Workforce Competencies for Patient-Centered Health Care Delivery through Health IT: A Framework for Practice Transformation

This project supported in whole or in part by ARRA HIT Grant # 90CC0079/02-04 awarded to the Cuyahoga Community College by the Federal HHS Office of the National Coordinator.

Health Information Exchange (HIE)

Comp. #	HIE Competency	DC#	HIE Detailed Competency	LO#	HIE Learning Objectives	PSR, Schedulers, Front Desk, Med Secretaries	Nurses (LPNs/RNs), MAs	Providers (MDs, DOs, NPs, PAs)	Care Coordinators	PharmDs, Pharmacy	Health Care Mgmt (Practice Mgrs, Admin)	Health Info Mgmt Medical Records RHIA	IT Professionals
Definitions & Principles													
1	Describe HIE concepts and goals	1a	Describe what HIE includes	1a.1	Describe the role of the HITECH act in the implementation of HIE	x	x	x	x	x	x	x	x
				1a.2	List the components of a Health Information Exchange (HIE)		x	x		x			
		1b	Describe the goals of HIE	1b.1	List the desired outcomes and goals of HIE	x	x	x	x	x	x	x	x
				1b.2	Explain why the goals of HIE are desirable	x	x	x	x	x	x	x	x
				1b.3	Describe how the components of HIE work together to accomplish the goals of HIE		x	x	x	x	x	x	x
2	Familiarity with information systems that support HIE	2a	Identify information systems that support HIE and explain what they do	2a.1	List information systems that support HIE	x	x	x	x	x	x	x	x
				2a.2	Describe the function of each information system that supports HIE	x	x	x	x	x	x	x	x
				2a.3	Describe how HL7 regulations and other standards affect information systems that support HIE		x	x			x	x	x
				2a.4	Describe how implementation of HIE varies from one state to another		x	x			x	x	x

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				2a.5	Identify how the information systems that support HIE work together		x	x				x	x	x
3	Familiarity with information systems for patient care	3a	Identify typical information systems for patient care and what they are used for	3a.1	List typical information systems used for patient care and the care settings in which they are used	x	x	x	x	x	x	x	x
				3a.2	Describe how information systems for patient care function and how they are used	x	x	x	x	x	x	x	x
4	Demonstrate understanding of interoperability	4a	Describe what interoperability means in relation to HIE	4a.1	List the requirements of interoperability for HIE		x	x	x	x	x	x	x
				4a.2	Identify strategies for attaining interoperability for HIE			x			x	x	x
		4b	Explain why interoperability is important to HIE	4b.1	List problems that result from a lack of interoperability for HIE		x	x	x	x	x	x	x
				4b.2	Describe the benefits of interoperability for HIE		x	x	x	x	x	x	x
				4b.3	Explain why interoperability for HIE is important for meeting interoperability requirements for MU and PCMH		x	x	x	x	x	x	x
				4b.4	Identify how interoperability affects interactions with outside entities, e.g., immunization registries		x	x	x	x	x	x	x
5	Adherence to care guidelines	5a	Describe common care guidelines	5a.1	Describe common care guidelines that are established via evidence-based medicine		x	x	x	x			x

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		5b	Identify when HIE can assist in adherence to care guidelines	5b.1	Describe scenarios in which information can be gathered via HIE to improve care management and adherence to care guidelines	x	x	x	x	x	x		x
				5b.2	Explain which roles may use HIE in adhering to care guidelines and how those roles may use it	x	x	x	x	x	x		x
				5b.3	Identify any special considerations (e.g., security, privacy, etc.) when using HIE to adhere to care guidelines	x	x	x	x	x	x		x
Data Quality													
6	Identify how data impacts clinical interventions	6a	Describe how data collection and data quality impact clinical interventions	6a.1	Describe how data is used in clinical interventions	x	x	x	x	x	x	x	x
				6a.2	List the ways that data collection methods and data quality can affect clinical interventions	x	x	x	x	x	x	x	x
				6a.3	Define structured and unstructured data	x	x	x	x	x	x	x	x
				6a.4	Analyze situations in which collecting structured data (as opposed to collecting unstructured data) is important for making the best use of the data in clinical interventions (at least until natural language processing improves)	x	x	x	x	x	x	x	x
				6a.5	Give examples of ways the availability of high-quality data can contribute to public health	x	x	x	x	x	x	x	x

