

In Chronic Condition: Experiences Of Patients With Complex Health Care Needs, In Eight Countries, 2008

Chronically ill U.S. patients have the most negative access, coordination, and safety experiences.

by Cathy Schoen, Robin Osborn, Sabrina K.H. How, Michelle M. Doty, and Jordon Peugh

ABSTRACT: This 2008 survey of chronically ill adults in Australia, Canada, France, Germany, the Netherlands, New Zealand, the United Kingdom, and the United States finds major differences among countries in access, safety, and care efficiency. U.S. patients were at particularly high risk of forgoing care because of costs and of experiencing inefficient, poorly organized care, or errors. The Dutch, who have a strong primary care infrastructure, report notably positive access and coordination experiences. Still, deficits in care management during hospital discharge or when seeing multiple doctors occurred in all countries. Findings highlight the need for system innovations to improve outcomes for patients with complex chronic conditions. [*Health Affairs* 28, no. 1 (2009): w1–w16 (published online 13 November 2008; 10.1377/hlthaff.28.1.w1)]

MEDICAL SCIENCE ADVANCES AND IMPROVED living standards have saved lives and contributed to longer life expectancy, yet industrialized nations now face the growing challenge of caring for patients with chronic diseases. Health systems initially designed to respond to acute, episodic illness increasingly care for patients with ongoing conditions, where the goals include preventing complications or deterioration rather than cure. Often coping with multiple conditions, chronically ill patients may see multiple clinicians at different care sites, increasing the risks of errors and poor care coordination. Across industrialized nations, chronically ill patients account for a disproportionate share of national health spending, placing them at the center of initiatives to

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improve health system performance.¹

Experiences of chronically ill patients, especially those with recent hospitalizations or serious illnesses, offer unique perspectives. To learn from such patients, the 2008 Commonwealth Fund International Health Policy Survey interviewed adults with chronic conditions who had recent health care experiences in eight countries: Australia, Canada, France, Germany, the Netherlands, New Zealand, the United Kingdom, and the United States. Including France for the first time, the survey builds on an annual series that informs a symposium with ministers and policy experts from surveyed countries. This study focuses on access, coordination, safety, and care management experiences.

The countries participating in the survey represent a diverse mix of insurance designs and primary care systems. Among the eight countries, the United States stands out for having the most expensive system (\$7,000 per capita compared to under \$3,500 in the other countries as of 2006), for its gaps in coverage, and for high cost sharing even for patients with insurance.² The other seven countries have systems with comprehensive minimum benefits and universal coverage. Canada, the Netherlands, and the United Kingdom have no cost sharing for primary care. France's insurance system protects patients with specific chronic illnesses from coinsurance. Germany limits cost sharing to 1 percent of income for the chronically ill and 2 percent for all households.³ The Netherlands, New Zealand, and the United Kingdom require patients to register with a general practitioner (GP) who acts as a gateway to more specialized care. The Netherlands and the United Kingdom are noted for their strong primary care foundations.⁴

Study Design And Methods

The survey initially screened random samples of adults age eighteen and older to identify "sicker" adults who met at least one of four criteria: rated their health as fair or poor; reported that in the past two years they had a serious illness, injury, or disability requiring intensive medical care; had major surgery; or had been hospitalized. This screening design followed the approach of the 2005 sicker-adult cross-national survey.⁵

The study targeted initial samples of 750 sicker adults in Australia and New Zealand; 1,000 in the Netherlands; 1,200 in France, Germany, the United Kingdom, and the United States; and 2,600 in Canada. Study sponsors enhanced samples beyond the minimum 750 to enable future within-country analyses. For this paper we restricted the sample to sicker adults who reported a diagnosis of at least one of seven conditions: hypertension, heart disease (including heart attack), diabetes, arthritis, lung problems (asthma, emphysema, and chronic lung obstruction), cancer, or depression.

The Commonwealth Fund supported the core study and an expanded U.S. sample and partnered with the Health Foundation to expand the U.K. sample. The Health Council of Canada, Ontario Health Quality Council, and Commissaire à la

Santé du Québec expanded the Canadian sample. The Dutch Ministry for Health, Welfare, and Sport and the Center for Quality of Care Research (WOK), Radboud University Nijmegen, supported the Netherlands sample. La Haute Autorité de Santé funded the French survey, and the German Institute for Quality and Efficiency in Health Care, the German survey.

The questionnaire was designed by researchers at the Commonwealth Fund and Harris Interactive, with advice from country experts. Except for minor wording changes to reflect country-specific terminology, we used the same instrument in each country. Telephone interviews averaging seventeen minutes took place during March–May 2008. The survey was conducted in German in Germany, French in France, Dutch in the Netherlands, and English in the five other countries, with an option for French in Canada and Spanish in the United States.⁶

The analysis weighted final samples to reflect the demographic distribution of adult populations in each country.⁷ Exhibits indicate significant differences between countries or within countries ($p < 0.05$).

Survey Findings

■ **Sample profile: chronic conditions and health care use.** Two-thirds to three-quarters of the initially screened sample of sicker adults in each country reported at least one of the seven chronic conditions (Exhibit 1). Half to 71 percent (U.S.) of those with a chronic condition reported two or more conditions. The majority were age fifty or older. These chronically ill adults had frequent contact with the health care system over the past two years. Forty percent or more had been hospitalized, and one-quarter to one-third reported major surgery. In all countries the majority saw multiple physicians: at least one-third reported seeing four or more. Patterns in physician use were similar across countries except Germany, where half reported seeing four or more doctors.

