Vermont Health Care Innovation Project

Health Data Infrastructure Meeting Agenda

November 18, 2015, 9:00-11:00am

Calvin Coolidge Conference Room, ACCD – 6th Floor, National Life Building, 1 National Life Drive, Montpelier

Call-In Number: 1-877-273-4202; Passcode: 2252454

Item #	Time Frame	Topic	Presenter	Relevant Attachments	Action Needed?
1	9:00-9:05am	Welcome and Introductions	Brian Otley		
2	9:05-9:10am	Minutes Approval	Brian Otley	Attachment 2: Draft October 21, 2015, Meeting Minutes	Approval of Minutes
3	9:10-9:20am	VITL-ACO Gap Remediation Presentation	Georgia Maheras & John Evans	Attachment 3a: VITL Response to HDI Work Group Questions Attachment 3b: VITL Response to Follow-Up Questions	Vote on Gap Remediation
4	9:20-9:30am	VITL-VCN Gap Remediation Presentation	Georgia Maheras & John Evans		Vote on Gap Remediation
5	9:30-9:45am	SCÜP Update	Larry Sandage	Attachment 5: SCÜP Presentation	Vote on Phase 2
6	9:45-10:10am	DLTSS Technology Assessment and Next Steps	Susan Aranoff	Attachment 6: DLTSS Data Gap Remediation Project Next Steps The final DLTSS Technology Assessment Report is available on the VHCIP website: http://healthcareinnovation.vermont.gov/sites/hcinnovation/files/VHCIP%20LTSS%20Assessment%20Report%20FINAL.pdf	Vote on Next Steps
7	10:10-10:35am	Data Utility/Data Governance	Georgia Maheras	Attachment 7: Data Utility and Governance Slides An article on public utility models: http://www.preservearticles.com/2012022823834/what-are-public-utilitiesand-state-its-characteristics.html	
8	10:35-10:55am	ACO Presentation	Leah Fullem	Attachment 8a: Vermont ACO Integrated Informatics Proposal Presentation (.pptx) Attachment 8b: Vermont ACO Integrated Informatics Proposal (.docx)	
9	10:55-11:00am	Public Comment Next Steps, Wrap-Up and Future Meeting Schedule	Simone Rueschemeyer & Brian Otley	Next Meeting: Wednesday, November 18, 2015, 1:00-3:00pm, Williston	

Additional Materials: Attachment 9: Status Reports – VHCIP Health Data Infrastructure Projects

Attachment 2: Draft October 21, 2015, Meeting Minutes

VT Health Care Innovation Project
Health Data Infrastructure Work Group Meeting Minutes

Pending Work Group Approval

Date of meeting: Wednesday, October 21, 2015 9:00 – 11:00 am, 109 State Street, Pavilion 4th floor EXE Conference Room

Agenda Item	Discussion	Next Steps
1. Welcome and Introductions	Simone Rueschemeyer called the meeting to order at 9:00 am. Participants introduced themselves and attendance was taken. A quorum was present.	
2. Review and Approval of the September minutes	Heather Skeels moved to approve the minutes by exception and Greg Robinson seconded. The motion passed with two abstentions.	
3.Review of Health Data Infrastructure Workplan for Remainder of Year 2	The group reviewed the Workplan for calendar year 2015. - Target dates are set to be completed by the end of 2015, though they may continue into 2016 if not completed. Year 3 is already in development. - This work is mean to align with the various partners and other State and SIM work. - The HIS DLTSS gap analysis report has been submitted to SIM staff and will be distributed publically within the next few weeks. - Development of State data utility: provide recommendations on how the State would like to see a data utility form for the State such as transmission storage, which would be in conjunction with the HIT plan. - Regarding the HDI Budget- the Core Team approved funding for this group in the amount of 1.5 will need to look at the individual requests by the November 2nd meeting- if there are proposals that are not ready for the November meeting, they can review them in December.	**Data Utility to be discussed at the next meeting in further detail.**

Agenda Item	Discussion	Next Steps
	- Regarding the role of the new HDI work group- this group is meant to make recommendations to the Steering Committee. The leadership team will meet to discuss the role further and communicate that back to the group. - Establishing the infrastructure and ability to track patient data even when it's decoded.	
4. VITL-ACO Gap Remediation Presentation	Kristina Choquette from VITL gave a presentation to update the progress on the ACO Gap Remediation project (attachment 4). - The 42 organizations was a target number of providers in order to reach the 62% of beneficiary data. UVM Medical Center has 22% of the beneficiary population and they were not a part of the 42 providers. VITL continues to work with them to make the connections. - The final goal for data: patient demographic data and data for quality measure reporting. The interface has the capability to give a 360 degree view with all the patient information for quality measure reporting. With potential to continue into the next year, VITL will work to make sure the data that is available to the organizations is quality data. - Users who have VITL Access will be able to see all the data being sent to VITL in order to care for the patient. - The focus has been to correct incorrect data and fill in the missing data to make sure it is coming through the interface and that it is coded accurately. Paul Harrington moved to recommend Phase 2 funding for $1 million as presented on page 15. Sue Aranoff noted that this information was not provided publically for 24 hours before this meeting to allow time to review the information and expressed concern over the DLTSS expansion being at risk for not receiving enough money due to the budgetary requests facing the Core Team, which are in excess of $5 million. She recommended postponing the vote and Brian Otley agreed. Paul withdrew his motion noting that it is not the job of the work group to reconcile the overall funding of the SIM program. Simone noted that it is the work group's role to make recommendations on what is important and let the leadership team reconcile the funding.	**VITL will prepare more information related to the total amount of funding that has been expended to date of the approved $1.3 million.** **The leadership team will meet to discuss next steps to provide a forum for discussion and/or follow up questions before the Steering Committee meeting on October 28, 2015.**
5. VITL-VCN Gap Remediation Presentation	Judith Franz from VITL presented the VCN/VITL Gap Remediation update (attachment 5). - When looking at the work flow assessment for larger agencies, discovering that it is a decentralized approach. In order to dive into a deeper level the scope and funding will need to be increased.	**The leadership team will meet to discuss next steps to provide a forum for**

