APPENDIX G. HEALTH INFORMATION EXCHANGE INTERVENTIONS AND ACTIVITIES IDENTIFIED THAT SUPPORT CARE COORDINATION FOR PERSONS RECEIVING LTPAC/LTSS

TABLE G-1. HIE Interventions and Activities Identified that Support Care Coordination for Persons Receiving LTPAC/LTSS				
Entitles Engaged in HIE to Support Care Coordination for LTPAC/LTSS	**HIEO and Any Relevant Initiatives**	**Types of Exchange Partners with the Entities**	**LTPAC/LTSS Exchanges Data (y/n) and How**	**Links**
RI NHs, 13 trained NHs, more to be trained*	Currentcare Beacon Community	Hospitals, laboratories, outpatient	Not yet or limited use.	http://www.currentcareri.com/matriarch/default.asp
Briody NH & Brothers of Mercy, SNFs, Western NY	HEALTHeLINK/ HealtheNet Western NY Beacon Community	Hospitals, primary care, laboratories, SNFs	Yes, both have LTPAC EHR software, likely with interfaces to HIE, no additional information available, assume similar to Beechwood, 1 of 3 SNFs participating in HIE in Western NY.	http://wnyhealthelink.com http://www.briody.org/ http://www.brothersofmercy.org/skillednursing.htm
Beechwood Homes, a SNF, part of Beechwood Continuing Care, Getzville, NY (also study site visit)	HEALTHeLINK/ HealtheNet Western NY Beacon Community	Hospitals, primary care, laboratories, other SNFs, HHA	Yes, AOD EHR has interfaces to send an ADT through secure HL7 messaging. Can access data via HEALTHeLINK from portal.	http://www.beechwoodcare.org http://wnyhealthelink.com http://www.wnyhealthenet.org/
Eastern Maine Health Care (EMHC),* a HHA (also study site visit)	HIN Bangor Beacon Community ACO	Hospitals, primary care, laboratories, CCRC	Yes, HHA have Allscripts & telehealth. Can send self-management information in relation to COPD, heart disease, diabetes, & asthma to HIN. Can access data from HIN via portal.	http://easternmainehomecare.org/home-health-services.aspx?id=68257 http://www.hinfonet.org/ http://www.hinfonet.org/resources/health-information-exchange/hie-participant-list
Brookdale Senior Living (BSL) communities (throughout US, including TX & FL)	HIEO depends on community INTERACT, CMS Innovations Grant, Transitions of Care Program in TX & FL	Hospitals	Yes, for CMS Innovations project some other BSL facilities outside the INTERACT project, a small number of BSL post-acute providers are exchanging with local private or regional HIEOs using Direct.	http://seniorhousingnews.com/2012/08/13/assisted-living-program-for-reducing-rehospitalizations-could-have-national-impact http://www.brookdaleliving.com
Cedar Creek Living Center, a SNF, Norman, OK	SMRTNET Challenge Grant	Hospitals, primary care, laboratories, NHs, Norman, OK Regional Health System	Yes, Direct secure e-mail sends SBAR, UTF using INTERACT for transitions. Staff can access VHR.	http://www.smrtnet.org/home http://www.resourcesystems.net/LongTermCare/CareTracker.aspx

TABLE G-1 (*continued*)				
Entitles Engaged in HIE to Support Care Coordination for LTPAC/LTSS	**HIEO and Any Relevant Initiatives**	**Types of Exchange Partners with the Entities**	**LTPAC/LTSS Exchanges Data (y/n) and How**	**Links**
Cathedral Square Corporation, housing, services & long-term care (LTSS) needs, VT	VHIE SASH model	HCBS, LTSS, hospitals, primary care physicians	Scheduled to exchange through VHIE by Fall 2013 so that program will be interoperable with community health teams & the VT hospitals' EHRs. The primary care providers & hospitals that are part of the medical homes are already connected through the Blueprint for Health & a clinical registry. Physicians participating in the Blueprint for Health record data about their patients in a registry or an EHR. Housing services enters data directly into a clinical registry. Health status information that will be sent among the community's SASH exchange partners includes nutrition, fall risk, physical inactivity rates, ADLs, IADLs, fall history, & basic health information. Hospitals use the ADT messages & this will be facilitated with HIE.	http://cathedralsquare.org/future-sash.php http://www.vitl.net/health-information-exchange/blueprint-for-health
Montefiore Medical Center,* Integrated Delivery System (IDS), New York, NY	Bronx RHIO, a borough-wide system that supports exchange between Bronx hospitals, health centers, NHs, HHAs, community-based physician practices for patients who have signed consent forms ACO	Hospitals, primary care, health centers, laboratories, NHs, HHA	Yes, HHA, SNF have integrated EHR links to community-wide system within the IDS, inpatient & outpatient EHRs. They also have access to patient data through Bronx RHIO.	http://www.prnewswire.com/news-releases/montefiores-bronx-accountable-healthcare-network-to-participate-as-medicare-pioneer-accountable-care-organization-135871133.html http://www.innovations.ahrq.gov/content.aspx?id=3651