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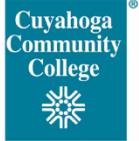
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		6b	Manage data collection and data quality for optimal use in clinical interventions	6b.1	Describe data collection techniques that optimize data usage for clinical interventions	x	x	x	x	x	x	x	x
				6b.2	Explain how the failure to record data negatively impacts clinical interventions	x	x	x	x	x	x	x	x
				6b.3	Identify methods for ensuring data quality that meets the needs of clinical interventions	x	x	x	x	x	x	x	x
7	Ensure accurate and timely data gathering, documenting, reporting and interpreting	7a	Ensure accurate and timely data gathering, documentation, reporting, and interpretation	7a.1	Describe how HIE can improve timely data gathering, documenting, reporting and interpreting	x	x	x	x	x	x	x	x
				7a.2	Explain how HIE patient matching can affect data quality	x	x	x	x	x	x	x	x
Regulations													
8	Ability to comply with privacy and security standards and regulations	8a	Comply with privacy and security standards and regulations	8a.1	List the privacy and security standards and regulations that apply to HIE	x	x	x	x	x	x	x	x
				8a.2	Identify technology requirements for compliance with privacy and security regulations							x	x	x
				8a.3	Identify steps each role must take to ensure compliance with HIE security standards and regulations	x	x	x	x	x	x	x	x
9	Ensure security of Protected Health Information	9a	Ensure the security of protected health information	9a.1	List the security requirements for protected health information related to HIE	x	x	x	x	x	x	x	x

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				9a.2	Identify procedures that ensure the security of protected health information with HIE	x	x	x	x	x	x	x	x
10	Apply HIPAA regulations to data exchange	10a	Apply HIPAA regulations to data exchange	10a.1	List the HIPAA regulations that apply to data exchange	x	x	x	x	x	x	x	x
				10a.2	Identify procedures that ensure HIPAA regulations for data exchange are met	x	x	x	x	x	x	x	x
11	Differentiate between structured and unstructured data	11a	Differentiate between structured and unstructured data in HIE	11a.1	Distinguish between structured and unstructured data	x	x	x	x	x	x	x	x
				11a.2	Explain how structured and unstructured data are handled in HIE	x	x	x	x	x	x	x	x
				11a.3	Identify the limitations of using unstructured data in HIE	x	x	x	x	x	x	x	x
12	Demonstrate understanding of data exchange issues -- technical, financial, legal	12a	Describe technical issues of data exchange	12a.1	List technical issues involved in implementing data exchange							x	x	x
				12a.2	Identify the ways technical issues complicate the implementation of HIE and how those issues may be resolved							x	x	x
		12b	Describe financial issues related to data exchange	12b.1	List financial issues involved in implementing data exchange		x	x	x	x	x	x	x
				12b.2	Identify the ways financial issues complicate the implementation of HIE and how those issues may be resolved		x	x	x	x	x	x	x

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				12b.3	Describe how the ability to exchange health information can affect provider reimbursement and pay for performance		x	x	x	x	x	x	x
				12b.4	Explain how the costs and payments for data exchange may be apportioned to vendors, providers, and patients						x	x	x
		12c	Describe legal issues related to data exchange	12c.1	List legal issues involved in implementing data exchange		x	x	x	x	x	x	x
				12c.2	Describe how data use agreements affect the way various entities are allowed to use data that is exchanged	x	x	x	x	x	x	x	x
				12c.3	Analyze the chain of responsibility for exchanged data, including consent agreements and related issues	x	x	x	x	x	x	x	x
				12c.4	Identify the ways legal issues complicate the implementation of HIE and how those issues may be resolved			x			x	x	x
13	Apply role-specific securities	13a	Describe role-specific security requirements	13a.1	Identify roles that have special security requirements for HIE	x	x	x	x	x	x	x	x
				13a.2	List the specific security requirements for each role requiring special security	x	x	x	x	x	x	x	x
		13b	Implement role-specific security	13b.1	List ways special security requirements can be met	x	x	x	x	x	x	x	x

