ^{d,f}	21% ^{c,d,f}	27% ^f	30% ^{e,f}	23% ^f	16%
Fundamental change needed	48 ^{b,f}	61 ^{c,d,e,f}	52 ^e	52 ^e	44 ^f	54
System needs to be completely rebuilt	26 ^{b,c,d}	17 ^{e,f}	20 ^{d,e,f}	14 ^{e,f}	30	31
Negative care experiences among adults with positive or negative system views						
Percent reporting any medical, medication, or lab error						
Country average, any error	27 ^{d,e}	30 ^{c,d,f}	25 ^e	22 ^e	34 ^f	23
Minor change	22	25 ^a	12 ^a	18 ^a	24 ^a	17 ^a
Rebuild	33	39	35	36	44	28
Percent reporting coordination failures (at least 1 of 2 concerns)						
Country average, any coordination failures	19 ^{e,f}	24 ^{d,e}	21 ^{e,f}	19 ^{e,f}	33 ^f	26
Minor change	11 ^a	15 ^a	14 ^a	13 ^a	26 ^a	16 ^a
Rebuild	24	31	27	33	44	34
Percent reporting going without any of 3 types of care because of cost						
Country average, access-cost problems	34 ^{b,d,e,f}	26 ^{c,d,e,f}	38 ^{d,e,f}	13 ^{e,f}	51 ^f	28
Minor change	13 ^a	22 ^a	21 ^a	7 ^a	37 ^a	14 ^a
Rebuild	48	39	48	27	67	38
Percent reporting waiting 6 days or more or never getting appointment when sick						
Country average, waiting 6 days or more	10 ^{b,c,e}	36 ^{c,d,f}	3 ^{d,e,f}	15 ^e	23 ^f	13
Minor change	7	27	0	8	16	11
Rebuild	15	40	0	36	33	15
Percent reporting waiting more than 4 weeks to see a specialist (Base: saw specialist in past 2 years)						
Country average, waiting time to see specialist	46 ^{b,d,e,f}	57 ^{c,e,f}	40 ^{d,e,f}	60 ^{e,f}	23	22
Minor change	37 ^a	43 ^a	32 ^a	51 ^a	18 ^a	21
Rebuild	55	70	46	68	28	25

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2005.

NOTES: Reading from left to right starting with Australia, the letter indicates that the country differs from countries to the right at $p < .05$, as indicated.

^a Within-country error-rate difference significant between minor change and rebuild ($p < .05$).

^b For difference with Canada.

^c For difference with New Zealand.

^d For difference with United Kingdom.

^e For difference with United States.

^f For difference with Germany.

the heightened risks to safety that occur during hand-offs from one site of care or physician to another.

Care during transitions has become a policy focus in several survey countries. For example, U.S. nationwide demonstrations are seeking to build on evidence that involving advanced-practice nurses in follow-up care for high-risk patients after hospital discharge can reduce readmission rates and costs.¹⁶

With international efforts to shorten hospital stays, patients abroad as well as in the United States are likely to be sicker when discharged, which increases the

need for transition care plans. Among the six countries surveyed, Germany stands out for lack of follow-up care arrangements. Past studies in Germany have also found poor linkage between hospitals and physician practices, corresponding to Germany's strict separation of inpatient and outpatient care.¹⁷

Studies indicate that readmission rates reflect the quality of care during hospital stays as well as gaps in transition care.¹⁸ The wide variation among countries in readmission/ER use after hospitalization indicates a need for strategies to identify the sources of risk and to develop initiatives targeted on lowering readmission rates. The U.K. National Health Service (NHS), for example, is seeking to identify patients at risk of rehospitalization (PARR), for whom improved care management could help prevent future hospitalization.¹⁹

Overall patient experiences often paint a picture of no person or team responsible for ensuring that care is coordinated and continuous, with a focus on patients' needs. Reports of duplicative tests and medical-record delays are markers of inefficient care, wasting patients' as well as physicians' time and resources. These experiences underscore the value of experiments with payment policies and care arrangements to reorganize care within and across sites of care, to provide more patient-focused and efficient care.

■ **Patient safety.** The high rates of medication and medical errors (including hospital infection rates) in all countries illustrate the heightened safety risks for those in the midst of more complex care. Signaling the need for safety initiatives focused on ambulatory care, a majority of patients in all countries reported that errors occurred outside the hospital.

Lack of review and attention to medications emerged in all countries. With chronically ill patients frequently taking multiple medications, failure to review medications, including when discharged, both puts patients at increased risk of adverse drug reactions and signals coordination concerns. Studies indicate that inadequate patient-physician discussions about medications also could mean missed opportunities to help patients adhere to and cope with complex regimens.²⁰

Risk management studies find that patients value candor and discussion when errors occur and that failure to disclose and discuss errors can be a factor motivating malpractice suits.²¹ Yet a minority of patients in any country said that the medical staff involved discussed the error. Patients in New Zealand, which has no-fault medical malpractice, were the most likely to report error discussions, which suggests that reduction in malpractice concerns could facilitate disclosure and discussion of mistakes.