Agenda Item	Discussion	Next Steps
	- As new information has been discovered it was shared with the leadership team that governs this project. Work was asked to continue in the same direction. The group discussed at length and participants expressed concern about not being able to build upon the work completed to date. Sue Aranoff moved to approved by exception that the VCN Gap Remediation Presentation in the amount of $150,000. Brian noted that this information was not presented with enough time to understand the work completed to date and the total budget spent. Sue withdrew her motion.	**discussion and/or follow up questions before the Steering Committee meeting on October 28, 2015.**
6. Public Comment	No further comments were offered.	
7. Next Steps, Wrap Up and Future Meeting Schedule	**Next Meeting:** Wednesday, November 18, 2015 1-3 pm, DVHA Large Conference Room, 312 Hurricane Lane, Williston	

VHCIP Health Data Infrastructure Work Group
Roll Call 10/21/2015

Heather Skeels 1°
Greg Robinson 2°
Motion Carried - 2 Abstentions
No vote taken
More information requested

Member		Member Alternate						
First Name	**Last Name**	**First Name**	**Last Name**	**Minutes**	**ACO Gap Remediation**	**VCN Gap Remediation**	**Organization**	**Health Data Infrastructure**
Susan	Aranoff ✓	Gabe	Epstein ✓				AHS - DAIL	M
Joel	Benware ✓	Dennis	Boucher				Northwestern Medical Center	M
		Jodi	Frei				Northwestern Medical Center	MA
		Chris	Giroux				Northwestern Medical Center	MA
Peggy	Brozicevic						AHS - VDH	M
Amy	Cooper ✓						HealthFirst/Accountable Care Coalition of th	M
Steven	Cummings						Brattleboro Memorial Hopsital	M
Mike	DelTrecco						Vermont Association of Hospital and Health	M
Chris	Dussault ✓	Angela	Smith-Dieng				V4A	M
Leah	Fullem ✓	Greg	Robinson ✓				OneCare Vermont	M
Michael	Gagnon	Kristina	Choquete ✓				Vermont Information Technology Leaders	M
Ken	Gingras						Vermont Care Partners	M
Eileen	Girling						AHS - DVHA	M
Dale	Hackett ✓						Consumer Representative	M
Emma	Harrigan ✓	Tyler	Blouin				AHS - DMH	M
		Kathleen	Hentcy				AHS - DMH	MA
		Brian	Isham ✓				AHS - DMH	MA

Paul	Harrington ✓						Vermont Medical Society	M
Stefani	Hartsfield	Molly	Dugan				Cathedral Square	M
		Kim	Fitzgerald				Cathedral Square and SASH Program	MA
Kaili	Kuiper ✓	Trinka	Kerr				VLA/Health Care Advocate Project	M
Nancy	Marinelli						AHS - DAIL	M
MaryKate	Mohlman						AHS - DVHA - Blueprint	M
Brian	Otley ✓						Green Mountain Power	C/M
Kate	Pierce ✓						North Country Hospital	M
Amy	Putnam	Todd	Bauman				DA - Northwest Counseling and Support Ser	M
		Kim	McClellan				DA - Northwest Counseling and Support Ser	MA
Amy	Putnam	Randy	Rounds ✓				VCP - Northwest Counseling and Support Se	M
Sandy	Rousse						Central Vermont Home Health and Hospice	M
Simone	Rueschemeyer ✓						Vermont Care Network	C/M
Julia	Shaw ✓	Lila	Richardson	A			VLA/Health Care Advocate Project	M
Heather	Skeels ✓	Kate	Simmons				Bi-State Primary Care	M
Richard	Slusky ✓	Kelly	Macnee ✓	A			GMCB	M
		Spenser	Weppler				GMCB	MA
Chris	Smith	Lou	McLaren ✓				MVP Health Care	M
Russ	Stratton						VCP - HowardCenter for Mental Health	M
Eileen	**Underwood** ✓						**AHS - VDH**	**M?**
???? Chris	???? Dussault	Mike	Hall				Champlain Valley Area Agency on Aging / C(	MA
???? Sandy	????Rousse	Arsi	Namdar				VNA of Chittenden and Grand Isle Counties	MA
								39

~~29~~ 30 Members = 16 for Q

Darin Prail ✓

21 = Q ✓

VHCIP Health Data Infrastructure Work Group
Attendance Sheet 10/21/2015

	First Name	Last Name		Organization	Health Data Infrastructure
1	Diane	Cummings		AHS - Central Office	S
2	Darin	Prail	here	AHS - Central Office	X
3	Julie	Wasserman		AHS - Central Office	S
4	Becky-Jo	Cyr		AHS - Central Office - IFS	X
1	Susan	Aranoff	here	AHS - DAIL	M
2	Gabe	Epstein	here	AHS - DAIL	MA
3	Nancy	Marinelli		AHS - DAIL	M
4	Tela	Torrey		AHS - DAIL	X
5	~~Beth~~	~~Rowley~~		AHS - DCF	X
6	Tyler	Blouin		AHS - DMH	~~MA~~
7	Emma	Harrigan	phone	AHS - DMH	M
8	Kathleen	Hentcy		AHS - DMH	MA
9	Brian	Isham	here	AHS - DMH	MA
10	Lucas	Herring		AHS - DOC	X
11	Amy	Coonradt		AHS - DVHA	S
12	Jennifer	Egelhof		AHS - DVHA	X
13	Erin	Flynn	HERE!	AHS - DVHA	S
14	Eileen	Girling		AHS - DVHA	M
15	Sarah	Kinsler	✓	AHS - DVHA	S
16	Carole	Magoffin	phone	AHS - DVHA	S
17	Steven	Maier	phone	AHS - DVHA	S
18	Jessica	Mendizabal	here	AHS - DVHA	S
19	Larry	Sandage	here	AHS - DVHA	S
20	James	Westrich	here	AHS - DVHA	S
21	Bradley	Wilhelm		AHS - DVHA	S
22	Cecelia	Wu		AHS - DVHA	S
23	Craig	Jones		AHS - DVHA - Blueprint	X
24	MaryKate	Mohlman		AHS - DVHA - Blueprint	M
25	Miki	Olszewski		AHS - DVHA - Blueprint	X