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			requirements for HIE	13b.2	Create a plan for implementing role-specific security requirements			x		x	x	x	x
14	Apply reporting requirements	14a	Meet reporting requirements that are affected by HIE or the absence of HIE	14a.1	Identify reporting requirements affected by HIE or the absence of HIE	x	x	x	x	x	x	x	x
				14a.2	Determine what is needed to meet reporting requirements	x	x	x	x	x	x	x	x
				14a.3	Make a plan for ensuring reporting requirements are met			x			x	x	x
Supporting Team-based Care													
15	Demonstrate HIE solutions for team-based patient care	15a	Describe how HIE solutions can facilitate team-based patient care	15a.1	Give examples of team-based patient care implementations	x	x	x	x	x	x	x	x
				15a.2	List ways that HIE can facilitate team-based patient care	x	x	x	x	x	x	x	x
		15b	Implement HIE solutions to facilitate team-based patient care	15b.1	List types of applications that make use of HIE to facilitate team-based patient care	x	x	x	x	x	x	x	x
				15b.2	Analyze best practices for leveraging HIE solutions to facilitate team-based patient care	x	x	x	x	x	x	x	x
16	Differentiate HIE use/access to scope of practice	16a	Describe how HIE use and access may vary depending on the scope of	16a.1	Describe the scope of practice for each relevant health care role	x	x	x	x	x	x	x	x

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			practice of an individual	16a.2	Give examples of use and access for specific roles, based on the scope of practice for those roles	x	x	x	x	x	x	x	x
		16b	Identify appropriate HIE use and access for individuals with specific scopes of practice	16b.1	Develop a grid that lays out appropriate HIE use and access for each relevant role, based on the scope of practice for that role (for identified roles only)							x	x	x
17	Facilitate HIE care coordination	17a	Describe how HIE can facilitate care coordination	17a.1	Describe ways that HIE can be used to improve care coordination among providers		x	x	x	x	x	x	x
				17a.2	Give examples of information that could be exchanged electronically that would facilitate care coordination	x	x	x	x	x	x	x	x
				17a.3	Identify potential improvements to care coordination that can be facilitated by HIE	x	x	x	x	x	x	x	x
		17b	Implement HIE-enabled care coordination practices	17b.1	Create a plan for using HIE to facilitate care coordination in your organization		x	x	x	x	x	x	x
18	Shared language for effectively communication between health care and IT professionals	18a	Identify terminology and shared language necessary for effective communication between health care professionals and IT professionals	18a.1	Identify potential sources of communication problems between health care professionals and IT professionals	x	x	x	x	x	x	x	x
				18a.2	Identify and define terminology that requires a common understanding for both health care and IT professionals and identify useful terminology resources	x	x	x	x	x	x	x	x

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		18b	Communicate effectively with health care professionals and IT professionals	18b.1	Identify best practices for ensuring that all stakeholders understand the required common terminology						x	x	x
				18b.2	Select the best mechanism for addressing and resolving communication problems in specific circumstances	x	x	x	x	x	x	x	x
19	Interact with patients via telehealth	19a	Describe the technology and practices involved in telehealth implementation	19a.1	Identify the technologies used for telehealth, describe how they are used, and give specific examples of their use	x	x	x	x	x	x	x	x
				19a.2	Identify and describe telehealth best practices	x	x	x	x	x	x	x	
		19b	Interact effectively with patients in telehealth settings	19b.1	Describe common problems encountered in implementing telehealth practices	x	x	x	x	x	x	x	x
				19b.2	Identify ways to monitor and improve telehealth skills		x	x	x	x	x	x	
20	E-prescribe	20a	E-prescribe	20a.1	Identify situations in which e-prescriptions are and are not appropriate	x	x	x	x	x	x	x	x
				20a.2	Identify the roles involved in e-prescribing and describe the scope of practice for each role	x	x	x	x	x	x	x	x
				20a.3	List the common technologies and tools used to e-prescribe	x	x	x	x	x	x	x	x

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				20a.4	Describe how HIE is used in e-prescription	x	x	x	x	x	x	x	x
				20a.5	Identify and describe e-prescription best practices	x	x	x	x	x	x	x	x