■ **Country health system views and costs.** At the outset, the survey asked chronically ill adults about their overall view of their country's health system and later about perceptions of wasteful or inefficient care and cost experiences (Exhibit 1). Across countries, a majority saw room for improvement. Chronically ill U.S. adults were the most negative, with one-third calling for rebuilding the system and only one-fifth saying the system works well with minor changes. Dutch patients were the most positive, followed by U.K., French, and Canadian patients. Among the six countries that participated in the 2005 sicker-adult survey, views became more positive in Australia, Canada, Germany, and the United Kingdom.⁸

Given frequent and ongoing care needs, chronically ill adults are likely to be sensitive to instances of excessive care or wasted time when care is poorly organized. Asked about experiences, U.S. and German patients were significantly more likely than patients in the other countries to report wasted time because of poorly organized care. French patients were the most likely, followed by U.S. patients, to perceive that doctors recommended care of little or no value. On these

**EXHIBIT 1
Adults With Chronic Conditions: Demographics, System Views, And Cost Experiences,
Eight Countries, 2008**

	AUS	CAN	FR	GER	NETH	NZ	UK	US
Final sample of sicker adults (unweighted N)	750	2,635	1,202	1,201	1,000	751	1,200	1,205
Has any of 7 chronic conditions, doctor diagnosis	74%	72%	67%	68%	66%	64%	75%	78%
Hypertension	30	32	32	41	34	25	37	43
Heart disease, including heart attack	15	13	14	22	16	13	14	14
Diabetes	13	17	12	15	13	10	11	21
Arthritis	36	33	12	15	19	20	35	38
Lung problems (asthma, emphysema)	23	20	15	11	15	20	18	22
Depression	30	26	34	15	16	17	25	31
Cancer	11	11	10	10	9	14	9	13
Adults with any chronic condition (unweighted N)	593	1,956	851	867	736	518	933	1,007
Has 2 or more chronic conditions (out of 7)	63% ^{c,e,f,h}	62% ^{c,d,e,f,h}	53% ^{g,h}	56% ^h	55% ^h	51% ^{g,h}	61% ^h	71%
Age 50 or older	56 ^{c,d,e,g}	57 ^{c,d,e,g}	67 ^{f,h}	72 ^{f,h}	73 ^{f,h}	58 ^g	71 ^h	58
Health care use in past 2 years:								
Hospitalized for other than normal pregnancy	58 ^{b,e,g,h}	47 ^{c,d,f,g}	57 ^{e,g,h}	58 ^{e,g,h}	45 ^f	59 ^{g,h}	42 ^h	48
Major surgery	25 ^{c,d,h}	29 ^{e,d}	33 ^{e,g}	36 ^{e,f,g}	23 ^h	29	26 ^h	34
Number of doctors seen								
2 or fewer	37	40	40	24	36	42	41	37
3	23	24	27	26	31	22	25	21
4 or more	38 ^{b,c,d,g}	32 ^{d,h}	31 ^{d,h}	50 ^{e,f,g,h}	34	34	31 ^h	38
Overall health system views								
Only minor changes needed, system works well	22 ^{b,c,e,f,g}	32 ^{c,d,e,g,h}	41 ^{d,f,h}	21 ^{e,f,g}	42 ^{f,h}	29 ^{g,h}	38 ^h	20
Fundamental changes needed	57 ^{b,c,e,f,g,h}	50 ^c	33 ^{d,e,f,g,h}	51	46	48	48	46
Rebuild completely	20 ^{d,e,g,h}	16 ^{c,d,e,f,g,h}	23 ^{e,g,h}	26 ^{e,g,h}	9 ^{f,h}	21 ^{g,h}	12 ^h	33
Perception of inefficient or wasteful care in past 2 years								
Doctors recommended treatment you thought had little or no health benefit	22 ^{c,e,g}	22 ^{c,e,g,h}	35 ^{d,e,f,g,h}	24 ^{e,f,g}	14 ^h	19 ^h	15 ^h	27
Often/sometimes felt your time was wasted because your medical care was poorly organized	26 ^{c,g,h}	29 ^{c,e,f,g,h}	20 ^{d,h}	31 ^{e,f,g}	21 ^h	23 ^{g,h}	18 ^h	36
Either/both problems	38 ^{b,c,d,g,h}	40 ^{e,f,g,h}	43 ^{e,f,g}	43 ^{e,f,g}	28 ^{g,h}	34 ^{g,h}	27 ^h	46
Out-of-pocket expenses for medical care in past year, US\$ equivalent								
Under \$500	43	57	48	57	72	61	81	31
More than \$1,000	25 ^{b,c,d,e,f,g,h}	20 ^{c,d,e,f,g,h}	5 ^{d,e,f,h}	13 ^{e,g,h}	8 ^{f,g,h}	14 ^{g,h}	4 ^h	41
Not sure/declined answer	21	13	44	14	12	17	10	18

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008.

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two questions, 40 percent or more U.S., French, German, and Canadian patients perceived instances of waste or inefficiency. Dutch and U.K. patients were the

least likely to indicate excessive care and also ranked low on wasted time from poor organization.

The United States stands out in patient costs, with 41 percent reporting that they spent more than \$1,000 out of pocket in the past year. U.K. and Dutch patients were the most protected against out-of-pocket costs, followed by Germans. French patient costs were also in the low range; however, a high proportion of French respondents were unable to estimate out-of-pocket costs, which suggests that they may not have understood the question. A follow-up survey question indicates that most were likely well protected: 54 percent reported a plan where all of their health costs are covered by France's national insurance fund (data not shown).

■ **Access.** U.S. chronically ill adults were by far the most likely to report forgoing needed care because of costs. More than half (54 percent) reported at least one cost-related access problem, including not filling a prescription or skipping doses, not visiting a doctor when sick, or not getting recommended care (Exhibit 2). Reflecting comprehensive benefits and low cost sharing, Dutch and U.K. patients were the least likely to go without care because of costs. Patterns in the other four countries reflected varying insurance designs.