Reports of delays in receiving abnormal test results or incorrect test results are symptoms of coordination failures as well as safety risks. The finding that both lab-test errors and duplicative tests were more common in the United States suggests a more fragmented care system there. The findings may also reflect more frequent ordering of tests by multiple physicians in the United States, with negative consequences for safety and efficiency.

■ **Chronic care management and patient-centered care.** In all six countries, the survey found that patients with chronic diseases often do not receive recommended care. At best, half of diabetics received all four recommended screening exams based on patients' reports, repeating findings from a U.S. study of medical records that documented failures to deliver recommended care.²²

Patients' experiences indicate that strategies known to improve or maintain health for those with chronic diseases, such as self-management or including a nurse as part of the care team, are not routinely used in any of the countries. Confirming the potential of care plans or nurses to make a difference, patients with either support were more likely to have received guideline screening services.

In each country, a disproportionate share of national spending is concentrated on patients with chronic diseases, especially those with multiple illnesses. Deficiencies reported by patients who are seeing multiple physicians emerge throughout the study, with often similar patterns across countries. National demonstrations and policy initiatives seeking to improve the effectiveness and efficiency of care delivered to chronically ill patients are under way in all six countries. These include disease management programs in Germany and Evercare and other pilots in the United Kingdom.²³ Investment in information technology, including integrated electronic medical records, also offers potential new tools to support patients and physicians with expanded infrastructure capacity to manage care. As these initiatives evolve, there are opportunities to evaluate and learn from failures as well as successes.

■ **Timely access.** Recent U.S. and U.K. initiatives are seeking to redesign physician and clinic practices to enable same- or next-day appointment access when sick.²⁴ The rapid access reported in New Zealand and Germany and the ease of getting after-hours care in both countries demonstrate that organizing care to achieve rapid access when people are sick and provide round-the-clock coverage is feasible. Follow-up research would be useful to shed light on factors contributing to the wide differences in rapid access to physicians and after-hours care and the extent to which patients' experiences reflect the supply of primary care physicians and use of teams or practice designs, including call arrangements.

In past patient surveys among the five English-speaking countries, the United States has stood out for having relatively short waiting times for specialized care. Based on patients' reports in this study, Germany also provides rapid access to such care. Understanding how Germany has achieved access to physicians, after-hours care, and specialized care while spending much less than the United States spends as a percentage of national income could help inform U.S. policy.

■ **Insurance and delivery systems matter.** Our findings also indicate that insurance and delivery systems affect patients' experiences beyond basic access and waiting times. Symptoms of inadequate insurance coverage and more fragmented care in the United States emerged throughout the survey. The United States outspends the other countries, spending 14.6 percent of national income compared

with Germany's 10.9 percent, Canada's 9.6 percent, Australia's 9.1 percent, New Zealand's 8.5 percent, and the United Kingdom's 7.7 percent.²⁵ Yet the United States often ranks last or tied for last for safety, efficiency, and access. With one-third of U.S. patients reporting medical, medication, or lab errors and a similar share citing duplicate tests or medical record delays, our findings indicate widespread performance deficiencies that put patients at risk and undermine care. Moreover, a recent study finds that the United States is not systematically a leader in clinical outcomes.²⁶

Confirming spending data from the Organization for Economic Cooperation and Development (OECD), the United States also stands out for its patient cost burdens, with consequences for access.²⁷ U.S. physician visit rates are already low by OECD standards.²⁸ To the extent that U.S. insurance continues to move toward higher front-end patient deductibles, these rates could go up, as increasing numbers of insured patients become "underinsured," lacking access or adequate financial protection.²⁹ Contrasts between the United States and Germany, in particular, indicate that it is possible to organize care and insurance to achieve timely access without queues, while ensuring that care is affordable at the point of service. There are clear opportunities for the United States to learn from other countries' insurance systems.

■ **Shared challenges.** Although differences between countries do exist, no country emerges as systematically the best or worst. The findings of often-similar patterns of inadequate communication, transitional care, and safety concerns highlight the challenges of improving performance in an era of ever more complex medical care. These findings suggest that many of the problems with which policy leaders are grappling transcend specific payment or delivery systems and will require more fundamental transformation.

.....
The authors thank the editors and the anonymous reviewers for their thoughtful comments that improved this paper. The views expressed are those of the authors and should not be attributed to the Commonwealth Fund or its directors or officers.