26	Peggy	Brozicevic		AHS - VDH	M
27	Eileen	Underwood	here	AHS - VDH	M
28	Georgia	Maheras		AOA	S
29	Bob	West		BCBSVT	X
30	Charlie	Leadbetter		BerryDunn	X
31	Heather	Skeels	here	Bi-State Primary Care	M
32	Joyce	Gallimore		Bi-State Primary Care/CHAC	X
33	Kate	Simmons		Bi-State Primary Care/CHAC	MA
34	Kendall	West		Bi-State Primary Care/CHAC	X
35	Daniel	Galdenzi		Blue Cross Blue Shield of Vermont	X
36	Kelly	Lange	Phone	Blue Cross Blue Shield of Vermont	X
37	James	Mauro		Blue Cross Blue Shield of Vermont	X
38	Steven	Cummings		Brattleboro Memorial Hopsital	M
39	Stefani	Hartsfield		Cathedral Square	M
40	Molly	Dugan		Cathedral Square and SASH Program	MA
41	KIm	Fitzgerald		Cathedral Square and SASH Program	MA
42	Paul	Forlenza		Centerboard Consultingt, LLC	X
43	Sandy	Rousse		Central Vermont Home Health and Hospice	M
44	Mike	Hall		Champlain Valley Area Agency on Aging / C	MA
45	Kevin	Kelley		CHSLV	X
46	Jonathan	Bowley		Community Health Center of Burlington	X
47	Dale	Hackett	here	Consumer Representative	M
48	Bob	Thorn		DA - Counseling Services of Addison County	X
49	Todd	Bauman		DA - Northwest Counseling and Support Se	MA
50	Kim	McClellan		DA - Northwest Counseling and Support Se	MA
51	Amy	Putnam		DA - Northwest Counseling and Support Se	M
52	Nick	Emlen		DA - Vermont Council of Developmental an	X
53	Richard	Boes		DII	X
54	Lucie	Garand		Downs Rachlin Martin PLLC	X
55	Ena	Backus		GMCB	X
56	Susan	Barrett		GMCB	X
57	Jamie	Fisher		GMCB	X
58	Christine	Geiler		GMCB	S
59	Al	Gobeille		GMCB	X
60	Pat	Jones	Phone	GMCB	S
61	Kelly	Macnee	here	GMCB	MA
62	Stacey	Murdock		GMCB	X
63	Annie	Paumgarten		GMCB	S

64	David	Regan		GMCB	X
65	Richard	Slusky	here	GMCB	M
66	Spenser	Weppler		GMCB	MA
67	Brian	Otley	here	Green Mountain Power	C/M
68	Amy	Cooper	here	HealthFirst/Accountable Care Coalition of t	M
69	Paul	Reiss		HealthFirst/Accountable Care Coalition of t	X
70	Jon	Brown	phone	HSE Program	X
71	Richard	Terricciano	here	HSE Program	X
72	Jay	Hughes		Medicity	X
73	Lou	McLaren	phone	MVP Health Care	MA
74	Chris	Smith		MVP Health Care	M
75	David	Wennberg		New England Accountable Care Collaborati	X
76	Kate	Pierce	phone	North Country Hospital	M?
77	Matt	Tryhorne		Northern Tier Center for Health	X
78	Joel	Benware	here	Northwestern Medical Center	M
79	Dennis	Boucher		Northwestern Medical Center	MA
80	Jodi	Frei		Northwestern Medical Center	MA
81	Chris	Giroux		Northwestern Medical Center	MA
82	Leah	Fullem	phone	OneCare Vermont	M
83	Todd	Moore		OneCare Vermont	X
84	Laurie	Riley-Hayes		OneCare Vermont	A
85	Greg	Robinson	here	OneCare Vermont	MA
86	Tawnya	Safer		OneCare Vermont	X
87	Karl	Finison		OnPoint	X
88	Beth	Waldman		SOV Consultant - Bailit-Health Purchasing	X
89	Joelle	Judge	here	UMASS	S
90	Richard	Wasserman, MD, MPH		University of Vermont - College of Medicine	X
91	Chris	Dussault	phone	V4A	M
92	Angela	Smith-Dieng		V4A	MA
93	Russ	Stratton		VCP - HowardCenter for Mental Health	M
94	Amy	Putnam		VCP - Northwest Counseling and Support Se	M
95	Julie	Tessler		VCP - Vermont Council of Developmental a	X
96	Martha	Buck		Vermont Association of Hospital and Health	A
97	Mike	DelTrecco		Vermont Association of Hospital and Health	M
98	Gary	Zigmann		Vermont Association of Hospital and Health	X
99	Simone	Rueschemeyer	here	Vermont Care Network	C/M
100	Ken	Gingras		Vermont Care Partners	M
101	Shelia	Burnham	phone	Vermont Health Care Association	X

102	Kristina	Choquete	here	Vermont Information Technology Leaders	MA
103	Michael	Gagnon		Vermont Information Technology Leaders	M
104	Paul	Harrington	here	Vermont Medical Society	M
105	Trinka	Kerr		VLA/Health Care Advocate Project	MA
106	Kaili	Kuiper	here	VLA/Health Care Advocate Project	M
107	Lila	Richardson		VLA/Health Care Advocate Project	MA
108	Julia	Shaw	phone	VLA/Health Care Advocate Project	M
109	Arsi	Namdar		VNA of Chittenden and Grand Isle Counties	MA
110	Peter	Cobb		VNAs of Vermont	X
111	Stuart	Graves		WCMHS	X
112	Joanne	Arey		White River Family Practice	A
113	Mark	Nunlist		White River Family Practice	X
114	~~Sean~~	~~Uiterwyk~~		White River Family Practice	X
115	Narath	Carlile			X
116	Mike	Maslack			X
117	Win	Turner			X
					121

