

R.I. Using E-Prescribing Data to Track H1N1

BY MARY ELLEN SCHNEIDER

Public health officials in Rhode Island are using electronic pharmacy data to track the use of oseltamivir and other antiviral medications being used to treat patients infected with the 2009 H1N1 influenza virus.

As part of an ongoing partnership with SureScripts, an electronic prescribing network, all 181 pharmacies in Rhode Island now can send and receive electronic prescription information over a secure network. As a result, pharmacies are able to transmit information to the Rhode Island department of health on all antiviral prescriptions written in the state. Even if a physician uses a handwritten prescription, the information is available from the pharmacy's electronic system.

At a press conference, Dr. David Gifford, director of the Rhode Island Department of Health, said prescriptions for antiviral medications provide a good proxy measure for infection with H1N1

virus and are a complement to other surveillance systems such as school absenteeism and emergency department visits.

Real-time electronic data on antiviral prescriptions also allow health officials to match supply and demand, he said.

For example, if prescriptions are about to outpace the supply, the health department can anticipate shortages in the antiviral supply and release more medication.

If there are reports of a large volume of H1N1 illness in a community, but not a lot of prescribing of antiviral medication, that could indicate the need for more physician education, Dr. Gifford said. Conversely, if the pharmacy data show a large amount of antiviral prescribing in areas where there is not a lot of H1N1 activity, it could indicate inappropriate prescribing of oseltamivir (Tamiflu) for seasonal influenza, he said.

The statewide initiative is believed to be the first in the nation and allows pharmacies to send data that have been stripped of personal patient information to the health department on a weekly basis.

The prescription data include the patient's age and zip code as well as the prescribing physician's name, allowing health officials to track the progress of the outbreak by communities. ■

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you sublease space during off-hours to a lactation consultant; physical, occupational, or speech therapist; or registered dietitian who could provide nutrition counseling and diabetes education?

► **Target missed appointments.** Automated dialing systems can be set to make reminder calls and reduce expensive no-shows, if this is a problem in your practice.

► **Cede out-of-office care.** Dr. Harbaugh admitted that this idea could "run me out of town," but he suggested that practices tally up the cost of delivery/newborn hospital visits, pediatric hospital rounds, and courtesy emergency department visits. The office, he said, "is where we provide the most service. It's our cost center." Some practices may want to poll families to see whether they would be willing to trade a visit to the hospital to see their newborn for an expanded level of office care, including early morning and evening walk-in visits.

► **Consider participating in clinical trials.** "It's a lot of work," but adding research to a pediatric practice can be rewarding and intellectually invigorating, as well as profitable, infusing up to \$100,000 a year into a practice's bottom line. The concept works only as long as a dedicated physician wants to take on the role of principal investigator and at least one office staff member can devote the bulk of his or her time to coordinating the trial(s). ■

Disclosures: Dr. Harbaugh disclosed that he is on the national advisory boards, is on the speakers bureaus, and/or serves as a consultant for several pharmaceutical companies. He recently served as CEO and chairman of the board for Kids First Pediatric Alliance, a metropolitan Atlanta IPA.

When RSV* activity erupts...

More children may be visiting the hospital or your office for help^{1,2}

RSV is responsible for up to 125,000 infant hospitalizations in the US annually³

- From 1997 to 2000, RSV bronchiolitis was the leading cause of hospitalizations for infants <12 months of age¹

A threat in all outpatient settings

- 22% of infants <1 year of age infected with RSV will develop bronchiolitis⁴
- 28% of children <2 years of age infected with RSV will develop bronchiolitis⁴
- In the US in 2000, the estimated RSV-related outpatient visits in children <5 years of age were²:
 - 236,000 hospital outpatient department visits
 - 402,000 emergency room visits
 - 1.7 million office visits

Potentially serious long-term consequences

- RSV-related lower respiratory tract illnesses (LRTIs) in infancy may be associated with an increased risk of asthma in the first decade of life⁵⁻⁷

Age	Asthma RR† (95% CI)‡
3 years	21.8 (2.90-163.57) ⁵
7 years	9.23 (2.79-30.55) ⁶
13 years	6.8 (2.7-17.3) ⁷

Based on a prospective cohort of 47 (93 control) Scandinavian children <1 year of age in 1989 hospitalized with RSV and followed for 13 years.

Help avert potentially serious consequences for your patients

For additional information, visit www.rsvinsiders.com



*RSV = respiratory syncytial virus.
†RR = relative risk.
‡CI = confidence interval.

References: 1. Leader S, Kohlase K. Recent trends in severe respiratory syncytial virus (RSV) among US infants, 1997 to 2000. *J Pediatr.* 2003;143:S127-S132. 2. Paramore LC, Ciuryla V, Ciesla G, Liu L. Economic impact of respiratory syncytial virus-related illness in the US: an analysis of national databases. *Pharmacoeconomics.* 2004;22:275-284. 3. Shay DK, Holman RC, Newman RD, Liu LL, Stout JW, Anderson LJ. Bronchiolitis-associated hospitalizations among US children, 1980-1996. *JAMA.* 1999;282:1440-1446. 4. Glezen WP, Taber LH, Frank AL, Kasel JA. Risk of primary infection and reinfection with respiratory syncytial virus. *Am J Dis Child.* 1986;140:543-546. 5. Sigurs N, Bjarnason R, Sigurbergsson F, Kjellman B, Björkstén B. Asthma and immunoglobulin E antibodies after respiratory syncytial virus bronchiolitis: a prospective cohort study with matched controls. *Pediatrics.* 1995;95:500-505. 6. Sigurs N, Bjarnason R, Sigurbergsson F, Kjellman B. Respiratory syncytial virus bronchiolitis in infancy is an important risk factor for asthma and allergy at age 7. *Am J Respir Crit Care Med.* 2000;161:1501-1507. 7. Sigurs N, Gustafsson PM, Bjarnason R, et al. Severe respiratory syncytial virus bronchiolitis in infancy and asthma and allergy at age 13. *Am J Respir Crit Care Med.* 2005;171:137-141.

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