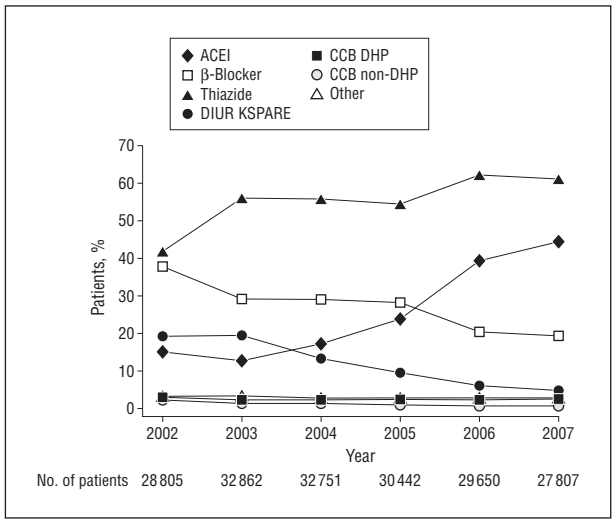

Figure. Trends in the prescription of initial antihypertensive medications among patients without compelling indications from 2002 through 2007. ACE indicates angiotensin-converting enzyme inhibitor; CCB, calcium channel blocker; CCB DHP, dihydropyridine calcium channel blocker; CCB non-DHP, nondihydropyridine calcium channel blocker; DIUR KSPARE, potassium-sparing diuretic.

neric medications were encouraged over brand name medications, but medications representing all therapeutic classes for hypertension treatment were available. Clinicians were encouraged to follow evidence-based practice; however, there was no mandate to use a specific agent in the initial treatment of hypertension.

While the patterns of care observed may not be generalizable to other settings, these 3 health care systems care for over 4 million patients in geographically distinct areas and the patient cohort included a clinically and demographically diverse population, approximately 50% female and 17% African American/Hispanic patients. Our findings of a slow but persistent increase in thiazide use suggest that clinical practice guidelines may have an impact on practice within these health care systems.

P. Michael Ho, MD, PhD
Chan Zeng, PhD
Heather M. Tavel, MS
Joe V. Selby, MD, MPH
Patrick J. O'Connor, MD, MPH
Karen L. Margolis, MD, MPH
David J. Magid, MD, MPH

Author Affiliations: Institute for Health Research, Denver, Colorado (Drs Ho, Zeng, and Magid, and Ms Tavel); Denver Department of Veterans Affairs Medical Center, Denver, Colorado (Dr Ho); Departments of Medicine (Dr Ho) and Emergency Medicine (Dr Magid), University of Colorado, Denver; Division of Research, Kaiser Permanente of Northern California, Oakland (Dr Selby); and HealthPartners Research Foundation, Minneapolis, Minnesota (Drs O'Connor and Margolis).
Correspondence: Dr Ho, Denver VA Medical Center, 1055 Clermont St (111B), Denver, CO 80220 (michael.ho@va.gov).
Author Contributions: Drs Ho and Magid had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. *Study concept and design:* Ho, Selby, O'Connor, and Magid. *Acquisition of data:* Tavel, Selby, O'Connor, Margolis, and Magid. *Analysis and interpretation of data:* Ho, Zeng, Selby, O'Connor, Margolis, and Magid. *Drafting of the manuscript:* Ho. *Critical revision of the manuscript for important intellectual content:* Ho, Zeng, Tavel, Selby, O'Connor, Margolis, and Magid. *Obtained funding:* Selby and Magid. *Administrative, technical, and material support:* Tavel, Selby, O'Connor, and Magid. *Study supervision:* Magid.
Financial Disclosure: Dr Ho serves as a consultant for WellPoint Inc. Dr Margolis receives research support from Bristol Myers Squibb in the form of an institutional research grant.
Funding/Support: This study was funded by grant U19HL091179 from the National, Heart, Lung, and Blood Institute as part of the Cardiovascular Research Network. Dr Ho is supported by a VA Research & Development Career Development Award (05-026-2).