Leah Korse - AHS-DVHA here

John Evans - VITL - here

Attachment 3a: VITL Response to HDI Work Group Questions

Section A – Gap Remediation phase 1 and 2 scope, activities, and cost tables

Phase 1 – Gap Remediation Original Project 1/1/15 to 12/31/15

Project Scope:

- Accelerate interface development
- Improve the quality of data transmitted via the interfaces

Activities:

- Secure Medicity SET team of dedicated resources for 6 months to rapidly deploy interfaces prioritized by the ACOs and the State
- Increase the percentage of data that can meet the ACO quality measures:
    - Identify data elements contained in the messages
    - Recommend EHR enhancements to remediate gaps
    - Facilitate practice workflow improvements
- Select and purchase terminology services to develop a clinical data management infrastructure

Gap Remediation Task	Cost	Expenses to date	Deliverable	Status as of 10/31/15
Dedicated Medicity SET Team	$610,000	$610,000		
VITL Gap Remediation	$407,500	$394,500		
Total	*$1,017,500*	*$1,004,500**	• *Implement interfaces capable of transmitting clinical data for **42** ACO organizations* • *ACO member organizations capable of transmitting clinical data to cover **62%** of the beneficiary population*	• ***Exceeded target – 43** provider organizations transmitting* • ***On track to meet deliverable – 42%** of the beneficiary population covered*
Gap Remediation Task	**Cost**	**Expenses to date**	**Deliverable**	**Status**
Terminology Services (2 years)	$284,000	$0		
Total	*$284,000*	*$0*	• *Standing up the infrastructure, deploying solution and 2 years subscription* • *Secure Terminology Services vendor for use in VHIE by any contributing HCO in VT*	• ***Contract negotiation in progress** - RFP completed and vendor selected*
Total Gap Remediation	***$1,301,500***	***Funds committed****	• ***Phase 1 complete***	• ***90% complete***

* SIM Agreement between SOV and VITL contains detail regarding scope, timeframes, cost, approvals. Payment schedule

Phase 2 –Gap Remediation Extension Project 1/1/16 to 12/31/16

Project Scope:

- Capitalize on the investments in resources and technology made in Phase 1:
    - Accelerate interface development for organizations beyond the phase 1
    - Begin to improve the quality of all clinical data collected in phase 1 and phase 2

Activities:

- Contract additional staff to rapidly deploy interfaces prioritized by the ACOs and the State
- Increase the percentage of data that can meet the ACO quality measures:
    - Identify data elements contained in the messages
    - Recommend EHR enhancements to remediate gaps
    - Facilitate practice workflow improvements
- Utilize data management infrastructure purchased under phase 1 (terminology services) to translate clinical data elements from source code to machine readable standard clinical classifications and code sets (LOINC, SNOMED, etc.)

Project Task	Cost	Deliverable

VITL Interface development and Gap Remediation	$600,000	• *ACO member organizations capable of transmitting clinical data to cover 80% of the beneficiary population (18% increase from original target)*
		• *In partnership with the ACOs:*
		  o *Deploy an EPIC CCD solution*
		  o *Deploy the eCW CCD solution to capable organizations*
		  o *Deploy a VITL solution to collect non-42 CFR part 2 patient data from willing organizations*

VITL Data Quality reporting and Terminology Services	$400,000	• *Deployment of terminology services system for VT* • *Perform terminology mapping for at least 3 data sets* • *Provide ACO specific data quality reports*
Total	*$1,000,000*	
Total Gap Remediation	***$1,000,000***	• *Phase 2 complete*

Section B – HDI Workgroup ACO Gap Remediation Request Questions:

1. If the request for an additional one million SIM dollars is not approved - what other resources are available to improve the ACOS data transfer?

   VITL Response: No resources specific to improving ACO work will be available after 12/31/15. ACO provider orgs will be incorporated in the normal scheduling and prioritization process

2. The original project requested $1.3M and set a target of 42 providers to achieve 62% of the beneficiaries. Current state has been reported as 43 providers achieving 42% of the beneficiaries. How much of the original $1.3M funding has been spent to achieve the 43/42% level? How much of the original $1.3M funding remains unspent? If any portion of the original $1.3M is left unspent, what is the estimate of how much further can be accomplished by spending the remaining portion without needing additional funds beyond the original $1.3M?

   VITL Response: See Phase 1 and Phase 2 tables above.

3. VITL has separated question #3 to distinct statement/questions in order to respond.

   a. If $1.3M was spent to achieve the 43/42% level,

   VITL Response: $1.3M was awarded for the *entire* scope of the project for phase 1. At the time, ACO organizations were capable of sending data to the VHIE on 17% of the beneficiaries. $1M of the award was allotted to accelerate interfaces with the goal to increase the percent of covered beneficiaries to 62%, an increase of 45%.

   b. and with the addition of 2 providers - UVMMC (22%) and CVMC (12%) - another 34% would be picked up totaling 76% of beneficiaries,

   VITL Response: We are currently in discovery phase with UVMMC and CVMC.

   c. why is another $1M needed to reach the almost 80% next objective?

VITL Response: The ACOs and VITL are requesting $1M for the entire scope of phase 2. Of that amount, $600,000 is allotted to ***implement*** the identified interface solution for UVMMC, CVMC and/or any other ACO health care providers who utilize the more complex vendor products struggling to become interoperable. The goal for phase 2 is to increase the percentage of covered beneficiaries transmitted through the VHIE from 62% to 80%. This is an increase of 18%.

4. VITL says vendor relationship breakthroughs have been made with both Epic and eCW recently to gain access to the needed data. With cooperative vendors, is the effort/cost to connect these 2 important providers really $1M?