TABLE G-1 (*continued*)				
Entitles Engaged in HIE to Support Care Coordination for LTPAC/LTSS	**HIEO and Any Relevant Initiatives**	**Types of Exchange Partners with the Entities**	**LTPAC/LTSS Exchanges Data (y/n) and How**	**Links**
CO LTPAC providers: 65 SNFs, 3 ALFs, 30 HHAs, 14 hospice organizations, 1 LTPAC	CORHIO Challenge Grant, ACO	Hospitals, laboratories, primary care physicians, other LTPAC providers	Yes, Viewing community health record from hospitals LIVE on CORHIO. Includes ADT's, Lab Results, Pathology results, Transcription reports, H&P.	http://www.corhio.org/ http://statehieresources.org/wp-content/uploads/2012/05/CORHIO-Challenge-Grant-Summary-Report-April-2012.pdf
Complete Home Care, HHA, CO	CORHIO Challenge Grant, ACO	Hospitals, primary care, laboratories, NHs	No.	http://www.completehhc.com http://www.corhio.org http://www.corhio.org/news/corhio-e-newsletter/patient-care-coordination-improves-after-home-health-providers-connect-to-hie-%281%29.aspx
MA IMPACT:* 8 NHs, 2 HHA, 1 Long-term acute care facility, 1 IRF participating	MeHI HIE Challenge Grant	Hospitals, community health care centers, medical homes, ambulatory care providers, HHA, SNFs	Yes, wide variety of information including functional status.	http://mehi.masstech.org/what-we-do/press-releases/massachusetts-awarded-two-hie-challenge-grant http://wiki.siframework.org/LCC+Long-Term+Post-Acute+Care+(LTPAC)+Transition+SWG
Golden Living SNF s & Maria Joseph Continuing Care Community, PA	Keystone HIE ONC Grant to Geisinger, Beacon Community	Hospitals, physicians, HHA	Yes, Golden Living has EHR with interfaces to HIE. Maria Joseph Continuing Care is an early adopter of the MDS-to-CCD tool & is sending this assessment data to hospitals & other providers.	https://www.keystonebeaconcommunity.org http://www.healthit.gov/policy-researchers-implementers/keystone-beacon-community

TABLE G-1 (*continued*)				
Entitles Engaged in HIE to Support Care Coordination for LTPAC/LTSS	**HIEO and Any Relevant Initiatives**	**Types of Exchange Partners with the Entities**	**LTPAC/LTSS Exchanges Data (y/n) and How**	**Links**
NY Presbyterian System affiliated LTPAC providers, New York, NY (Beth Israel Medical Center [hospice], Hebrew Home for the Aged [SNF], Village Center for Care [SNF], North Shore Long Island Jewish Health System [SNF], & VNSNY [HHA, see below for separate description] are the LTPAC providers in the NYCLIX [now Healthix])	NYCLIX (RHIO) HRSA Special Projects of National Significance Information Technology Networks of Care Initiative, Supports Select Health--a NYCLIX Medicaid Managed Special Needs Plan for Persons Living with HIV & AIDS		Yes, most providers send & receive information via NYCLIX such as ADT, diagnoses, medications, lab results, radiology reports, allergies, discharge summaries, & other clinical data, query NYCLIX to retrieve information.	http://www.healthix.org
UT: 98 SNFs	UHIN	All SNFs connected for Medicaid eligibility use case	Special use of UHIN for Medicaid authorization for NH services process, now all electronic system, being pilot for HHA.	http://uhin.org
Avalon Healthcare throughout UT	UHIN cHIE		Yes, 14 Avalon SNFs in on system have EHR, can push information to HIE.	http://www.avalonhci.com/communities/utah/
Maimonides Medical Center (Mental Health Home), Brooklyn, NY	BHIX NY State HEAL grant to demonstrate enhanced care coordination	Mental health providers, hospitals, outpatient care clinics, 13 organizations with which Maimonides works	Yes, BHIX provider portal & messaging system to send & receive information including real-time alerts when patient has inpatient, ED, psychiatric admission or discharge, care coordinators monitor these events.	http://www.bhix.org http://www.maimonidesmed.org/Main/ClinicalServices/Psychiatry_45.aspx http://ehrintelligence.com/2013/04/03/brooklyn-hie-supports-mental-health-patients-coordinates-care/ http://statehieresources.org/wp-content/uploads/2013/01/Bright-Spots-Synthesis_Care-Coordination-Part-I_Final_012813.pdf

