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Judith Sparrow
U.S. Dept of Health & Human Services
Office of the National Coordinator for Health IT
330 C St. SW, Ste. 1104
Washington, DC 20201
judy.sparrow@hhs.gov

Dear Ms. Sparrow,

I appreciate the opportunity to address the HIT Policy Committee's Meaningful Use Workgroup. Thank you for the chance to share with you Group Health Cooperative's experience of incorporating patient-generated data into our electronic health record.

As my written testimony, I've attached the following documents:

- An outline of my spoken testimony
- A systematic review from the American Journal of Preventive Medicine about the effectiveness of Health Risk Assessments when combined with feedback and interventions.
- The Electronic Blood Pressure (e-BP) trial that we published in *JAMA* in 2008, in which home blood pressure monitoring with electronic communication through secure email with a clinical pharmacist nearly doubled the percentage of people whose blood pressure was controlled (under 140/90 mm Hg).
- A randomized trial we published in *Diabetes Care* in 2009, in which home glucose monitoring with electronic communication with care managers improved glycemic control in patients with type 2 diabetes
- Our evaluation, which the April 2010 *Health Affairs* published, showing that surveying patients about their experience has been key to Group Health's continual improvement of its health information technology. In that article we recommended:
 - Meaningful use criteria should include measures of patients' experience.

- Patients should be able to connect with their health care providers however they need or prefer, whether in person, over the phone, or through secure e-mail.

Regards,

A handwritten signature in grey ink, appearing to read "James D. Ralston". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James D. Ralston, MD, MPH
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- 1) Good morning. I am James Ralston, a practicing internal medicine physician at Group Health Cooperative and a health informatics investigator at Group Health Research Institute in Seattle.
- 2) My colleagues and I applaud this workgroup's deliberations on inclusion of patient-generated data in the criteria for meaningful use of electronic health records (EHR).

Thank you for the opportunity to share with you today Group Health's experience with using patient-generated data in the EHR.

- 3) Group Health is a nonprofit member-cooperative health system that integrates care with coverage.

We have 900 physicians who care for 380,000 people in 26 medical centers, 4 multi-specialty sites, and 6 primary contracted hospitals in Washington State.

We try to keep our patients at the center of everything we do, including our health information technology.

- 4) Over the past 6 and half years, Group Health has been directly engaging patients through our EHR.

Through our patient website connected to our EHR, patients can:

- exchange secure e-mail with their healthcare providers
- schedule office visits
- get after-visit summaries and medication refills
- see parts of their EHR, including results of medical tests and lists of medications, immunizations, allergies and medical conditions
- complete a comprehensive and individually tailored health risk assessment or HRA called the "Health Profile"

- 5) Patients and providers increasingly communicate online through our patient website.

As of December 2009:

59% of enrollees had accessed the shared EHR online

30% of all primary care visits were through secure email

- 6) Patient-generated data is an essential part of care at Group Health.

For preventive and chronic illness care, we use an online HRA, our "Health Profile," which lets patients identify their own, unique health risks

and receive actionable tailored feedback on health risks and recommended prevention services and chronic illness care.

A recent review in the *American Journal of Preventive Medicine* found HRAs combined with feedback and interventions had positive effects on outcomes including tobacco use, alcohol use, dietary fat intake, cholesterol, and blood pressure.

But use of HRAs has been limited by an inability to integrate them with clinical data, decision support, and documentation functions within EHRs.

Group Health has integrated our HRA within our EHR to generate individual Health Profiles for our patients and their care teams.

Our Health Profile incorporates over 250 questions and 1,000 possible answer choices to provide detailed and personalized health information on many topics from clinical preventive services (immunizations, screening, and chemoprevention), to chronic disease management, future disease risk, healthy lifestyles, and workplace productivity. The Health Profile also gathers additional patient information relevant to doctor-patient interactions, such as patients' living arrangements.

Our Health Profile combines answers to these questions with relevant clinical information directly from the patient's EHR (such as their latest cholesterol test results) to use in calculating health risks and making clinical recommendations.

After individuals complete the Health Profile, a primary care team report is transmitted back to the medical record for clinicians to use in delivering care.

Multiple discrete data fields from the Health Profile (such as past medical history, past surgical history, and social history details) are transmitted to the corresponding fields in the electronic record both to enhance clinical documentation and to expedite clinician history taking. This two-way data integration with the patient's EHR enhances the clinical relevance of the Health Profile.

For example, we use the PHQ-8 to screen for depression in the Health Profile. When a patient has a score that is concerning for possible depression, the patient receives recommendations for care, and the patient's primary care physician receives an in-basket alert in the EHR and contacts the patient if necessary.

Despite success with using our Health Profile, we still have a problem that is widespread and affects others too: lack of better integration of patient-entered HRA information with the EHR.

Better integration with EHR would allow stronger logic to drive decision support and better workflow that would let relevant actions be tied to HRA results, including order entry and documentation.

We have also found that data from home monitoring devices is important for improving care of patients with chronic illnesses including high blood pressure and diabetes.

We have published two randomized trials using the Chronic Care Model and data patients enter into the EHR:

In a 2008 study in *JAMA*, we found home blood pressure monitoring combined with electronic communication through secure email nearly doubled the percentage of people whose blood pressure was controlled.

In a 2009 study in *Diabetes Care*, we found home glucose monitoring with secure electronic communication improved glycemic control in patients with type 2 diabetes.

Both studies required inefficient workarounds to get patients' blood pressures and blood glucose levels into the EHR and then viewable for collaboration between patients at home and providers in clinic.

Being able to incorporate data uploaded from home blood pressure and glucose monitors into the EHR would have substantially improved the workflow in these trials and speeded up spreading the interventions into usual care.

- 7) Although patient-entered data are important for use of EHRs, it will be meaningful only if we can keep the needs and preferences of patients first.

To do this, we should prioritize measurement of patient experience as part of meaningful use criteria.

In the April issue of *Health Affairs*, we published an article showing that regular surveys of patients about their experience with online services of the EHR has been key to Group Health's continual improvement of health information technology

- 8) Policy support for patient-entered data should start with measuring patient experience with care involving EHRs.

Meaningful use should then consider specific patient-entered data to meet patients' preventive and chronic care needs.

These data should include patients' individual health risk and history information and selected data from home monitoring devices such as home blood pressure measures for those with hypertension and blood glucose levels for those with diabetes.

All these data should be visible to patients and support ongoing collaboration with healthcare providers.

I hope our experience as care providers and our evidence from research have helped inform your deliberations on incorporating patients' experience and data into the criteria for meaningful use of EHRs.

Thank you.