Delaware State Innovation Model Award Year 3

Health Information Technology Operational Plan

Optimizing new and leveraging current health IT at the provider, payer, and state level to achieve the statewide infrastructure needed to implement delivery system and payment reform, including the use of telehealth

Table 1:

Detail how the awardee will optimize new and leverage current health IT at the provider, payer, and state level to achieve the statewide infrastructure needed to implement delivery system and payment reform, including the use of tele health							
Health IT functionality	**Infrastructure to support**	**Readiness of function**	**Information Purpose & Location**	**Current barriers**	**Funding**	**Policy Levers Utilized**	**Fully Operational Date**
HCCD	Data storage, analytics software package, connections to the payers (likely SFTP), ETL tools, de-identification tools, policies and processes for requesting data sets or reports	Design specifications not yet developed	Delaware is in the process of developing a multi-payer Health Care Claims Database (HCCD) using data from Medicare FFS (pending release of data by CMS), Medicaid, the State Employee Benefit Program, and Qualified Health Plans. These datasets represent 55-60% of the state's insured. The required infrastructure for data senders will be developed with the eventual incorporation of voluntary commercial data in mind. Providers will be able to use data from the	Funding source for consultant assistance with design	The DHIN, with the assistance of the Department of Health and Social Services, is currently evaluating short- and long-term funding options for the Health Care Claims Database (HCCD). Funding will likely come from several sources including access fees for utilizing the HCCD, public and private grant funding, and revenue for specific data projects.	Delaware continues to utilize several policy levers for enabling the HCCD. DCHI developed a strategy for improving health innovation in a white paper, "Increasing access to claims data to support health innovation" which ties use cases for multi-payer claims data to Delaware's innovation priorities. DCHI continues to build consensus around use cases for the HCCD through the Transparency Working Group (TWG). The TWG is developing specific	12/31/2017

			multi-payer database to help them participate in value-based payment models. Larger providers (e.g., ACOs, hospital systems) may use the data directly, while less sophisticated providers may choose to engage third parties to conduct analytics if they are unable to do so on their own. The HCCD will also be used to support research, evaluation and planning. HCCD data will be used to assess progress on SIM initiatives, such as Healthy Neighborhoods and overall SIM goals, and will enable research conducted by third-parties such as academic research institutions. The DHIN will operationalize the HCCD through a contracted vendor which will be responsible for ingesting claims data from payers into its data warehouse. The data warehouse will be used to generate extracts to meet a			recommendations for each use case in DCHI's original white paper, with a focus on informing HCCD design decisions. Finally, Delaware utilizes mandatory reporting requirements for state-based healthcare payers, including Medicaid, the State Employee Benefit Program, and Qualified Health Plans. Delaware will encourage other health plans within the state to voluntarily participate in the HCCD.	

			variety of reporting needs.				
Common Scorecard	IMAT platform	Currently operational, Currently adopted by ~50 providers statewide.	The Scorecard includes measures of quality, utilization, and cost across multiple payers and has been an important element of Delaware's approach to health care delivery transformation. It will help ensure alignment of quality and cost measures across value based payment models and provides a single aggregated view for a practice across patient panels. The Scorecard is updated on a quarterly basis so that providers can receive regular updates on their performance.	Long term funding source for operations remains undefined	Development and support of the Common Scorecard is enabled through funding provided by the SIM grant. DHIN receives funding to support overall project management, and to contract with a vendor to develop and support the Common Scorecard. In 2016, funding was used to develop additional functionality and facilitate launch of the Common Scorecard statewide to all primary care practices.	The set of quality, utilization, and cost measures included in the Common Scorecard was developed through a multi-stakeholder consensus-building process. The DCHI Clinical Committee, which represents a wide variety of providers, health plans, DHIN, and state representatives, provided extensive input into measure selection and refinement. Additional feedback about the Common Scorecard was solicited from 21 practices that conducted extensive testing of the Common Scorecard in 2015 and early 2016.	Currently operational
Provider Directories	Salesforce software; integration into the statewide Community Health Record	Currently operational; under expansion to meet statewide SIM needs.	Used in care delivery. Enables users of the DHIN HISP to identify other providers and their Direct address for information exchange. Located at DHIN and exposed to users through the HISP user web interface	There is a pronounced preference in Delaware to utilize the Community Health Record as the primary source of health data, rather than using point to point exchange. Efforts to introduce Direct Secure Messaging to the	DHIN's ONC grant (Advance Interoperable HIE)	None	Currently operational

