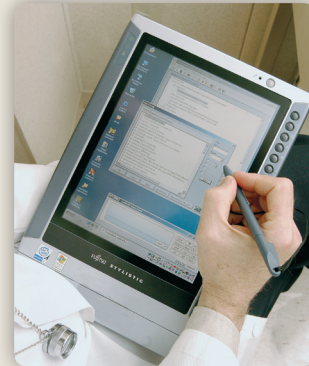


Introduction

The Health Information Technology for Economic and Clinical Health Act (HITECH Act), enacted as an additional component of the American Recovery and Reinvestment Act, promotes the development and utilization of Electronic Health Records (EHR). The potential benefits from widely adopting EHRs are substantial. EHRs are expected to meet Meaningful Use criteria. Occupational and environmental information should be part of the EHR. Inclusion of such information complies with Meaningful Use criteria. Minorities and immigrants are potentially important beneficiaries of such inclusion.



Meaningful Use Criteria

HITECH states that EHRs must include components that meet Meaningful Use criteria:

- Improve quality, safety and efficacy and reduce disparities
- Engage patients and families in their health care
- Improve care coordination
- Improve population and public health
- Maintain privacy and security



How meaningful is occupational and environmental information?

Improve quality, safety and efficiency and reduce disparities:

Occupational and environmental information in the medical record could inform the clinician about alternative causes for common presentations and thus improve diagnosis, management and prevention and also guide appropriate billing. Racial and ethnic disparities due to under-diagnosis, non-use of worker compensation, lack of hazard awareness, all leading to disproportionate impact of occupational and environmental hazards could potentially be addressed. Decision support tools could be linked to the data collected, improving all of the above dimensions.

Engage patients and families in their health care:

Targeted patient education materials including guidance on common workplace hazards and personal protection as well as family guidance for home-based & para-occupational exposures.

Improve care coordination:

Time loss from workplace illness and injury (the greatest cost to worker and workplace) could be reduced by early and appropriate attention to diagnosis, referral, rehabilitation and guided return-to-work.

Improve population and public health:

Syndromic surveillance, studies of workplace health impacts and prompt workplace intervention, and rapid identification of environmental outbreaks prompting public health response to reduce greater population impact would be greatly improved by linking occupation as well as environment to the medical record.

Maintain privacy and security:

Medical information associated with workplace illness and injury is available to employers and worker compensation insurers. A challenge will be to develop flexible firewalls to redact non work-related EHRs to avoid unnecessary transfer of protected health information.

Work-Related Injuries, Environmentally-Related Illnesses

Working adults spend about half of their waking hours at work. The impact of work-related injury and illness is large and costly.

- 3.1 - 5.5 million work-related injuries per year in the US
- 160,000 new work-related illnesses per year
- - 4500 work-related injury deaths per year
- - 49,000 work-related illness deaths per year
- - \$170 billion - Combined cost of US occupational injury and illness per year
- - \$55 billion spent on worker compensation claims
- Environmental, para-occupational and occupational exposures result in cancers, neurological disease and acute and chronic intoxications
- Environmental factors accounted for 55% of autism



Disparities can be helped by occupational/environmental information in the EHR

Minorities and immigrants disproportionately suffer the impact of environmental and occupational illnesses and injuries and would benefit substantially from including this information in EHR.

- Multiple studies have found Blacks and Hispanics at higher risk for fatal workplace injuries than Caucasian non-Hispanics.
- While US workplace fatalities have decreased, Hispanic occupational fatalities have increased.
- The fatal work injury rate is higher for foreign-born workers than for workers born in the US and for Hispanics workers born in the US.
- Urban Hispanic workers have higher occupational injury rates than the general population.
- Para-occupational (take-home) exposure is more likely in low wage jobs.
- Early identification of high risk processes is likely to benefit low wage workers.
- The risk of lead exposure remains disproportionately high among children who are low-income, African American and/or Hispanic.