Having a continuous relationship with a care provider enables the delivery of care that is timely, informed by knowledge of patients' medical histories, and, potentially, coordinated across providers and settings. The vast majority of chronically ill adults in each country reported a regular source of care. However, U.S. patients were significantly less likely than others to have a personal physician or long-term relationship with a care provider.

Getting care quickly when sick can help patients avoid complications and better manage their conditions. Rates varied widely across countries. Dutch and New Zealand chronically ill adults were the most likely and Canadian and U.S. patients the least likely to report same- or next-day access. U.K., French, and German patients also reported high rates of same- or next-day access, although the proportion of patients waiting six days or longer in these countries was high compared to the Netherlands or New Zealand. New Zealand, Australia, and the United Kingdom were the only countries in which a majority of patients said that it was very easy to reach their doctors by telephone.

Asked about access during evenings or weekends, Dutch and German patients, followed by New Zealand and U.K. patients, were the most likely to report easy access to after-hours care. U.S., Australian, and Canadian adults were the most likely to say that getting after-hours care was very difficult: 40 percent of U.S. patients reported such difficulty.

The extent to which chronically ill adults used hospital emergency rooms (ERs) tended to track country patterns in ease of access to primary or after-hours care. ER use was significantly higher in Canada, the United States, and Australia than the other five countries—including use for concerns patients thought could have been treated by their regular doctor if available.

EXHIBIT 2
Cost Barriers, Access to Physicians, And After-Hours Care Among Adults With Chronic Conditions, In Eight Countries, 2008

	AUS	CAN	FR	GER	NETH	NZ	UK	US
Unweighted N	593	1,956	851	867	736	518	933	1,007
Access problems because of cost in past 2 years								
Did not fill Rx or skipped doses	20% ^{c,d,e,g,h}	18% ^{c,d,e,g,h}	13% ^{e,g,h}	12% ^{e,f,g,h}	3% ^{f,g,h}	18% ^{g,h}	7% ^h	43%
Did not visit doctor when had a medical problem	21 ^{b,c,d,e,g,h}	9 ^{d,e,f,g,h}	11 ^{d,e,f,g,h}	15 ^{e,f,g,h}	3 ^{f,h}	22 ^{g,h}	4 ^h	36
Did not get recommended test, treatment, or follow-up	25 ^{b,c,d,e,f,g,h}	11 ^{e,f,g,h}	13 ^{e,f,g,h}	13 ^{e,f,g,h}	3 ^{f,h}	18 ^{g,h}	6 ^h	38
Any of the above access problems because of cost	36 ^{b,c,d,e,g,h}	25 ^{e,f,g,h}	23 ^{e,f,g,h}	26 ^{e,g,h}	7 ^{f,g,h}	31 ^{g,h}	13 ^h	54
Do you have a doctor you usually see?								
Yes	89 ^{c,d,e,f,h}	92 ^{c,d,e,h}	99 ^{d,f,g,h}	97 ^{e,g,h}	99 ^{f,g,h}	95 ^h	92 ^h	82
No doctor but usual place of care	7 ^{c,d,e,f}	5 ^{c,d,e,h}	1 ^{d,f,g,h}	2 ^{g,h}	1 ^{f,g,h}	3 ^{g,h}	7	9
No regular doctor or place	4 ^{c,d,e,g,h}	3 ^{c,d,e,g,h}	1 ^h	1 ^h	0 ^{f,h}	2 ^h	1 ^h	9
Length of time with regular doctor or place								
5 years or more	61 ^{c,d,e,g,h}	66 ^{c,d,e,g,h}	76 ^{f,h}	80 ^{f,g,h}	79 ^{f,g,h}	62 ^{g,h}	73 ^h	53
Last time you were sick, how quickly could you get an appointment to see a doctor?								
Same day	36 ^{b,d,e,f,g,h}	26 ^{c,d,e,f,g}	42 ^{e,f,g,h}	43 ^{e,f,h}	60 ^{g,h}	54 ^h	48 ^h	26
Next day	15 ^{b,e}	11 ^{c,d,e,f,h}	18 ^e	16 ^e	24 ^{g,h}	20 ^g	14	17
6 days or more, or never	18 ^{b,d,e,f,g,h}	34 ^{c,d,e,f,g,h}	18 ^{d,e,f,g,h}	26 ^{e,f,g}	3 ^{f,g,h}	8 ^{g,h}	14 ^h	23
How easy or difficult is it to contact your doctor by phone during practice hours? (Base: tried contacting)								
Very easy	54 ^{b,c,d,e,f,h}	43 ^{d,e,f,g}	38 ^{d,f,g}	29 ^{e,f,g,h}	36 ^{f,g}	65 ^{g,h}	51 ^h	43
Somewhat easy	32 ^{c,e,f}	33 ^{c,e,f}	46 ^{d,f,g,h}	37 ^f	43 ^{f,g}	25 ^{g,h}	32	37
Somewhat/very difficult	13 ^{b,d,e,h}	22 ^{c,d,f,g}	15 ^{d,f}	32 ^{e,f,g,h}	19 ^f	10 ^{g,h}	15	19
When you needed care at night, weekend, or holiday, how difficult was it to get care without going to ER? (Base: needed after-hours care)								
Very difficult	34 ^{c,d,e,f,g}	33 ^{c,d,e,f,g}	29 ^{d,e,f,g,h}	15 ^{f,g,h}	15 ^{f,g,h}	20 ^h	20 ^h	40
Somewhat difficult	28	23	27	21	15	19	24	20
Very or somewhat easy	36 ^{d,e,f,g}	33 ^{d,e,f,g}	42 ^{d,e,f,g}	63 ^{f,g,h}	65 ^{f,g,h}	55 ^h	53 ^h	36
Went to ER in past 2 years	53 ^{b,c,d,e,f,g}	64 ^{c,d,e,f,g,h}	41 ^{e,h}	39 ^{e,f,h}	26 ^{f,g,h}	45 ^h	40 ^h	59
Went to ER for a condition that could have been treated by regular doctor if available	17 ^{b,c,d,e,f,g}	23 ^{c,d,e,f,g,h}	9 ^h	6 ^h	6 ^h	8 ^h	8 ^h	19
Called a help line for medical advice in past 2 years								
Able to get advice needed: yes, completely	18 ^{b,c,d,g}	26 ^{c,d,e,f,h}	5 ^{e,f,g,h}	7 ^{e,f,g,h}	14 ^{f,g}	20 ^g	30 ^h	17
	38 ^{b,e,g}	58 ^{e,h}	61	47 ^e	75 ^{f,h}	49	62 ^h	40
Wait for appointment with specialist (Base: needed to see specialist in past 2 years)								
Less than 4 weeks	45 ^{b,c,d,e,h}	40 ^{c,d,e,f,h}	55 ^{d,e,f,g,h}	68 ^{f,g,h}	69 ^{f,g,h}	45 ^h	42 ^h	74
1 month to less than 2 months	24 ^{b,c,d,e,f,g,h}	16 ^{c,d,e}	20 ^{d,e,h}	12 ^{e,f,g}	6 ^{f,g,h}	19 ^h	20 ^h	12
2 months or longer	29 ^{b,d,g,h}	42 ^{c,d,e,f,g,h}	23 ^{d,f,g,h}	20 ^{f,g,h}	25 ^{f,g,h}	33 ^h	33 ^h	10