				Behavioral Health and LTPAC communities have been marginally successful, due to lack of engagement by hospitals and ambulatory providers as exchange partners			
Identity Mgt	Medicity proprietary CMPI used to match patients in the Community Health Record. IBM Initiate is used for identity matching in other service offerings.	Currently operational and can be used as is	Used in care delivery and transitions of care.	Lack of consistency in capture of all demographic elements necessary to produce a clean match	Privately funded through DHIN participation fees	None	Currently operational
Community Health Record	Data storage and hosting; interfaces to data senders; Mirth integration engine; Medicity software ("Organize")	Currently operational. Data contributors include all DE hospitals and 3 MD hospitals, all commercial labs operating in DE, and ~ 95% of imaging centers. Additionally, approximately 100 practices are sending encounter-level care summaries (see CCDA document exchange below)	Supports care delivery (used by nearly 100% of ambulatory practices) and the following State agencies: • DPH Epidemiology • Cancer Registry • Dept of Corrections • Adult Protective Svc • DPH Communicable Dz Group • DSAMH Community Mental Health Centers • DSAMH DE Psych Ctr • Div of Dev Disability Svcs	None known	Funded primarily through a mix of fees to data providers (hospitals, labs, etc) and payers, to include Medicare, State Employee Health Plans, and Marketplace QHPs.	QHP plans, Medicaid MCOs, and State Health Plan TPAs are required to participate in DHIN's data exchange services at DHIN's prevailing fee structure, which helps to cover the cost of providing the CHR	Currently operational
CCDA Document Exchange	Document repository; connections (support SFTP, Direct, or XDS.b)	Currently operational and in use by approximately 12% of DE ambulatory providers.	Supports care delivery, transitions of care, and is planned to also support consumer engagement and quality measurement	Must work with each EHR vendor one by one with varying degrees of ease.	Currently funded through DHIN"s ONC grant (Advance Interoperable HIE); will transition to fee-based funding at end of grant	None	Currently operational

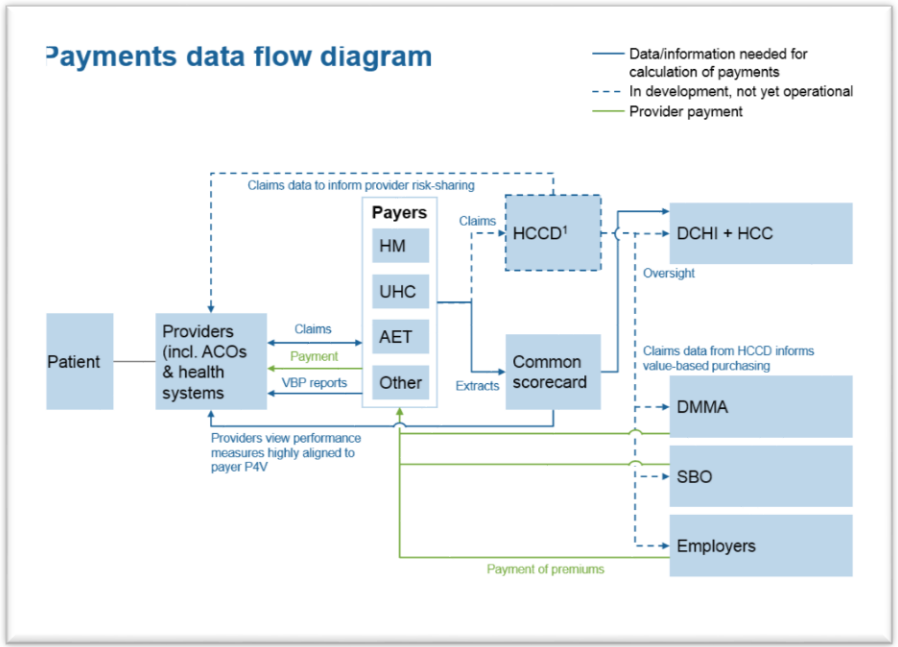
			and population health analytics	Providers are reluctant to commit to the ongoing fees Engaging LTPAC has been a struggle			
Patient Portal	Data repository; software; connections to existing hospital and practice patient portals	In implementation	Will be used to support patient engagement, to include collection of patient generated data. The vision is that a patient will be able to access all of their health data through a single login to either their provider's patient portal or to a DHIN front end (in either case, all data in the DHIN data repository will be viewable)	Perception by hospitals that DHIN is competing with them for patient engagement	Currently funded through DHIN"s ONC grant (Advance Interoperable HIE); will transition to private funding at end of grant	None	12/31/2016
Exchange Services	Interfaces from data senders to DHIN's Mirth integration engine; Medicity Network 7; interfaces from DHIN to ambulatory practice EHRs	Currently operational	Supports care delivery. DHIN is the contracted agent for delivering results and reports to ordering and copy-to providers for all DE hospitals and labs, 3 MD hospitals, and approximately 95% of DE imaging groups. Results are delivered by three possible channels; 1) integration to practice EHR – approximately half of all DE practices, 2) web portal clinical inbox – all CHR subscribers, or 3) autoprint to a practice's designated network	None	Privately funded through DHIN participation fees	None	Currently operational