   VITL Response: Of the $1M requested for phase 2, $600,000 is allotted to accelerate interfaces and increase the beneficiary count to 80%. These vendors are cooperating and are willing to discuss potential solutions with VITL to test, reconfigure and rebuild their product. Once connectivity is achieved, each organization requires an interface to be configured. Thorough testing of the data structure, data integrity, and patient matching rules within the organization vault and across the VHIE needs to occur. This funding request is based on VITL's experience with vendors, the types of data transmitted, the type of organization (hospital, individual vs. multi-location primary care practice, etc.) collecting the data, and the level of effort needed to contract resources in order to accelerate this effort.

   $400,000 has been allotted to utilize the clinical data management infrastructure purchased under phase 1 (terminology services):
   - Costs related to infrastructure and software licensing are $122,000.
   - Costs related to configuring the software and to perform additional mapping to translate clinical data elements from source code to machine readable standard clinical classifications and code sets (LOINC, SNOMED, etc.) are $175,000.
   - Costs related to creating data quality reports are $103,000.

5. It feels like the additional funding request is muddying the waters between the work originally proposed and approved and additional work that all parties would like to begin or keep going. Can you provide a breakdown of what has been spent to-date from the original $1.3M funding on:
   a. Interface development?
   b. Data analysis & formatting?
   c. Terminology services?

   VITL Response: See Phase 1 table above.

6. Can you provide a breakdown of how the additional $1M funding will be spent on:
   a. Interface development?
   b. Data analysis & formatting?
   c. Terminology services?

VITL Response: See Phase 2 table above.

7. What percentage of the work (as defined in the original project plan) has been accomplished to date?

   VITL Response: See Phase 1 table above.

8. How much of the original funding request has been spent to date?

   VITL Response: See Phase 1 table above.

9. What was the planned duration of the original funding request?

   VITL Response: 1 year. It ends on 12/31/15.

10. Does the funding request represent additional work not previously identified in the project plan?

    VITL Response: Yes. When phase 1 was approved by the workgroup, the ACOs and VITL acknowledged that a subsequent phase would be necessary.

11. If this work was not part of the original project plan, what is the justification for including it now?

    VITL Response: Not applicable

12. If this work was part of the original work plan, why is additional funding being requested now?

    VITL Response: This work was not part of the original scope of work. It supports the next phase of Gap Remediation. The scope of phase 2 is to:

    - Accelerate interface development for organizations not included in phase 1
    - Perform data quality improvement utilizing terminology services for all data collected during phase 1 and phase 2.

    Capitalizing on the investments made in phase 1 is in alignment with the SIM goals to include expanded connectivity between SOV data sources and ACO providers.

Section C – ACTT Data Quality Project scope, activity phase, and cost table

The table below is provided to assist the reader in understanding the responses to each question.

	Original Project	Original Project Changes		New Project Request	
		Group A Completion by Nov 30th	Group A Completion (with extension) by Dec 31st	Group A	Group B (1 DA, 4 SSAs & 1 DDA)
Agencies	16	10 (37*)	10 (37*)	10 (37*)	6
Work/Scope	Phases 1, 2 & 3	Phase 1 & part of Phase 2	Remainder of Phase 2	Phase 3	Phases 1, 2 & 3
Funding	$200K	($135K) spent $65K balance		$150K	
* Number of sites					

Section D - HDI Workgroup ACTT Data Quality Project Request Questions:

1. What was original funding amount? Original scope of deliverable? Original schedule?
   <u>VITL Response:</u>
   - $200K

- Original scope included a Current state assessment (phase 1), a gap analysis (phase 2) and a remediation plan (phase 3) for 11 DAs & 5 SSAs
- Amendment term is December, 2014 to December, 2015

2. How much of the original funding amount has been spent? How much remains to be spent? How much of the original scope can be delivered with the original budget?
   VITL Response:
   - ~$135K of the original $200K has been spent (calculated through the end of September).
   - ~$65K of the original $200K remains to be spent
   - Phase 1 and Phase 2 (current state assessment and gap analysis for the 10 agencies currently in flight, Group A) can be completed within the original budget with 2 FTEs.

3. How many "unique sites" (with unique data collection requirements) did the project turn out to be across the original 11 agencies?
   VITL Response:
   - ~42 unique sites so far across 10 agencies (97 interviews to date) with 2 remaining interviews to conduct with CSAC, 1 remaining interview to conduct for HCRS and Clara Martin respectively.
   - 1 DA and 4 SSAs/DDAs remain – (to total 16 agencies), with X 'unique sites' for the SSAs/DDAs and X unique sites for Rutland. Per Ken, the 5 SSAs/DDAs will be assessed via two meetings.

4. What is the plan to get the 1 agency that has not engaged to engage? Why have they not engaged yet?
   VITL Response:
   - VCN is managing the discussion regarding whether or not to include this agency

5. Can Phase 1 and 2 be completed with the original funding?
   VITL Response:
   - Yes, for the 10 DAs (Group A) with Rutland and the 5 SSAs/DDAs (Group B) excluded based on the VCN (and participating member agency leadership) finalizing the desired state/data dictionary definition ASAP.

6. Having learned the complexity of the DAs, how confident is the funding ask to complete Phase 3 at $150K of additional?
   VITL Response:
   - Confident given there will be a remediation plan for each agency (with a section for each site) and a presentation of the plan to the VCP and agency leadership team and a training session for each agency. Phases 1, 2, & 3 for the remaining DA and 5 SSAs/DDAs will also be completed with the additional funds (2 FTEs for six months).

7. What percentage of the work (as defined in the original project plan) has been accomplished to date?
   VITL Response:

- Phase 1 will be completed and phase 2 underway (for the 10 agencies (Group A) – excluding Rutland or the 5 SSAs/DDAs {Group B}) by Dec. 31st. Evaluation of the SSAs/DDAs is 'on hold' (given they have just selected their unified EHR)

8. How much of the original funding request has been spent to date?
   VITL Response:
   - $135K - answered in #2

9. What was the planned duration of the original funding request?
   VITL Response:
   - The original amendment's term was Dec 1, 2014 to Dec 1, 2015.