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008.

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As an alternative to visits, medical help lines appear the most widely used in the United Kingdom and Canada. Satisfaction rates were high in both countries.

Regarding access to specialists, wait times were longest in Canada, New Zealand, and the United Kingdom, where at least one-third of adults reported waits of two months or longer after learning that they needed to see a specialist. U.S., Dutch, and German chronically ill adults reported the most rapid access, with two-thirds or more seen by a specialist in less than four weeks. Overall, the Netherlands emerges as the most likely to provide chronically ill adults with affordable and timely access, including after-hours and specialist care.

■ **Care coordination.** Well-coordinated care is critical for patients with chronic illnesses, especially those with multiple conditions. There were significant differences in the percentages of patients reporting poor coordination, although all countries have room for improvement (Exhibit 3).

U.S. patients were significantly more likely than those in other countries to report that medical records or test results were not available during a scheduled visit or that tests were duplicated unnecessarily. One-third of U.S. patients reported at least one of these experiences—a rate 30 percent higher than in any other country. Dutch patients' responses were at the other end of the spectrum, with among the lowest rates on both questions. In all countries, the likelihood of experiencing either coordination problem increased sharply for patients seeing four or more physicians.

Having medical history and information flow with patients can avoid duplication and improve care. Exchange of information with specialists appears of particular concern in Germany, where one-third of patients said that specialists did not have information about their medical history. Asked about specialists' reporting back to their regular doctor, patients provided similar answers across countries (14–20 percent saying “no”) except in France, where patients were more likely to say that their regular doctor was kept up-to-date.

■ **Hospital discharge.** Deficiencies in coordinating care when patients left the hospital occurred in each country, raising risks for complications (Exhibit 3). In all countries except the United States, half or more of surveyed patients said that they did not receive instructions on symptoms to watch for or know whom to contact with questions, or that the hospital did not provide written care plans or make arrangements for a follow-up visit. France had the highest rate, at 71 percent of hospitalized patients reporting deficits in discharge instructions. U.S. patients were the least likely (38 percent) to report discharge gaps.

Patients often received new medications while hospitalized. Yet 30–45 percent of patients discharged with new medications in all countries except Germany (23 percent) said that no one discussed other medications they were using before being hospitalized. Studies finding that two-thirds of complications after hospital discharge are related to medication provide evidence that failure to reconcile medications puts patients at risk, with attendant cost consequences.⁹

Highlighting possible quality concerns during the hospital stay or gaps in transition care, 17–18 percent of hospitalized chronically ill patients in the United