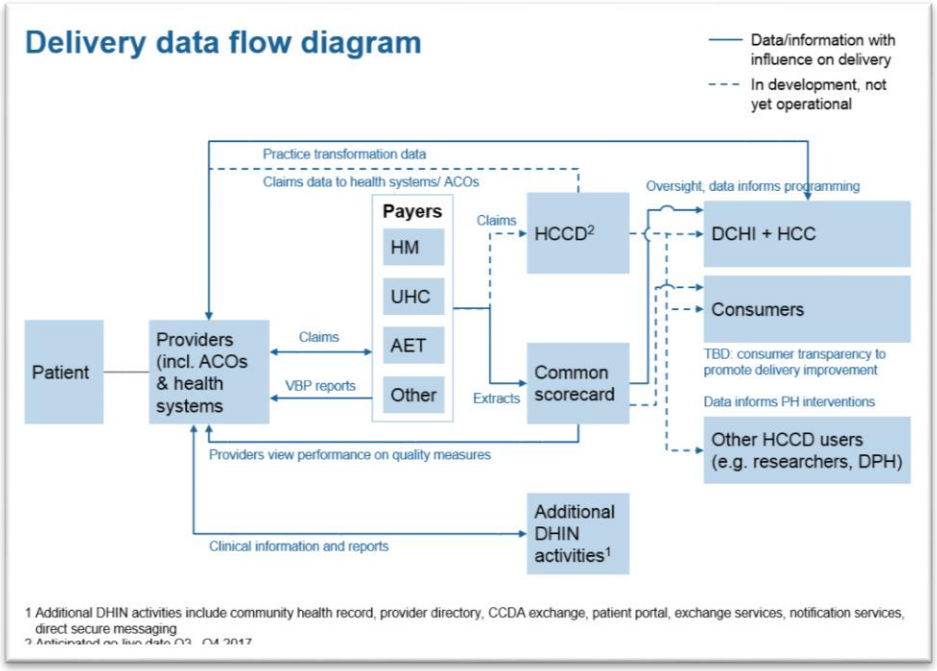
			printer – approximately 25 practices. Nearly all ambulatory providers in DE and numerous providers in border regions of contiguous states are users.				
Notification Services	Initiate MPI, Audacious Inquiry hosting and rules engine	Currently operational	Supports care coordination. Currently used by Medicaid MCOs, State Health Plan TPAs, Marketplace QHPs, 3 of DE's 5 ACOs, and approximately 17% of ambulatory providers. Over half of DE residents are covered by subscription to a notification service	ADT messages upon which notification services are based do not reliably contain all the information that would make the notification useful, such as reason for visit and disposition.	Privately funded through DHIN participation fees	QHP plans, Medicaid MCOs, and State Health Plan TPAs are required to participate in DHIN's data exchange services at DHIN's prevailing fee structure, which includes subscription to DHIN's notification service	Currently operational
Direct Secure Messaging	Digital certificates, trust bundle,	Currently operational	Supports transitions of care	There is a pronounced preference in Delaware to utilize the Community Health Record as the primary source of health data, rather than using point to point exchange. Efforts to introduce Direct Secure Messaging to the Behavioral Health and LTPAC communities have been marginally successful, due to lack of engagement by hospitals and ambulatory providers as exchange partners	Currently funded through DHIN"s ONC grant (Advance Interoperable HIE); will transition to fee-based funding at end of grant	None	Currently operational