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Clinical and Molecular Evidence for Transmission of Novel Influenza A(H1N1/2009) on a Commercial Airplane

Influenza A(H1N1/2009) has spread rapidly throughout the world by international air travel.[1] However, in-flight transmission of the virus has not been well documented. We report 6 cases of influenza A(H1N1/2009) associated with a single flight from the United States to Asia via Europe ("Flight A") linked by molecular epidemiological data.

See also pages 861 and 868

Report of Cases. Five passengers and 1 crew member who had traveled on Flight A presented with acute onset of fever, malaise, cough, sore throat, or rhinorrhea, with the first case presenting symptoms while he was in New York, New York, and the rest within 3 days of the flight's arrival in Singapore. All were discharged well, without se-

Table. Epidemiological Characteristics of Passengers and Crew Members on a Single Flight From the United States to Asia via Europe

Characteristic	Infected	Not Infected	*P* Value
Age, mean (SD), y	27.5 (6.1)	37.1 (12.5)	.02
Sex, M/F, No.	3/3	10/9	>.99
Passengers/crew, No. (%)	5/1 (83)	14/6 (65)	>.99
Boarded plane in New York, No. (%)	4/6 (67)	13/20 (65)	>.99
Total time on plane, mean (SD), h	14.5 (5.0)	15.7 (4.0)	.59
Carried hand sanitizer, No. (%)	2/6 (33)	6/20 (30)	>.99
Used mask, No. (%)	0/6	2/20 (10)	>.99
Sleep time, mean (SD), h	5.0 (3.1)	9.0 (4.1)	.06
Movie/reading time, mean (SD), h	5.0 (2.1)	5.6 (2.3)	.63
Used toilet, No. of times	4.8 (1.9)	5.6 (2.9)	.48

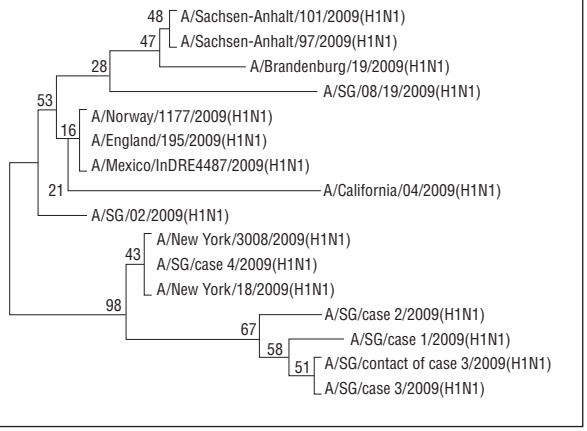

Figure. Sequence analysis of viruses from cases on a single flight from the United States to Asia via Europe. Case viruses and 1 virus from a contact of case 3 cluster closely to published sequences from the New York region of the United States from the same period (A/New York/18/2009[H1N1]), and were distinct from other Singapore identified viruses sequenced during the same period (A/SG/08/2009[H1N1] and A/SG/02/2009[H1N1]).

quelae, after hospitalization for isolation. Immediate contact tracing of all passengers was conducted according to the World Health Organisation (WHO) recommendations.[2] These define "close contacts" as passengers in the same row or in the 2 rows in front of and behind infected travelers. Twenty-three passengers in Singapore received oseltamivir phosphate (Tamiflu; Roche Laboratories Inc, Nutley, New Jersey) chemoprophylaxis and a strict 7-day quarantine. The WHO and the destination countries of the other passengers were notified. No additional cases of influenza A(H1N1/2009) were identified through active surveillance. We attempted to contact all passengers and crew to determine risk factors for infection in flight using a standardized questionnaire, but only 19 passengers and 7 crew members responded, since many were traveling and not contactable. We also performed molecular typing on the virus from nasopharyngeal specimens of infected patients.