**EXHIBIT 3
Care Coordination And Transitions Among Adults With Chronic Conditions, In Eight
Countries, 2008**

	AUS	CAN	FR	GER	NETH	NZ	UK	US
Unweighted N	593	1,956	851	867	736	518	933	1,007
Medical records or test coordination in past 2 years								
Test results or medical records not available at time of scheduled appointment	16% ^{e,h}	19% ^{d,e,g,h}	15% ^h	12% ^{f,h}	11% ^{f,h}	17% ^h	15% ^h	24%
Doctors ordered medical test you felt was unnecessary because test had already been done	12 ^{d,e,g,h}	11 ^{d,e,g,h}	10 ^{d,e,g,h}	18 ^{e,f,g}	4 ^{f,h}	10 ^h	7 ^h	20
Coordination problems by number of doctors seen	23 ^{e,h}	25 ^{e,g,h}	22 ^{e,h}	26 ^{e,g,h}	14 ^{f,g,h}	21 ^h	20 ^h	34
1 or 2 doctors (within-country differences are statistically significant, $p < 0.05$)	17	16	15	20	7	10	14	21
4 or more doctors	32	35	27	28	21	33	32	45
Base: Saw or needed to see a specialist in past 2 years								
When you saw the specialist, did he/she have information about your medical history? (% no)	19 ^{c,d,f}	16 ^{c,d,h}	28 ^{e,f,g,h}	32 ^{e,f,g,h}	16	12 ^h	14 ^h	22
After you saw the specialist, did your regular doctor seem informed and up-to-date about care from the specialist? (Base: has regular doctor) (% no)	16 ^{e,f,h}	16 ^c	8 ^{d,e,f,g,h}	17 ^e	18	18	14	20
Base: Hospitalized in past 2 years (unweighted N)								
When discharged from the hospital: Did not receive clear instructions about symptoms to watch for and when to seek further care	25% ^{c,h}	20% ^{c,d,f,h}	37% ^{d,e,f,g,h}	29% ^h	24% ^h	28% ^h	26% ^h	12%
Did not know whom to contact for questions about your condition or treatment	15 ^h	11 ^g	16 ^h	11 ^g	13	14 ^h	17 ^h	8
Hospital did not provide written plan for your care after discharge	43 ^{b,f,g,h}	29 ^{c,d,e,h}	39 ^h	40 ^{f,h}	37 ^h	31 ^h	32 ^h	9
Hospital did not make arrangements for follow-up visits with doctor or other care professional	38 ^{e,g,h}	32 ^{c,e}	40 ^{e,g,h}	35 ^{e,g}	21 ^f	32	27	28
Any of the above discharge gaps	61 ^{b,c,g,h}	50 ^{c,d,h}	71 ^{d,e,f,g,h}	61 ^{e,f,g,h}	51 ^h	53 ^h	50 ^h	38
Given new Rx medications when discharged: Did someone discuss other medications you were using before you were hospitalized? (% no)	44 ^{b,d,e,h}	54 ^{c,d,e,h}	39 ^h	34 ^{f,g,h}	33 ^{f,g,h}	47 ^h	47 ^h	66
After discharge, readmitted to hospital or went to ER as a result of complications during your recovery	39 ^d	42 ^{d,h}	44 ^{d,h}	23 ^{e,f,g}	41	45 ^h	35	30
Yes, either hospital or ER	11 ^h	17 ^{c,d,f,g}	7 ^{e,h}	9 ^{e,h}	17	11 ^h	10 ^h	18
Yes, readmitted to hospital	6	8	5	7	11	9	7	12
Yes, went to ER only	5	8	2	2	6	2	3	7

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008.

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States, Canada, and the Netherlands said that they were readmitted to the hospital or went to the ER as a result of complications. These rates were double the re-admission/ER use rates in France and Germany—the lowest in the survey.

■ **Prescription medications.** Reflecting the critical role that prescription medications play for patients with chronic diseases, 74–89 percent of adults in all countries said that they were taking prescription medications regularly; one-third to half reported four or more medications (Exhibit 4). Despite the often complex medication regimens, 40 percent or more patients in each country said that their medications were not regularly reviewed by their doctors or pharmacists.

Pointing to the central role pharmacists can play in review and safety, one of five or more patients in the Netherlands, Australia, Canada, New Zealand, and United States reported a time when pharmacists told them that the drug they were about to fill could be harmful because of medications they were already taking. Although rates of “near misses” were lower in France, Germany, and the United Kingdom, more than one in ten reported such events.

■ **Safety.** Asked about medication or medical errors, 14–23 percent of patients across countries reported at least one in the past two years (Exhibit 4). Lab and diagnostic test errors were also of concern, particularly in the United States (significantly higher than six countries), Australia, and Canada. Patient-reported test errors were significantly lower in the Netherlands, France, and Germany. Reflecting higher test-error rates, particularly delays in hearing about abnormal test results, one-third of U.S. patients reported some type of error—the highest in the survey.

Although safety strategies in most countries have focused on hospitals, in all countries the majority of patients said that the mistakes occurred outside the hospital. Across countries, the likelihood of error increased with complexity: the percentage of reported errors doubled or more among patients seeing four or more physicians compared to only one or two.

■ **Chronic care management.** Initiatives to improve outcomes for chronically ill patients seek to transform care from only responding after people get sick to keeping people healthy with an emphasis on teams and engaging patients—often known as the Chronic Care Model.¹⁰ Effective control of patients' conditions depends on a collaborative relationship between patients and clinicians to set goals, develop treatment plans, and support patients and families who have the day-to-day care responsibilities. There are opportunities to improve patient engagement and care management in all countries (Exhibit 5).

Asked about managing their condition, one-fourth (U.S.) to almost half (France, Netherlands, and U.K.) of chronically ill patients said that the clinicians they see had not discussed goals and priorities. In all countries but the United States, more than half said that they had not been given a written plan to manage care at home, and two-thirds or more had not been contacted after a visit to see how they were doing. In both instances, U.S. patients were the most likely to report efforts to involve them and follow up on care—yet one-third to half answered