Public Health Reporting (ELR, SS, IZ)	Interfaces from hospitals to DHIN's Mirth integration engine and from DHIN-Mirth to Public Health; web services for Immunization reporting and query	Currently operational	Supports Public Health and care delivery. All DE hospitals are electronically reporting syndromic surveillance data, ELR, and Immunizations. One MD border hospital is also reporting syndromic surveillance data to DE DPH through DHIN. 77% of DE pharmacies and 32% of DE ambulatory practices report to the state immunization registry through DHIN	Immunization reporting (DelVAX) by ambulatory practices remains challenging as it requires working with each individual practice and their EHR vendor. Roughly 4 new practices per month are being successfully onboarded.	Privately funded by each participating entity. DPH pays for the web service for immunization reporting.	Div'n of Public Health required all DE hospitals to electronically report SS and ELR data through DHIN using current standards (HL7 5.2.1) by Sep 30, 2015 or pay a fine for non-compliance.	Currently operational
Clinical Gateway	IBM Initiate, Mirth integration engine, Medicity transformation tools	Currently operational	Supports population health; currently used by a consortium of four DE hospitals covering all counties of the state	Lack of understanding of the capabilities of the tool. DHIN is currently engaging the largest payer in the state to explore the utility of the tool for data collection to support HEDIS reporting	Privately funded by subscribers	None	Currently operational
DMOST Registry (advance directives)	Under design	Requirements gathering complete; design work has begun	By state statute, DHIN will host a registry of DMOST forms, which translate advance directives into clinical orders. This will support care delivery at end of life	State statute did not come with funding.	Implementation will be funded through DHIN"s ONC grant (Advance Interoperable HIE); business model for sustainability is under development and private sources of funding will be sought.	State law and regulation require the use of the DMOST form and require it to be honored. The regulation is under revision, and will include a requirement to report to the DMOST registry as the "source of truth".	NLT June 30, 2017

Additional Information

- Approximately 95% of DHIN participating practices currently use an EHR.
- 75% of practices with an EHR are using one of the 26 EHRs for which DHIN has a certified results delivery interface.
- The remaining 25% of practices use approximately 40 different EHRs, each with a very small footprint in the DE market, making it very difficult to engage these EHR vendors in the work to support the various types of exchange
- Almost all DE providers are receiving results and reports delivered through DHIN on behalf of the hospitals, labs, or imaging groups. These results are also archived in the DHIN Community Health Record to make them available for query by other health care providers. Currently, only about 12% of DE ambulatory providers are contributing data to the Community Health Record in the form of encounter-level CCDs. An unknown number of them may be engaging in point to point exchange with referral partners using secure messaging tools in their EHR.
- An unknown number of providers are accessing data through CommonWell or Care Equality.
- A survey of ambulatory practices conducted by DHIN in March, 2015 indicated that 40% of ambulatory practices had not yet implemented a patient portal. A follow up survey is planned for Dec 2016 to guide efforts to engage practices with DHIN's offering of a state-wide patient portal.
- Of those practices who had implemented a patient portal, 49% of them had less than 5% of their patients as active users.
- DHIN is currently in contract negotiations with a major provider of telehealth services (currently contracted to two of the three largest health systems in the state to provide telehealth services) to have them send summaries of telehealth encounters to the DHIN Community Health Record. This will provide a more complete longitudinal record of care, and will allow DHIN to leverage our notification services to inform the patient's PCP that a telehealth encounter has occurred. Initial implementation will be funded through DHIN's ONC grant (Advance Interoperable HIE), and ongoing costs will transition to private funding after the end of the grant.





Support for building telehealth capabilities: PCPs and behavioral health clinicians should be provided with support to operationalize telehealth capabilities and connect with established behavioral healthcare groups that offer telehealth services. Types of support may include technical assistance for implementation, funding for infrastructure and/or technology, and guidance on reimbursement. Support for telehealth should focus on primary care practices in areas with behavioral health professional shortages to build their tele-behavioral health program. Integrated in to Delaware's workforce strategy is the development and launch of a learning and relearning curriculum which will support providers' competencies related to health IT tools (including electronic health records, practice management software, and data from DHIN) to fully utilize health information technology for data collection, sharing, analysis, planning and evaluation at the individual and population levels. The new curriculum will also address the role of telehealth within a transformed system of care. A vendor was selected (University of Delaware) in AY2 and the curriculum will be available statewide in Q1 of AY3.