NOTES

1. Organization for Economic Cooperation and Development, *Towards High-Performing Health Systems—The OECD Health Project*, 11 May 2004, 213.253.134.29/oced/pdfs/browseit/8104081e.pdf (11 August 2005).
2. Recent papers include C. Schoen et al., "Primary Care and Health System Performance: Adults' Experiences in Five Countries," *Health Affairs*, 28 October 2004, content.healthaffairs.org/cgi/content/abstract/hlthaff.w4.487 (13 September 2005); R.J. Blendon et al., "Confronting Competing Demands to Improve Quality: A Five-Country Hospital Survey," *Health Affairs* 23, no. 3 (2004): 119–135; R.J. Blendon et al., "Common Concerns amid Diverse Systems: Health Care Experiences in Five Countries," *Health Affairs* 22, no. 3 (2003): 106–121; and R.J. Blendon et al., "Inequities in Health Care: A Five-Country Survey," *Health Affairs* 21, no. 3 (2002): 182–191.
3. G. Anderson, V. Petrosyan, and P. Hussey, *Multinational Comparisons of Health Systems Data 2002* (New York: Commonwealth Fund, October 2002).
4. The Health Foundation is an independent charity based in London (www.health.org.uk). Additional interviews were conducted in London, Wales, Scotland, and Ireland.
5. Harris made extensive efforts to assure representative samples. Adults age eighteen and older were selected randomly within households and then screened. A minimum of seven calls were made to make con-

- tact, with calls at different times of the day and on weekdays and weekends.
6. Weights were applied to all respondents, including eligible and ineligible respondents. Weights included age, sex, and additional variables consistent with standards for each country. After weights were applied to the full sample, ineligible respondents were removed.
 7. L.T. Kohn, J.M. Corrigan, and M.S. Donaldson, eds., *To Err Is Human: Building a Safer Health System* (Washington: National Academies Press, 1999).
 8. T.H. Gallagher et al., "Patients' and Physicians' Attitudes regarding the Disclosure of Medical Errors," *Journal of the American Medical Association* 289, no. 8 (2003): 1001-1007.
 9. E.H. Wagner, "Managed Care and Chronic Illness: Health Services Research Needs," *Health Services Research* 32, no. 5 (1977): 702-714.
 10. Schoen et al., "Primary Care."
 11. *Ibid.*
 12. Blendon et al., "Common Concerns." Trends for sicker adults for other access indicators were not possible because of question changes.
 13. Prescription drug coverage is an optional benefit in Canada, although Canada covers the full cost of physician care and most medical treatment. New Zealand, Australia, and Germany include cost sharing for visits and medical care services.
 14. R.J. Blendon et al., "Satisfaction with Health Systems in Ten Nations," *Health Affairs* 9, no. 2 (1990): 185-192.
 15. E.A. Coleman and R.A. Berenson, "Lost in Transition: Challenges and Opportunities for Improving the Quality of Transitional Care," *Annals of Internal Medicine* 141, no. 7 (2004): 533-536; and E.A. Coleman et al., "Posthospital Care Transition: Patterns, Complications, and Risk Identification," *Health Services Research* 39, no. 5 (2004): 1449-1465.
 16. M. Naylor, *Making the Bridge from Hospital to Home* (New York: Commonwealth Fund, Fall 2003).
 17. Peter Sawicki, Institute of Quality and Efficiency in Health Care, Germany, personal communication, 26 September 2005; and J. Gunter, "Conflict between Inpatient and Outpatient Care: Summary of the Discussion" (in German), *Zeitschrift für ärztliche Fortbildung und Qualitätssicherung* 97, nos. 8-9 (2003): 609-610.
 18. J.S. Weissman et al., "Hospital Readmissions and Quality of Care," *Medical Care* 37, no. 5 (1999): 490-501.
 19. Jennifer Dixon, Kings Fund, United Kingdom, personal communication, 27 September 2005.
 20. I. Wilson et al., "Physician-Patient Communication about Prescription Medications" (Unpublished paper, Tufts-New England Medical Center, August 2005).
 21. S.S. Kraman and G. Hamm, "Risk Management: Extreme Honesty May Be the Best Policy," *Annals of Internal Medicine* 131, no. 12 (1999): 963-967.
 22. E.A. McGlynn et al., "The Quality of Health Care Delivered to Adults in the United States," *New England Journal of Medicine* 348, no. 26 (2003): 2635-2645.
 23. R. Busse, "Disease Management Programs in Germany's Statutory Health Insurance System," *Health Affairs* 23, no. 3 (2004): 56-67; and R. Boaden et al., *Evercare Evaluation Interim Report: Implications for Supporting People, with Long-Term Conditions*, 19 January 2005, www.npcrdc.man.ac.uk/Publications/evercare%20report1.pdf (13 September 2005).
 24. M. Murray et al., "Improving Timely Access to Primary Care: Case Studies of the Advanced Access Model," *Journal of the American Medical Association* 289, no. 8 (2003): 1042-1046.
 25. G.F. Anderson et al., "Health Spending in the United States and the Rest of the Industrialized World," *Health Affairs* 24, no. 4 (2005): 903-914.
 26. P.S. Hussey et al., "How Does the Quality of Care Compare in Five Countries?" *Health Affairs* 23, no. 3 (2004): 89-99.
 27. Anderson et al., *Multinational Comparisons*.
 28. *Ibid.*
 29. C. Schoen et al., "Insured but Not Protected: How Many Adults Are Underinsured?" *Health Affairs*, 14 June 2005, content.healthaffairs.org/cgi/content/abstract/hlthaff.w5.289 (11 August 2005).