**EXHIBIT 4
Prescription Medications And Safety Among Adults With Chronic Conditions, In Eight Countries, 2008**

	AUS	CAN	FR	GER	NETH	NZ	UK	US
Unweighted N	593	1,956	851	867	736	518	933	1,007
Prescription medications								
Percent taking Rx medications regularly	78% ^{b,d,e,g,h}	84% ^{d,f}	84% ^{d,f}	89% ^f	85% ^f	74% ^{g,h}	85%	86%
Number of different Rx medications 4 or more	33 ^{b,g,h}	41 ^{f,g,h}	38 ^{g,h}	39 ^{g,h}	39 ^{g,h}	35 ^{g,h}	50	48
Base: Taking Rx medications regularly, in past 2 years								
How often have any of your doctors or pharmacists reviewed and discussed all medications you are using?								
Always	34 ^{c,e,g}	40 ^{c,d,e,g}	18 ^{d,e,f,g,h}	29 ^h	25 ^{f,h}	34 ^g	27 ^h	38
Often	21	18	10	20	11	13	22	20
Sometimes, rarely, or never	41 ^{c,d,e}	40 ^{c,d,e,f}	68 ^{d,f,g,h}	49 ^{e,h}	62 ^{f,g,h}	48 ^h	48 ^h	41
Pharmacist told you the Rx you were about to fill might be harmful because of medications you were taking								
	30 ^{b,c,d,e,f,g,h}	23 ^{c,d,e,g}	12 ^{e,f,g,h}	15 ^{e,h}	38 ^{f,g,h}	20	17	20
Medical and medication errors in past 2 years								
Believed a medical mistake occurred in treatment or care								
	17 ^{c,d,e,g}	16 ^{c,d,e,g}	8 ^{f,h}	12 ^g	9 ^{f,h}	15 ^g	8 ^h	16
Given the wrong medication or wrong dose								
	13 ^{d,e}	10 ^{d,e,h}	8 ^h	7 ^{f,h}	6 ^{f,h}	13	9 ^h	14
Either/both medical or medication errors								
	22 ^{c,d,e,g}	21 ^{c,d,e,g}	14 ^{f,h}	16 ^h	14 ^{f,h}	20 ^g	15 ^h	23
Lab errors in past 2 years (base: had blood test, x-ray, or other tests)								
Given incorrect results for a diagnostic or lab test								
	7 ^{c,e,f,g}	5 ^{e,g}	3 ^{e,h}	5 ^e	1 ^{f,g,h}	3 ^h	3 ^h	7
Delays in notification of abnormal test results								
	13 ^{c,d,e,g}	12 ^{c,d,e,g,h}	5 ^{f,h}	5 ^{f,g,h}	5 ^{f,g,h}	10 ^h	8 ^h	16
Either/both types of lab errors								
	18 ^{c,d,e,f,g}	16 ^{c,d,e,g,h}	8 ^h	8 ^h	6 ^{f,g,h}	12 ^h	11 ^h	20
Any medical, medication, or lab errors								
	29 ^{c,d,e,g}	29 ^{c,d,e,g,h}	18 ^{f,h}	19 ^{f,h}	17 ^{f,h}	25 ^h	20 ^h	34
Did error occur while you were hospitalized? (% no)								
	75 ^d	83 ^{d,e,f}	74	61 ^{g,h}	66 ^h	72	75	79
Any error by number of doctors seen								
1 or 2 doctors (within-country differences are statistically significant, $p < 0.05$)								
	22	19	17	4	8	17	11	25
4 or more doctors								
	41	41	23	28	29	38	28	43

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008.

NOTES: Reading from left to right starting with Australia, the letter indicates significant differences with countries to the right at $p < 0.05$, as indicated. ^bDifferent from CAN. ^cDifferent from FR. ^dDifferent from GER. ^eDifferent from NETH. ^fDifferent from NZ. ^gDifferent from U.K. ^hDifferent from U.S.

no to each question.

Effective doctor-patient communication is essential for patients with chronic conditions. However, one-fourth to more than one-third of patients across countries said that their regular physician only sometimes, rarely, or never encourages them to ask questions. Furthermore, 15–28 percent of patients said that they are not often given instructions about symptoms to watch for and when to seek further care. A similar share of patients across countries (12–31 percent) said that their doctor only sometimes, rarely, or never tells them about treatment choices or

EXHIBIT 5
Care Management Experiences Among Adults With Chronic Conditions, In Eight Countries, 2008

	AUS	CAN	FR	GER	NETH	NZ	UK	US
Unweighted N	593	1,956	851	867	736	518	933	1,007
Care management								
Health care professional you see for your condition has:								
Discussed with you your main goals or priorities in caring for your condition	60% ^{c,e,g,h}	65% ^{c,e,f,g,h}	51% ^{d,f,h}	64% ^{e,g,h}	51% ^{f,h}	58% ^{g,h}	50% ^h	74%
Given you a written plan or instructions to manage your care at home	42% ^{c,d,e,g,h}	47% ^{c,d,e,g,h}	34% ^{f,h}	31% ^{f,h}	35% ^{f,h}	43% ^{g,h}	35% ^h	66
Contacted you after a visit to see how things were going	30% ^{b,d,h}	36% ^{c,d,e,g,h}	27% ^{d,f,h}	21% ^{e,f,g,h}	27% ^{f,h}	35% ^h	29% ^h	49
Nurse regularly involved in managing your condition:								
Nurse provides support or counseling by telephone	18% ^{c,e,f,g,h}	22% ^{d,e,f,g,h}	26% ^{d,f,g,h}	13% ^{e,f,g,h}	29% ^g	33% ^g	48% ^h	33
	38	49% ^{c,d,f,g}	24% ^{e,f,g,h}	28% ^h	39	37% ^h	37% ^h	48
Doctor-patient communication								
How often does your doctor or doctor at usual place (base: has regular doctor or place)								
Encourage you to ask questions								
Always	52% ^{c,d,e}	53% ^{c,d,e,g}	39% ^{f,g,h}	42% ^{f,g,h}	42% ^{f,h}	56% ^g	47% ^h	56
Often	15	17	21	18	13	11	13	18
Sometimes/rarely or never	27% ^{c,d,e,g}	28% ^{c,d,e,g}	35% ^h	38% ^{f,h}	35% ^h	29% ^g	35% ^h	24
Tell you about treatment options and involve you in decisions								
Always	58% ^{c,g}	56% ^{c,e,g}	43% ^{d,e,f,g,h}	56% ^e	63% ^h	62% ^h	51	53
Often	16	20	19	23	16	16	18	23
Sometimes/rarely or never	23% ^{c,e,f}	21% ^{c,e}	31% ^{d,e,f,g,h}	19% ^{e,g}	12% ^{g,h}	17% ^{g,h}	24	23
Give you clear instructions about symptoms to watch for and when to seek further care								
Always	59% ^{f,g}	58% ^{c,f,g}	44% ^{d,e,f,g,h}	61% ^{f,g}	60% ^g	67% ^h	52% ^h	59
Often	20	19	23	20	16	13	16	21
Sometimes/rarely or never	17% ^{c,g}	21% ^{c,e,g}	28% ^{d,e,f,h}	18% ^g	15% ^g	17% ^g	25% ^h	19
Adults with diabetes (unweighted N)								
HbA1c checked in past six months	83%	90%	93%	92%	96%	87%	92%	94%
Feet examined for sores or irritations in past year	53	53	41	47	67	71	80	61
Eye exam for diabetes in past year	65	69	61	80	85	68	85	68
Cholesterol checked in past year	97	96	92	98	98	99	100	98
Received all four diabetes services	36% ^{e,f,g}	39% ^{d,e,g}	31% ^{e,f,g,h}	40% ^{e,g}	59	55	67% ^h	43

SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008.

NOTES: Reading from left to right starting with Australia, the letter indicates significant differences with countries to the right at $p < 0.05$, as indicated. ^aDifferent from CAN. ^cDifferent from FR. ^dDifferent from GER. ^eDifferent from NETH. ^fDifferent from NZ. ^gDifferent from U.K. ^hDifferent from U.S.

involves them in decisions. The responses of New Zealanders were among the most positive and French, the most negative, on these aspects of communication. On all three questions, however, the range of country responses was narrow compared with access or coordination experiences.

The Chronic Care Model emphasizes teams, with expanded roles for nurses to

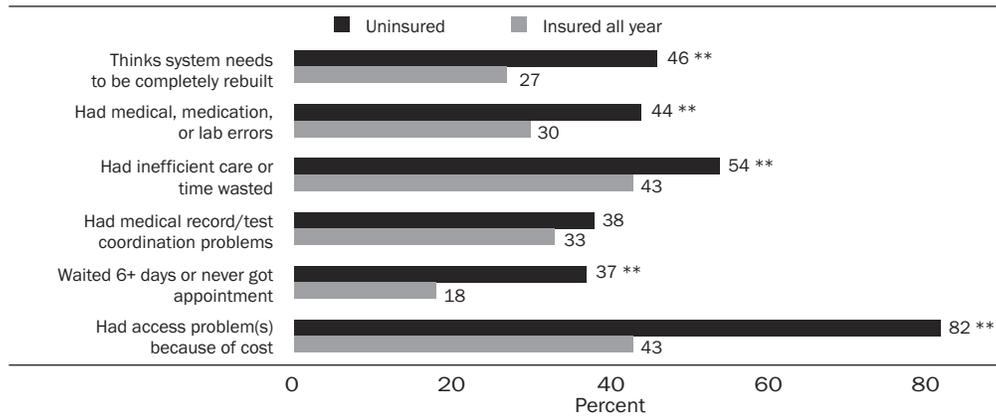
counsel and to provide and coordinate care.¹¹ Based on patients' reports, such nurse involvement varies significantly across countries, ranging from a high of about half of patients saying that nurses are regularly involved in care for their condition in the United Kingdom, to 29–33 percent in the Netherlands, New Zealand, and United States, to a low of 13 percent in Germany.

Looking specifically at diabetes, the survey explored the extent to which patients received four basic recommended screening tests (Exhibit 5). Although country rates were high on each of the four services—often in the 80–90 percent range—far fewer received all recommended care. The share of diabetics reporting all four services ranged from half to two-thirds in New Zealand, the Netherlands, and the United Kingdom to a low of 31 percent in France. Notably, the highest rates—United Kingdom, Netherlands, and New Zealand—are in countries in which the vast majority of primary care practices report the use of electronic medical records (EMRs) and office systems able to profile patients by diagnosis and prompt clinicians for follow-up or preventive care.¹²

■ **United States: insurance matters.** In the U.S. survey, 29 percent of chronically ill adults were uninsured during the year. Exhibit 6 compares experiences by insurance status to examine the extent to which the uninsured are at higher risk and to contrast the experiences of U.S. chronically ill insured patients with patients in other countries.

As illustrated, U.S. uninsured adults were significantly more likely than those insured all year to go without care because of costs and to wait when sick. Remembering that all in this study have chronic (often multiple) conditions, a disturbingly high 82 percent of the uninsured did not fill a prescription, get recommended care, or see a doctor when sick because of costs. Uninsured chronically ill

EXHIBIT 6
U.S. Adults With Chronic Conditions, Insured All Year Compared With Uninsured, 2008



SOURCE: Commonwealth Fund International Health Policy Survey of Sicker Adults, 2008.

NOTE: Statistical significance denotes difference compared with “insured all year.”

** $p < 0.05$

adults were also more likely than those with insurance to report errors as a result of higher rates of delays in hearing about abnormal lab tests and wrong-dose/wrong-medication errors. Not surprisingly, given these experiences, the uninsured were also more negative about the U.S. health system than insured adults were.

Still, the experience of fragmented and inefficient care in the United States cuts across insurance status. Insured and uninsured chronically ill U.S. adults reported similarly high rates of coordination concerns (duplication and records/tests not available) and perceptions of excess care or time wasted because of poorly organized care.

Although insured U.S. adults fared better than the uninsured, they were still more likely than their counterparts in other countries to forgo care because of cost and to encounter poor coordination. Their perceptions of waste, patient-reported errors, and negative system views also remained at the high end of the country range.