Delaware is better positioned to support innovative means of delivering care since the legislature passed House Bill 69 in July 2015. The bill mandates that insurers reimburse remote telemedicine services the same way they do for in-person equivalents. The state's Department of Insurance is currently formulating regulations related to the bill's implementation and expects to publish them in mid-February 2016. The law formally defines telemedicine as involving real-time two-way communication via telecommunication or other electronic means and lays out different use cases that apply under this definition. Delaware's QHP standards also reinforce and mirror the telehealth legislation for those plans sold on the Marketplace. The law also regulates quality and consistency for

telemedicine. For example, providers must complete similar procedural items as they would for in-person visits (e.g., documenting the visit through a record of care). In addition, with the exception of emergencies and episodic consultations by specialists, telemedicine must take place between those with an existing patient/provider relationship."

Utilizing new and current health IT at the provider, payer and state level to support the information/data needs for integration of population health into the activities, including e-performance measurement

Delaware's major effort to support population health through HIT is the population health use case for the HCCD. In spring 2016, the HCCD working group identified four priority use cases to further develop. The section following reflects the first priority use case, population health.

Table 2:

Health IT functionality	Population health information Purpose & Location	Current barriers	Funding	Policy Levers Utilized	Fully Operational Date
HCCD	The HCCD will serve as a data source to answer specific population health questions. Researchers, providers, and community leaders of population health and quality improvement initiatives will be able to access/marry clinical and social/environmental data at the point of care within communities (e.g., risk stratification of patients married with demographic and social determinant data by zip code). At a more granular level, access to claims data will help illuminate gaps in care for patients by tracking services delivered by different care providers. HCCD will enable this by making data extracts – at a population level and at an individual level for qualified applicants – available to service delivery organizations. The HCCD can also support success of Healthy Neighborhoods by allowing physicians to understand utilization (e.g., high utilizers, barriers to treatment) at the zip code level in their catchment areas. Details and technical components of data availability via HCCD for population health are currently under development.	Same as in Table 1	Same as in Table 1	DCHI is gathering input from stakeholders through the HCCD Transparency Working Group (TWG). The TWG is tasked with developing specific recommendations as to how Delaware's HCCD should be used to support population health activities.	Same as in Table 1
Common Scorecard	Delaware's strategy includes several important components to ensure that population health measures are integrated into the delivery system. First, Delaware's Common Scorecard includes multiple measures focused on prevention (e.g., breast cancer screening, appropriate treatment for children with upper respiratory infections). Second, Delaware's innovative approach to population health through "Healthy Neighborhoods" focuses on collaboration between community-based initiatives and the care delivery system to design and implement locally-tailored solutions	Same as in Table 1	Same as in Table 1	Same as Table 1	Same as in Table 1

	to some of the state's most pressing health needs. Third, in order to support the aspiration for every resident of the state to have a primary care provider who is accountable both for the quality and for the total cost of their health care, Delaware's strategy calls for the value-based payment models to attribute individuals to a primary care provider. Delaware will rely on individual payer attribution methodologies as the basis for this attribution (these methodologies range from retrospective attribution based on the plurality of visits to assigned attribution at enrollment). Delaware expects to make significant progress on this aspiration, with 90% of providers participating in value-based models by the end of the grant period.				

Multi-stakeholder governance structure for the health IT systems and functions that will support service delivery reform (e.g., care coordination) and payment reform (e.g., data aggregation)

Table 3:

Health IT functionality	Data Governance Structure	HIT Governance Structure
HCCD	Data for the Health Care Claims Database (HCCD) will be collected from several sources, including Medicare FFS (pending release of data by CMS), Medicaid, the State Employee Benefit Program, and Qualified Health Plans. DHIN and its vendor will manage ingestion and storage of the data. Data release to third parties for purposes of analysis will be governed by an HCCD sub-committee represented by DHIN Board members. Data requests will be reviewed and requestors will be required to adhere to strict data use agreements and usage of the data will be limited to the purpose(s) approved by the DHIN sub-committee.	The overall HCCD will be governed by the DHIN Board, with a multi-stakeholder, representative sub-committee of DHIN board members responsible for overseeing implementation of the HCCD.
Common Scorecard	The HCCD currently utilizes claims data submitted by Delaware payers (commercial and Medicaid) on a quarterly basis. The DHIN, along with its vendor, is responsible for accepting and storing Common Scorecard data submissions and ingesting the data into the application. Access to data is governed by a two-fold process. First, Delaware primary care practices are required to enroll in the Common Scorecard to receive access to their quality, utilization, and cost data. Second, practices must also enroll in the DHIN and adhere to data use standards governing the use of the Common Scorecard.	DCHI is responsible for the overall vision of the Common Scorecard, including defining development priorities, collecting stakeholder feedback, measure selection, and conducting user acceptance testing related to the quality of the data. The DHIN is responsible for project management, implementation, functionality development, and technical support of the Common Scorecard.