10. Does the funding request represent additional work not previously identified in the project plan?
    VITL Response:
    - Yes, while it is the same three phases of work being conducted, the client determined the work needed to be done for multiple sites at some of the larger agencies. Multiple individual sites within one DA agency have been individually assessed due to the decentralized nature of the larger agencies.

11. If this work was not part of the original project plan, what is the justification for including it now?
    VITL Response:
    - Because of the decentralized nature of the larger agencies, the data quality team discovered the individual sites needed individual assessments to arrive at the data quality value level the VCP is seeking. Simone validated this finding and directed VITL to perform the assessments at the individual site level to arrive at the 'quality of assessment' level that would be truly prove valuable and impactful to the member agencies.

12. If this work was part of the original work plan, why is additional funding being requested now?
    VITL Response:
    - N/A

Attachment 3b: VITL Response to Follow-Up Questions

Thank you so much. We do have a few more questions and you can either address in a revision to this document, which I would need by Thursday morning or alternatively, have the information as part of the discussion at the Work Group meeting. The questions are listed below:

1. Please provide the FTE for each of the categories where personnel are identified as necessary for the work.

VITL Response:

- Gap remediation phase 2: 2 FTE new staff, consulting, plus reallocation of existing staff for Gap Remediation Interfaces and data formatting
- Terminology and Data Quality: 1200 hours of new staff for terminology mapping and ACO data quality reports
- ACTT Data Quality: 2 FTE existing staff already dedicated to the ACTT data quality project

2. Please provide more information about the software license- it is currently undefined. Do you have a vendor for this selected or will you go out to bid?

   VITL Response: A portion of the $122,000 includes licensing to upgrade the data quality infrastructure including SQL enterprise, Tableau, and Rhapsody communication points. These are an expansion of existing capabilities.

3. Gap Remediation:

   a. Just want to confirm - the document seems to state that VITL will meet the 42 providers/62% beneficiary population within the initial budget which has $13K left to be spent. Is that correct? That means the % beneficiaries will raise from the current 42% to 62% with the spending of the last $13K. Is that correct?

      VITL Response: Yes.

   b. Weren't UVMMC and CVMC both included in the original 42 providers/62% beneficiaries scope?

   VITL Response: The targets were based on the 42 top priority ACO provider organization that represent 62% of the covered beneficiaries. Not all of the original targeted 42 provider organizations, which included UVMMC and CVMC, were ready to connect to the VHIE. As a result, VITL engaged with the next group of provider organizations as determined by the ACOs. We are still working with the top priority provider organizations and their vendors (to include UVMMC and CVMC) and depending on their readiness, may go-live as part of the original 42 provider organizations or within phase 2.

4. Can you please confirm that interface development work is also funded under the DVHA-VITL Core Grant and Contract and that the interfaces could include ACO members?

   VITL Response: No resources specific to accelerating ACO specific work will be available after 12/31/15. ACO provider organizations will be incorporated in the normal scheduling and prioritization process.

Additional resources are required to accelerate the ACO specific interfaces because existing VITL resources are already engaged and committed to developing interfaces with the following organization types based on the DVHA Grant Agreement:

> "Connectivity of HIE infrastructure: Subrecipient shall provide Interface development work designed to develop connectivity between the VHIE networks and hospital, ambulatory and other Health Care Organizations.
>
> 4.1.3.1 Subrecipient Interface development shall include the following, other than the work specifically funded outside the scope of this Grant as detailed in Section 3.18 above:
>
> - Connectivity to patient-centered medical homes and other primary care providers;
> - Connectivity to mental health providers;
> - Connectivity to substance abuse treatment providers;
> - Connectivity to other specialty care providers;
> - Connectivity to long term care and skilled nursing providers;
> - Connectivity to community services;
> - Connectivity to public health registries;
> - Connectivity to home health; and
> - Connectivity to other data sources."

5. Please confirm what defines a connection: is it an ADT, a Lab, multiple connections? How are these counted?

   VITL Response: A connection is defined as an interface for each data type (ADT, Immunization, etc.). One connection is defined as one interface.

6. Terminology Services was previously approved as part of the 2015 Gap Remediation work. Can you please explain why there are new Terminology Services lists in the 2016 request? How do these overlap? Are personnel included in the 2016 number?

   VITL Response: 2015 work included: standing up the infrastructure, 2 yrs subscription and securing terminology services vendor. 2016 proposed work includes: deployment of terminology services system; performing term mapping for at least 3 data sets; and providing ACO specific data quality reports.

   When phase 1 was approved by the workgroup, the ACOs and VITL acknowledged that a subsequent phase would be necessary. If this additional amount is not approved, the data quality work for the ACOs would suffer significantly. This is because the infrastructure would exist as a result of phase 1, but resources would not be available to fully utilize the system and to achieve a return on this investment.

   Phase 2 work represents $400,000 to include:

   - 1200 hours of new staff time at $125/hour
   - $128,000 consulting fees

- $122,000 in data quality infrastructure costs and licensing

7. The response to D7 does not include a percentage. Can you please provide a percentage of progress on the initial scope?

VITL Response:

	Original Project	Original Project Changes		New Project Request	
		Group A Completion by Nov 30th	Group A Completion (with extension) by Dec 31st	Group A	Group B (1 DA, 4 SSAs & 1 DDA)
Agencies	16	10 (37*)	10 (37*)	10 (37*)	6
Work/Scope	Phases 1, 2 & 3	Phase 1 & part of Phase 2	Remainder of Phase 2	Phase 3	Phases 1, 2 & 3
Funding	$200K	($135K) spent $65K balance		$150K	
* Number of sites		50	60	40	

Attachment 5: SCÜP Presentation

SCÜP Project Update

(Shared Care Plans &
Universal Transfer Protocol)

November 18, 2015

SCÜP Project Review

Overview:

This project will provide a technological recommendation that supports Vermont's providers and caregivers in successfully navigating transitions between care settings.