TABLE G-1 (*continued*)				
Entitles Engaged in HIE to Support Care Coordination for LTPAC/LTSS	**HIEO and Any Relevant Initiatives**	**Types of Exchange Partners with the Entities**	**LTPAC/LTSS Exchanges Data (y/n) and How**	**Links**
Kindred Health care, US (Post-acute care hospitals, nursing centers, rehab services)	Varies by location, facilities in IN are exchanging through the IHIE ACO, InteractII Program, MA Challenge Grant	In a few communities, hospitals in their care markets, & physicians with plans to expand significantly with EHR implementation	Yes, varies by location, 1 provider uses Direct to send UTF** through VPN for transition, Kindred is rolling out PCC EHR, planning for interoperable exchange in all care markets, starting with sending the CCD.	http://www.kindredhealthcare.com
Senior Home Health, 22 HHAs, FL	FL HIE Partners with ACOs across FL	Hospitals, physicians, other providers	HHAs have EHR & can access HIE information including, medications & test results from other physicians, facilities.	http://www.seniorhomecare.net http://www.florida-hie.net/
MD: 4 SNFs awarded funds for adoption of HIT to support improved transitions of care for patients as they transition between hospitals & their facility	CRISP Challenge Grant	Hospitals, other LTPAC providers	Yes, providers query patients they are treating for information in the HIE. Information obtained through the portal can be printed & incorporated into records. Types of data available: patient demographics, lab results, radiology reports, medication fill history, discharge summaries, H&Ps, operative notes, & consults. ENS notifies providers when 1 of their patients has an encounter at a MD hospital. Alerts are sent via a Direct secure message or HL7 into an EHR system.	http://crisphealth.org/ http://www.times-news.com/local/x730873032/Nursing-homes-win-tech-grant http://crisphealth.org/FOR-PROVIDERS/Serivces-for-Long-Term-Care
Erickson Living Retirement Community, MD	CRISP Challenge Grant Program	Hospitals, physicians & CRISP partners		http://www.crisphealth.org

TABLE G-1 (*continued*)				
Entitles Engaged in HIE to Support Care Coordination for LTPAC/LTSS	**HIEO and Any Relevant Initiatives**	**Types of Exchange Partners with the Entities**	**LTPAC/LTSS Exchanges Data (y/n) and How**	**Links**
Golden Living Post-Acute Recovery Centers, Central IN	IN HIE Central IN Beacon Community	Hospitals, LTPAC providers, community health & behavioral health centers	Yes.	http://www.ihie.org/ http://m.govhealthit.com/news/major-long-term-care-provider-signs-hie-deal http://www.goldenlivingcenters.com/home.aspx
Visiting Nurse Service of NY (VNSNY)	Healthix (RHIO), Bronx RHIO, BHIX, NYCHHIP, LIPIX	Hospitals, EDs, community health centers, SNFs, pharmacies, clinical labs, diagnostic imaging centers, etc.	VNSNY enrolls physicians to use web portal to: manage their patient list with VNSNY; see current clinical information on their medications & other data; & review, sign or change the POC & modifications. The Web Portal is useful for physicians who have patients in home care, but whose EMRs cannot yet support electronic exchange of data with VNSNY or through RHIOs. VNSNY: accepts eReferrals & face-to-face attestations; display wound images & other data forms; & adapt more tightly to smartphones. A VNSNY allows the physician to: Refer patients electronically from the EMR, automatically drawing patient data from the EMR & adding instructions for home care. Receive the POC electronically, review & approve or change it, return it to VNSNY & file it in the EMR. Send & receive clinical messages electronically to & from VNSNY, & file a copy of the exchange in the EMR.	http://healthix.org http://www.vnsny.org/why-vnsny/getting-started/health-information-exchange http://www.vnsny.org/system/assets/0000/0548/HIEFactSheet102507-English.original.pdf?1226441761/