A total of 596 passengers and crew members were on both legs of the flight. The infected crew member and 4 of 5 affected passengers were in the economy class from row 50 onwards, yielding an overall attack rate of 4.7% for that section compared with 0.2% for the rest of the plane (relative risk, 22.9; 95% confidence interval, 2.7-193.6 [$P<.001$]). Infected passengers and crew were younger than those not infected (mean age, 27.5 years vs 37.1 years; $P=.02$) (**Table**). This was consistent with the observation that a higher proportion of infection occurred in younger individuals.[3]

Viral genome sequencing[4] using 1949 bases from segments 4 (HA) and 5 (NP) for 4 of the Flight A cases (A/SG/case 1-4) revealed that all the sequences closely matched sequences from New York. These were distinct from other viruses identified from Singapore and countries outside Flight A's route at that time (as demonstrated by the 98 bootstrap value in the **Figure**). The phylogenetic tree built from these sequences shows that the crew member was infected by a virus strain virtually identical to other New York strains circulating at the time, while passengers (including the business class passenger [case 2]) were infected by viruses that could be derivatives of this strain. Overall, the molecular and epidemiological data support the evidence of in-flight transmission of influenza A(H1N1/2009), although the precise mode of transmission is difficult to ascertain with certainty.

Comment. Modern commercial aircraft with high-efficiency particulate filters and frequent recirculation of cabin air have reduced the risk of transmission of airborne respiratory infections. Spread of respiratory viral infections, however, is thought to be related to infectivity of the source patient(s), proximity, and duration of contacts.

Only 2 of the infected passengers on Flight A would have been detected using the WHO criteria for contact tracing. This was also the case with severe acute respiratory syndrome,[5] another emerging viral infection, transmitted predominantly by large particle droplets and direct contact with respiratory secretions or fomites. Perhaps contact tracing all passengers and crew in the same cabin or served by the same crew might be more appropriate in future airline outbreak investigations.

Human activities including onboard interactions may be important in in-flight influenza transmission. Our study showed that the infected passengers slept less on the plane ($P=.06$; Table). This was also reported in an outbreak of influenza on a delayed Alaskan Airlines flight in 1977.[6] Unfortunately, too few of the passengers we studied used hand sanitizers or masks to assess their impact in reducing transmission of respiratory infections in air travel.

The most important limitation of our study is that we were unable to interview the majority of passengers and crew on Flight A or to do airflow, environmental, or seroepidemiological studies. We also depended on reporting from other international agencies to ascertain all infections. We could thus have underestimated the attack rates.

Our clinical, epidemiological, and molecular evidence are, however, highly suggestive that influenza A(H1N1/2009) transmission occurred on board Flight A, possibly through human interaction in a crowded cabin. Efforts to contain future emerging respiratory viral in-

fections spread through international travel will have to include more thorough predeparture screening, perhaps novel decontamination or personal protective technologies, and broader clinical and molecular epidemiologic investigations than currently recommended.

Peng Lim Ooi, MBBS, MSc, MPH, FAMS
Florence Yuk Lin Lai, MPhil
Chew Ling Low, BSc(Hons)
Raymond Lin, MBBS, FRCPA
Christopher Wong, BSc, PhD
Martin Hibberd, BSc, PhD
Paul Ananth Tambyah, MBBS