Project Accomplishments:

- The project team completed business requirements gathering sessions with three communities (Bennington, Rutland, & St. Johnsbury).
- Finalization and validation of business and technical requirements with the three participating communities.
- High level technical review of six potential solution providers, most of which are currently in development or scheduled for development in Vermont.
- Final report outlining:
  - Findings
  - Key Features identified
  - Overview of the technical solutions
  - Final recommendation

Vermont Health Care Innovation Project

SCÜP Project Findings

Community interest in the solutions:

- UTP: High
- SCP: Very High

Major Barriers:

- Consent
- Access across the Care Continuum
- Integration into existing workflows or adapting workflows to tools
- Sustainable funding

Feasibility in current or to-be technical landscape:

- UTP: Currently available
- SCP: Very attainable

Other key feedback:

- Keep both solutions simple
- Reduce additional logins
- Needs to be adaptable to various workflows

SCÜP Project Recommendations

Overall Project Recommendations:

- Cloud based solution
- Due to solutions available and their scheduled availability, may be best to separate the two projects once more
- Due to budget and schedule constraints, the next phase of the project(s) will need to proceed as pilots

Universal Transfer Protocol Recommendation:

- Most closely aligns with solution provided by PatientPing for Event Notification

Shared Care Plan Recommendation:

- Aligns well with multiple solutions that are in development or scheduled for development
- The ACO Care Management solution has agreed to work with the project to accommodate most requirements as well as the schedule and budget constraints
- Other solutions such as MMIS Care and PatientPing will still be considered as discovery continues more intensely with the OneCare Vermont

Questions?

Attachment 6: DLTSS Data Gap Remediation Project Next Steps

DISABILITY AND LONG-TERM SERVICES AND SUPPORTS DATA GAP REMEDIATION PROJECT: NEXT STEPS

Susan Aranoff, Esq.

Health Integration Quality Analyst

Vermont Department of Disabilities, Aging, and Independent Living

November 18, 2015

Vermont Health Care Innovation Project

BACKGROUND

- Since its inception, increasing the Health Information Technology capacity of Vermont's Disability and Long-Term Services and Supports (DLTSS) Providers and other "non-Meaningful Use providers" has been a stated goal of the Vermont Health Care Innovation Project. (See- application, operational plans, work plans, and milestones).

- The DLTSS Data Gap Analysis and Remediation Project began as part of the Accessing Care Through Technology (ACTT) suite of HIE/HIT projects.

DLTSS Data Gap Remediation Project-Phases

- This project is a “planning phase to build a comprehensive budget request for Phase Two that allows for IT gap remediation work to occur.”
- The gap analysis was submitted in April 2015 and finalized in November 2015.

Next Steps

- Disseminate Report
  - MMIS Implementation Team
  - HDI Work Group
  - State HIT Plan Leadership
  - HIS Implementation Team
- Gap Remediation
  - Allocate Funds
  - Identify Priorities

Context

- Vermont's Home Health Agencies and Area Agencies on Aging make it possible for aging Vermonters and Vermonters with disabilities to live independently in the community – which is not only what most people prefer – it is required by law- e.g. the Olmstead decision.
- Home Health Agencies and Area Agencies on Aging need robust connections to the VHIE in order to implement the Next Generation Medicare Shared Savings Program.
- Home Health Agencies and Area Agencies on Aging need robust connections to the VHIE in order to comply with the IMPACT Act.

Continued

- Vermont is one of the leaders in shifting the balance from people living in institutions to living in the community. At present, more than 50 % of people receiving Disability and Long Term Services and Supports live in the community.
- Vermont has the second oldest average population and the need for Disability and Long Term Services and Supports, including Home and Community Based Services, is rapidly increasing.
- Home and Community Based Services are essential for improving and maintaining the health of Vermonters- especially Vermonters living with disabilities, chronic and/or complex health conditions.

Continued

- Vermont's Home Health Agencies serve approximately 23,000 Vermonters per year. In FY 2013, Vermont's HHAs made nearly 950,000 home visits.
- Vermont's Area Agencies on Aging serve approximately 45,000 Vermonters per year.
- SIM has allocated the following for hospitals, primary care providers, specialists, ACOS, skilled nursing facilities, and SSAs/DAs:
  - Year 1 Actuals: $3,003,982.64
  - Year 2 Budget: $3,574,117.50
  - Year 3 Budget: $2,917,500

The Core Team will be considering requests for several proposals at its December meeting, including those discussed earlier today that total approximately $3 million dollars that will benefit hospitals, primary care providers, specialists, ACOS, and SSAs/DAs.

- To date, no SIM funds have been allocated to increase HIE/HIT connectivity for Vermont's Home Health Agencies and Area Agencies on Aging.

Vermont Health Care Innovation Project

PROPOSAL

- Expand the scope of VITL's SIM-funded work to include connecting the remaining HHAs and AAAs to the VHIE if funding is approved for additional interfaces.
- Recommend that the Core Team allocate $800,000.00 of remaining funds to remediate some of the highest priority gaps identified in the DLTSS data gap analysis.
- Specifically recommend providing VITLAccess to the Home Health Agencies and Area Agencies on Aging.

Attachment 7: Data Utility and Governance Slides

Feedback Requested: Data Utility and Governance

Georgia Maheras, Esq.

Project Director

November 18, 2015

Vermont Health Care Innovation Project

BACKGROUND

- Request from Lawrence Miller to develop recommendations for:
  - Support of a state 'data utility'
  - Statewide HIE Governance structure

Data Utility – Brainstorm

- Scope of the utility: What functions would be under regulation and therefore positioned as non-competitive? Should the utility also be able to engage in non-regulated activities where there is competition?
- Regulatory model: Who plays the role of consumer advocate to balance utility priorities?
- Planning process: How do utility plans and budgets get set, approved, monitored, and verified?
- Funding: How do the budgets get funded? On what timeframes? What is the funding source?
- Cost: How much cost does regulation create?