Implementing health IT policy levers to support the SIM initiative(s) of the state

All policy levers and ways Delaware is leveraging regulatory authority are described in the AY3 Operational Plan Narrative, Section II.A.2.

Performance Measurement/Quality Reporting Systems that Support SIM Goals

Table 4:

Health IT functionality	Performance Metrics and Quality Reporting Systems Enabled by Health IT Modular Functions	Funding
HCCD	Researchers, providers, and community leaders of population health and quality improvement initiatives will be able to use use claims data from the HCCD to define and calculate performance metrics to inform policy making and performance improvement initiatives. Users of the HCCD are expected to be able to calculate quality measures using HCCD data for the purposes of measuring quality among sub-populations, geographic areas, or to measure the impact of specific initiatives/interventions on patient quality. Furthermore, the HCCD will allow Delaware to explore the feasibility of calculating quality, utilization, and cost measures for Medicare patients and potentially include Medicare data in the Common Scorecard for the first time.	Same as in Table 1
Common Scorecard	Delaware launched version 2.0 of the Common Scorecard in Q3 2016 to primary care practices statewide. The Common Scorecard allows practices to view their quality, utilization, and cost measure performance across multiple payers and timeframes. The Common Scorecard is managed by the DHIN and its vendor, with strategic guidance and input from DCHI. At this time, the Common Scorecard measures are generated by payers using claims data. Delaware has made significant progress in aligning quality measures across all payers in the state. Delaware intends for all value-based payment models to be 100% aligned with the Common Scorecard measure set for primary care providers, including on measures of quality, experience, utilization, and cost. To date, Delaware has achieved between 75-100% alignment between payers' value-based programs and the Common Scorecard, depending on the payer and value-based program.	Same as in Table 1

Technical assistance to providers related to Health IT and targeted provider groups that will receive assistance, including what services will be delivered

Delaware will provide technical assistance to providers on Health IT topics through two important programs. First, the SIM-funded practice transformation program, which became available to providers in Q1 2016, provides dedicated resources to primary care practices within the state to adopt changes in clinical and operational processes in order to better integrate and coordinate care for their patients. One of the capabilities that is a focus of Practice Transformation support is optimizing access and connectivity to clinical and claims data to support coordinated care. To coordinate care, practices use health IT tools, including electronic health records, practice management software, and data from DHIN. Practices must effectively interpret data, use health IT as a component of their workflow, and support expansion of the Community Health Record with clinical data. Practice Transformation support will help to build this capability in participating practices.

Secondly, Delaware has developed and will launch in Q1 2017 a learning and re-learning curriculum to strengthen workforce competencies regardless of the coordinated care model in which they practice. The new curriculum will support providers' competencies related to health IT tools (including electronic health records), practice management software, and data from DHIN to fully utilize health information technology for data collection, sharing, analysis, planning and evaluation at the individual and population levels. The new curriculum will also address the role of telehealth within a transformed system of care and address related provider areas of interest (e.g., "How do I make referral decisions during an electronically-based patient appointment?", "What is the best way

to demonstrate active listening via a computer screen?"). The 2-year curriculum will be made up of six modules (Health IT being one of the six), with each module broken down into three unique training phases:

- A virtual pre-work session to introduce the module and training content;
- An intensive, in-person training session complete with live simulations and skills-based training; and
- An action group webinar series to allow practices the opportunity to dive into a particular training area in more detail. The intent of these action group webinar series is to eventually develop a statewide learning community.

Timelines, Workplans, and Driver Diagram

HIT elements are included in the Workplan Tables by Driver in the AY 3 Operational Plan Narrative, Section III. They are also included in the Master Timeline and Driver Diagram, both accessible in "DE SIM Op Plan AY3 Appendices.xls".