Author Affiliations: Communicable Diseases Division, Ministry of Health (Drs Ooi and Lin and Mss Lai and Low), Genome Institute of Singapore (Drs Wong and Hibberd), and Department of Medicine, National University of Singapore (Dr Tambyah), Singapore.
Correspondence: Dr Ooi, Ministry of Health, 16 College Rd, Singapore 169854, Singapore (OOI_Peng_Lim@moh.gov.sg).
Author Contributions: *Study concept and design:* Ooi, Lai, Hibberd, and Tambyah. *Acquisition of data:* Ooi, Low, Lin, Wong, and Hibberd. *Analysis and interpretation of data:* Ooi, Lai, Lin, Wong, Hibberd, and Tambyah. *Drafting of the manuscript:* Ooi, Lai, Low, Hibberd, and Tambyah. *Critical revision of the manuscript for important intellectual content:* Ooi, Lin, Wong, Hibberd, and Tambyah. *Statistical analysis:* Lai and Hibberd. *Obtained funding:* Wong. *Administrative, technical, and material support:* Ooi, Low, Lin, Wong, and Hibberd. *Study supervision:* Ooi, Wong, and Tambyah.
Financial Disclosure: Dr Tambyah received research support from Baxter, Adamas, Merlion, Novartis, Pfizer, Wyeth, Asian Hygiene Council, and Asia-Pacific Advisory Committee on Influenza. None of these commercial entities had any access to the data.
Additional Contributions: The following individuals assisted in the outbreak investigation: Bok Huay Foong, BA, Pei Pei Chan, BSc(Hons), Hwi Kwang, Han, BEOHS, Hai Yin Toh, BEOHS, Suhana Solhan, BSc(Pharm)(Hons), Cheryl Tang, BSc(Hons), Lyn James, MBBS, MMed(PH), FAMS, Jeffery Cutter, MBBS, MMed(PH), MSc, FAMS, and Cui Lin, PhD, from the Ministry of Health, Singapore; Chee Wee Koh, BSc, Wan Yee Leong, BSc, and Charlie Lee, BSc, from the Genome Institute of Singapore; and Sebastian Maurer-Stroh, BSc, PhD, from the Bioinformatics Institute, Singapore.

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COMMENTS AND OPINIONS

One Can't Judge a Stent by Its Cover

The "law of unintended consequences" states that any purposeful action will produce some unintended consequences.[1] The recent acquisition of the Guidant Corporation by Boston Scientific (BS) Corporation, Natick, Massachusetts, has led to policies that (1) promote wasteful spending and delay acquisition of necessary clinical information and (2) expose the interventional cardiology community to a potential appearance of conflict of interest at a time when physician-industry relationships are being carefully scrutinized.[2-4]

In 2006, BS Corporation purchased Guidant Corporation for $27 billion. In an attempt to avoid competitive market imbalance, the Federal Trade Commission (FTC) also approved the acquisition of Guidant's vascular business by Abbott Laboratories, Abbott Park, Illinois. The 3-way deal was quite complex, and as a result of this deal, BS Corporation was given the right to comarket the Xience V (Abbott Laboratories) drug-eluting stent system under a different name (PROMUS; BS Corporation). Marketing approval was then granted by the Food and Drug Administration (FDA) allowing 2 new (yet identical) options to enter the US market.[5] Clearly, the profits, sales revenue, and market share are dependent on which company supplies the device, but in reality, this should have no impact for the end user.

The FDA has mandated that new drug-eluting stents to the market undergo postmarketing surveillance registries to follow the long-term safety and efficacy of new devices. While we applaud this requirement, there are unintended consequences because these 2 stents are the same. By allowing the identical device to be marketed under 2 different names (Xience V and PROMUS), the FTC and the FDA have created the perception that these 2 stents are actually different devices. Each company is running their own postmarketing registry, which makes no sense for identical devices. Instead of combining resources for 1 large registry of Xience V and PROMUS implantations that could rapidly enroll, separate studies delay enrollment, waste money, and most importantly divert attention and resources away from optimal patient care.

It would appear that excess profit concerns have led to a situation that has shifted the focus away from the patient. Companies bring products to market that are similar if not identical (in this case) to other products. Physicians choose between these products based on factors beyond what is best for the patient.

Dealing with these "2" stents in the marketplace varies across the country. Hospitals and buying groups have the choice of purchasing identical products in different colored boxes, with different names, from 2 different vendors. Some hospitals have chosen one over the other, while others have honored historic relationships and have products from both companies. With the assumption of price neutrality, which is often difficult for physicians to ascertain (owing to lack of awareness, lack of knowledge,