TABLE G-1 (*continued*)				
Entitles Engaged in HIE to Support Care Coordination for LTPAC/LTSS	**HIEO and Any Relevant Initiatives**	**Types of Exchange Partners with the Entities**	**LTPAC/LTSS Exchanges Data (y/n) and How**	**Links**
Rush University Medical Center (RUMC), Chicago, IL care transitions program, & HRS Home Care & partner SNFs (also study site visit)	Currently no HIE, MetroChicago planned The Bridge Model--EDPP, Project BOOST, HRS has received a CMS/CMMI 3026 (CCTP) Grant, RUMC plans to connect with Chicago MetroChigago HIE Fall 2013 ACO in planning phase	HHA, SNFs, CBOs, aging services	Rush has an EHR system (EPIC) & provides access to select EHR information to facilitate information sharing particularly during the pre-discharge phase when transition plans are being established. Uses multiple methods of HIE with LTSS, LTPAC providers & other community partners, ranging from phone, fax, mail & e-mail to a referral management system by Allscripts called ECIN which allows messages & attachments to be exchanged in a secure manner. For providers with Allscripts EHR, the information can be pulled into their EHR application. HIE primarily occurs in the transition of care process in the following areas: - Referral & assessment for placement and/or services. - Transfer of care. - Followup phone calls within 24-48 hours after transfer to ensure services are set up. - Clinical, demographic & service information is communicated by hospital case managers & care coordinators to community providers (HHA, other HCBS).	http://www.transitionalcare.org/the-bridge-model/ http://www.ehcca.com/presentations/readsummit2/golden_pc.pdf
Cleveland Clinic, HHA, Cleveland, OH Also small number of HIE initiatives for interfaces with specific LTPAC providers in OH	Private HIE for EPIC users, plans to join Clinisyc Clinical HIE PCMH pilot	Other EPIC users affiliated HHAs using Allscripts, & affiliated hospitals, outpatient In 1 Cleveland clinic facility, built interfaces with local SNF using PCC	SNF PCC Interfaces with EPIC; HHA Allscripts interfaces with EPIC. Will be moving to EPIC home health module soon.	http://www.clinisync.org/ http://www.darkdaily.com/cleveland-clinic-and-university-hosptials-to-join-clinisync-ohios-statewide-health-information-exchange-329#axzz2tAnIEB6Z

TABLE G-1 (*continued*)				
Entitles Engaged in HIE to Support Care Coordination for LTPAC/LTSS	**HIEO and Any Relevant Initiatives**	**Types of Exchange Partners with the Entities**	**LTPAC/LTSS Exchanges Data (y/n) and How**	**Links**
DE: 48 SNFs connected	DHIN	NA	NA, more information needed.	http://www.dhin.org/
MN LTPAC providers, primarily SNFs	CHIC through HIE-Bridge	NA	No, early in process of getting connected & participating.	http://www.hiebridge.org/ http://www.medinfosystems.org/web_documents/part_c_release_for_website_posting.pdf
Litchfield Woods Health Care Center, SNF, CT	Charlotte Hungerford Hospital Connect, Community HIE (Siemens Mobile MD HIE)	Hospitals, HHA	Yes, more information needed.	http://www.athenahealthcare.com/CT_Litchfield_Woods.aspx
KS HHAs (3 identified)	KHIN	NA	NA.	http://www.khinonline.org/files/KHIN_Participants_Map/013114_map.pdf
Council on Aging of Southwestern OH, an AAA	HealthBridge HIE Greater Cincinnati Beacon Community, ACO	NA	Receive ADTs through Direct, admission alerts from hospitals, ED, More information NA.	http://www.healthbridge.org/WhoWeServe/OtherProviders.aspx
Visiting Nurse Service of Greater Cincinnati, OH & Northern KY	HealthBridge HIE Greater Cincinnati Beacon Community, ACO	Hospitals, primary care, health centers	Receive ADTs through Direct, admission alerts from hospitals & ED. More information NA.	http://www.healthbridge.org/Portals/0/GC%20Beacon%20Overview%20new%20v2%20final.pdf http://www.healthbridge.org/WhoWeServe/OtherProviders.aspx