Discussion And Implications

The survey findings of significant variations in care experiences regarding access, safety, and coordination/efficiency indicate that countries' policies and care systems make a difference for patients coping with complex, chronic conditions. U.S. patients appear at particularly high risk as a result of coverage gaps and poorly organized care. Chronically ill patients in countries with strong primary care infrastructures tend to fare better. Yet deficits in transitional care when patients leave the hospital, inadequate coordination for patients seen by multiple clinicians, and weak efforts to engage or support patients to manage their conditions exist in all countries.

■ **Countries' policies make a difference.** Repeating patterns observed in earlier surveys, the United States continues to stand out for more negative patient experiences, ranking last or low for access, care coordination/efficiency, and patient-reported safety concerns. The percentage of chronically ill U.S. adults who reported access problems, errors, delays, duplication, and other symptoms of poorly organized care was two to three times the level reported in the lowest-rate countries in the survey (a 20–30 percentage point spread). Along with Canadians, U.S. patients were also the most likely to indicate a primary care system under stress—lack of rapid access, difficulty getting care after hours, and high ER use.

The United States did comparatively well on measures of transitional care during hospital discharge, and responses were more positive on some items related to patient-centered care (for example, setting goals and priorities). Yet U.S. patients often cannot afford to follow recommended care. Recent studies indicate that the trend toward higher cost sharing for insured patients appears to be undermining access and adherence to recommended care.¹³ In effect, insurance designs may be undermining efforts to hold physicians accountable for achieving outcome targets

or evidence-based guidelines. Lack of affordable access, waits for primary care, and inadequate coordination put chronically ill U.S. patients—especially those with multiple chronic conditions—at high risk of poor health outcomes. Notably, despite spending much more, the United States has been falling behind all of the other surveyed countries in reducing premature deaths from conditions amenable to health care.¹⁴

Among the eight countries, the Netherlands often ranked first or second for positive access experiences and low rates of patient-reported errors, duplication, or perceptions of wasteful care. Served by a strong primary care infrastructure, including after-hours physician-led cooperatives and primary practices with electronic medical information systems, Dutch chronically ill patients reported rapid access to physicians when sick, found it easy to get care after hours, and were the least likely to have visited the ER or have coordination problems.¹⁵ Reflecting comprehensive insurance benefits, Dutch patients also report low rates of going without recommended care or medications because of costs. Yet relatively high Dutch readmission/ER use following discharge suggests a need for more integrated care as patients transition across care sites.

With the exception of waiting times for specialists and some aspects of patient engagement, the United Kingdom also ranked highly on many aspects of primary care access, coordination, and patient-reported errors. The extensive use of nurses on teams and high rates of diabetics with recommended care likely reflect U.K. incentives and reporting system reforms focused on primary care.¹⁶

Canadian responses indicate that Canada continues to face capacity restraints in both primary care and access to specialists. With the exception of Australia, which generally ranked in the middle, each of the other countries was at times near the top or bottom of the country range. Access variations, among the widest in the survey, tended to track countries' coverage and benefit policies as well as primary care capacity. Indicating shared concerns, the range of variation across countries in other areas of the survey was often narrower if the leading or lagging country was excluded.

■ **Lowering patient risks.** To date, patient safety efforts have primarily focused on hospitals. Yet patients in all eight countries reported that medical, medication, and test errors most often happened outside the hospital. Notably, at least one in ten chronically ill patients in four countries cited delays in learning about abnormal test results. Even higher proportions of patients across countries reported failures to reconcile medications at the time of discharge or that pharmacists had warned them of potential adverse drug interactions. These concerns highlight the need to focus on ambulatory care and medication safety.

Readmission rates to hospitals or the ER for complications indicate health risks resulting from inadequate care during hospital stays or transitions. Studies within the United States and targeted efforts by hospitals suggest that as many as 75 percent of readmissions for chronically ill patients are potentially preventable with

planned follow-up care after discharge.¹⁷ Readmissions thus offer policy and care system leaders a sensitive indicator of quality and safety over an episode of care.

■ **Shared quest for system innovation.** The experiences of chronically ill patients attest to the need to integrate care around the patient, supported by information systems that inform and enable more-effective and -efficient care. As countries grapple with redesigning their delivery systems from an acute, episodic orientation toward team approaches that integrate care over time and promote health for chronically ill patients, there is a unique opportunity for cross-national learning. Country initiatives under way share many similar features: using incentives and more “bundled” payments; spread of registries and electronic information systems; use of assistive telehealth technology with patients and care teams; targeting the highest-risk patients for outreach and follow-up care; building the evidence base for chronic care, especially for multiple conditions; and efforts to engage patients and communities with a population focus on prevention and health. Some examples include German statutory Disease Management Programs and Integrated Care Contracts with promising approaches to risk management and global fees to support care coordination; the U.K. Expert Patient Programme, which aims to give patients confidence to manage their own care plus GP contracts with incentives and feedback to doctors to improve care; France’s recent implementation of cost-sharing incentives to strengthen patients’ relationship to primary care and reduce fragmentation; private and public initiatives in the United States and Canada to promote integration across settings of care, with incentives to support “medical homes”; and New Zealand primary health organizations, information systems, and social marketing approaches to engage communities in health promotion to prevent chronic illnesses.¹⁸

FROM THE PERSPECTIVE OF CHRONICALLY ILL PATIENTS having intense contact with health care, the study finds opportunities to improve in all eight countries. As countries seek to innovate with goals of better health and value, the international community has opportunities to learn from negative as well as positive experiences. In an era of rising rates of chronic disease, public health initiatives as well as system innovations will be essential to enable all patients to achieve healthier, longer, and more productive lives.

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