TABLE G-1 (*continued*)				
Entitles Engaged in HIE to Support Care Coordination for LTPAC/LTSS	**HIEO and Any Relevant Initiatives**	**Types of Exchange Partners with the Entities**	**LTPAC/LTSS Exchanges Data (y/n) and How**	**Links**
Central IL Health Information Exchange (CIHIE), connecting 30 LTPAC providers		Hospitals, ambulatory clinics, physician groups	LTPAC providers MDS data converted to CCD format, & pulled into CIHIE, where it becomes part of the patient's longitudinal record that can be accessed by any provider in CIHIE through clinician portal. Organizations with EHR that can consume CCD can pull this MDS information into their system.	http://cihie.org/ http://cihie.org/#/news/4553179412

NOTES: This table reflects HIE interventions identified from an environmental scan and literature review and is not intended to represent all HIE interventions and activities. Information regarding these interventions was gathered from a variety of sources, including telephone and e-mail inquiries; web sites, public or requested reports; presentations; webinars; and meeting summaries. All of these interventions have some type of electronic HIE. NA means more information was not readily available at the time of this report.

* AOD is Answers on Demand EHR software; PCC is Point Click Care EHR software.
** The UTF contains medication lists, advance directives, the patient's functional status such as activities of daily living (ADL) and instrumental ADL, treatment plans, and other data elements required by the next provider of care in order to seamless assume responsibility for the patient.

CO=Colorado; CT=Connecticut; DE=Delaware; FL=Florida; IL=Illinois; IN=Indiana; KS=Kansas; KY=Kentucky; MA=Massachusetts; MD=Maryland; ME=Maine; MN=Minnesota; NY=New York; OH=Ohio; OK=Oklahoma; PA=Pennsylvania; RI=Rhode Island; TX=Texas; US=United States; UT=Utah; VT=Vermont.

LONG-TERM AND POST-ACUTE CARE PROVIDERS ENGAGED IN HEALTH INFORMATION EXCHANGE: Final Report

Files Available for This Report

MAIN REPORT

Executive Summary http://aspe.hhs.gov/daltcp/reports/2013/HIEengagees.shtml
HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.pdf

APPENDIX A. SELECTED PROGRAMS AND INITIATIVES THAT SUPPORT CARE COORDINATION AND INFORMATION EXCHANGE FOR PERSONS RECEIVING LTPAC/LTSS

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendA
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageA.pdf

APPENDIX B. FRAMEWORK TO CHARACTERIZE HEALTH INFORMATION EXCHANGE TO SUPPORT CARE COORDINATION FOR PERSONS RECEIVING LTPAC/LTSS

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendB
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageB.pdf

APPENDIX C. ENVIRONMENTAL SCAN AND LITERATURE REVIEW SOURCES

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendC
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageC.pdf

APPENDIX D. PROMISING COMPONENTS AND INTERVENTIONS TO REDUCE READMISSIONS

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendD
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageD.pdf

APPENDIX E. SUMMARY OF LITERATURE ON HEALTH INFORMATION EXCHANGE OUTCOMES AND RELATED MEASURES

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendE
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageE.pdf

APPENDIX F. EXAMPLES OF COMMUNITY-BASED CARE TRANSITION PROGRAM WITH LTPAC/LTSS PARTICIPATION

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendF
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageF.pdf

APPENDIX G. HEALTH INFORMATION EXCHANGE INTERVENTIONS AND ACTIVITIES IDENTIFIED THAT SUPPORT CARE COORDINATION FOR PERSONS RECEIVING LTPAC/LTSS

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendG
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageG.pdf

APPENDIX H. SITE VISIT SUMMARY: RUSH UNIVERSITY MEDICAL CENTER, CARE TRANSITIONS PROGRAM, BRIDGE PROGRAM

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendH
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageH.pdf

APPENDIX I. SITE VISIT SUMMARY: BEACHWOOD HOMES

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendI
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageI.pdf

APPENDIX J. SITE VISIT SUMMARY: EASTERN MAINE HEALTH SYSTEM, EASTERN MAINE HOME CARE

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendJ
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageJ.pdf

APPENDIX K. SUMMARY OF INFORMATION ROUTINELY EXCHANGED BY THE THREE SITES VISITED, BY CARE COORDINATION FUNCTION

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendK
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageK.pdf

APPENDIX L. STANDARDS AVAILABLE TO SUPPORT HEALTH INFORMATION EXCHANGE OF LONG-TERM AND POST-ACUTE CARE DATA

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendL
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageL.pdf

APPENDIX M. GLOSSARY

HTML http://aspe.hhs.gov/daltcp/reports/2013/HIEengage.shtml#appendM
PDF http://aspe.hhs.gov/daltcp/reports/2013/HIEengageM.pdf