Statewide HIE Governance

- Part of HIT Strategic Plan
- Create an entity that has appropriate authority, accountability, and expertise to ensure the effective, efficient use of resources for public and private HIT/HIE efforts in support of health care and payment reform across the state of Vermont.

Brainstorm: What would make good governance?

- Key consideration:
  - About the processes for making and implementing decisions. Not about making ‘correct’ decisions, but about the best possible process for making those decisions.

Attachment 8a: Vermont ACO Integrated Informatics Proposal Presentation

Vermont ACO Informatics Integration Project

Proposed November 2015

Project Objectives

- **Create a single integrated data warehouse for all ACO-attributed lives**, leveraging the existing OneCare Health Catalyst Warehouse for use by CHAC and VCP/HealthFirst
- Envision and create **analytic reports** and appropriate ad hoc analysis capacity **to support an integrated Population Health Management (PHM) approach for Vermont** supported by the three ACOs
- Create a **design of how data and informatics could work under a single, combined ACO** in 2017 assuming further evolution is possible under the All Payer Model
- Create a **plan for appropriate ACO use of the Blueprint all-payer linked claims and clinical datasets** in support of a successful statewide population health management model

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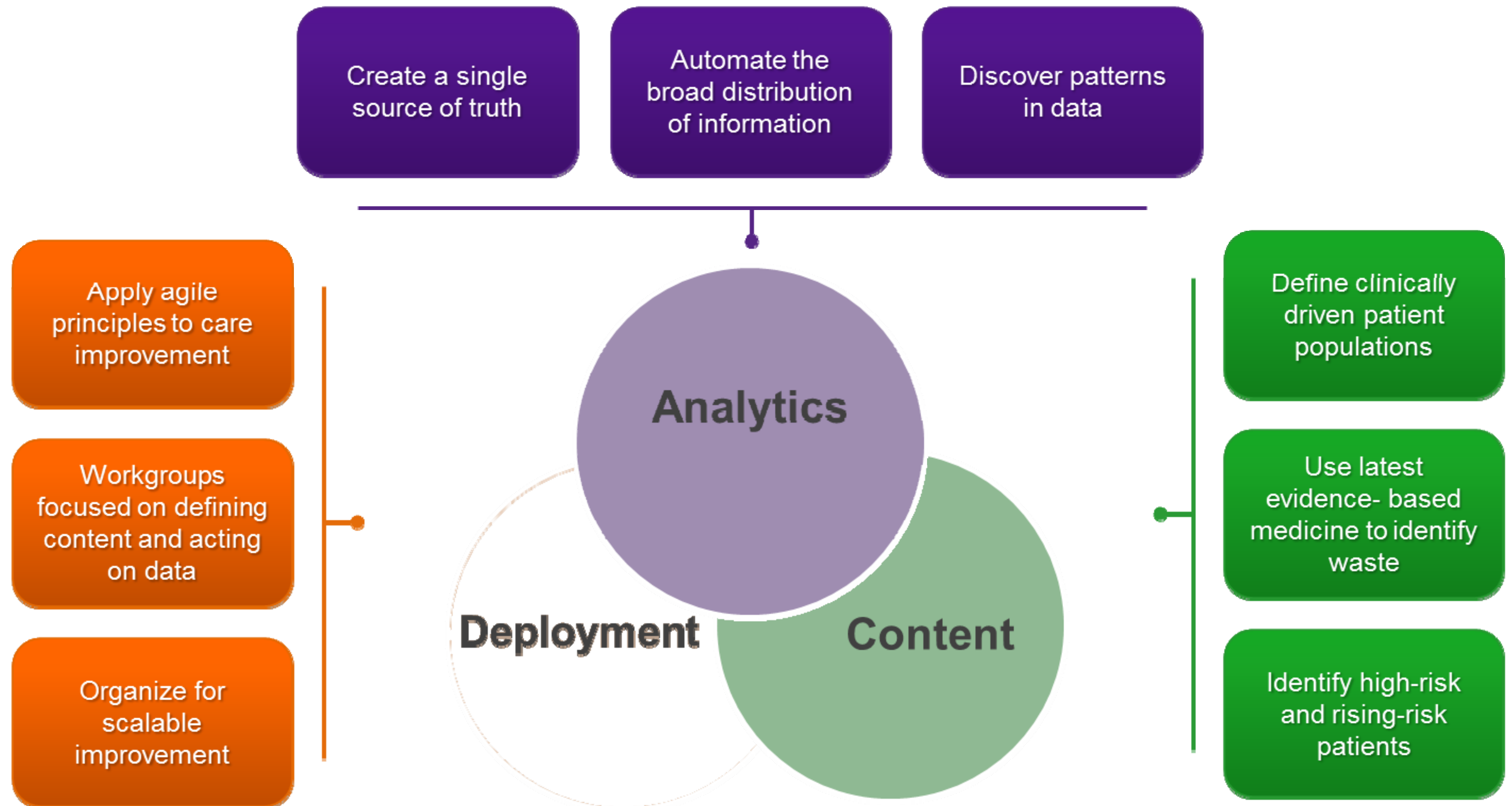
Our Combined Vision for PHM



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Challenges and Considerations

- Data Use Agreements and Data Sharing concerns
- Different metrics for different programs
  - HEDIS Quality Measures
  - ACO Quality Measures
  - BP Incentive Measures
  - Other available BP Measures
  - Cost/Utilization Comparisons with others
  - Patient-Level Reports
- Aligning source/data warehousing and value-added systems strategies both short term (2016) and longer term
  - VHIE
  - ACO Gateway
  - VITL Clinical Repository
  - Health Catalyst
  - Docsite
  - Current/Legacy OneCare warehouse and reporting capabilities
  - Patient Ping
  - Potential SCUP and/or OneCare Care Management/Coordination/Transitions Management Tool
  - Any current or coming DVHA tools for any of the above as part of their HCIS portfolio

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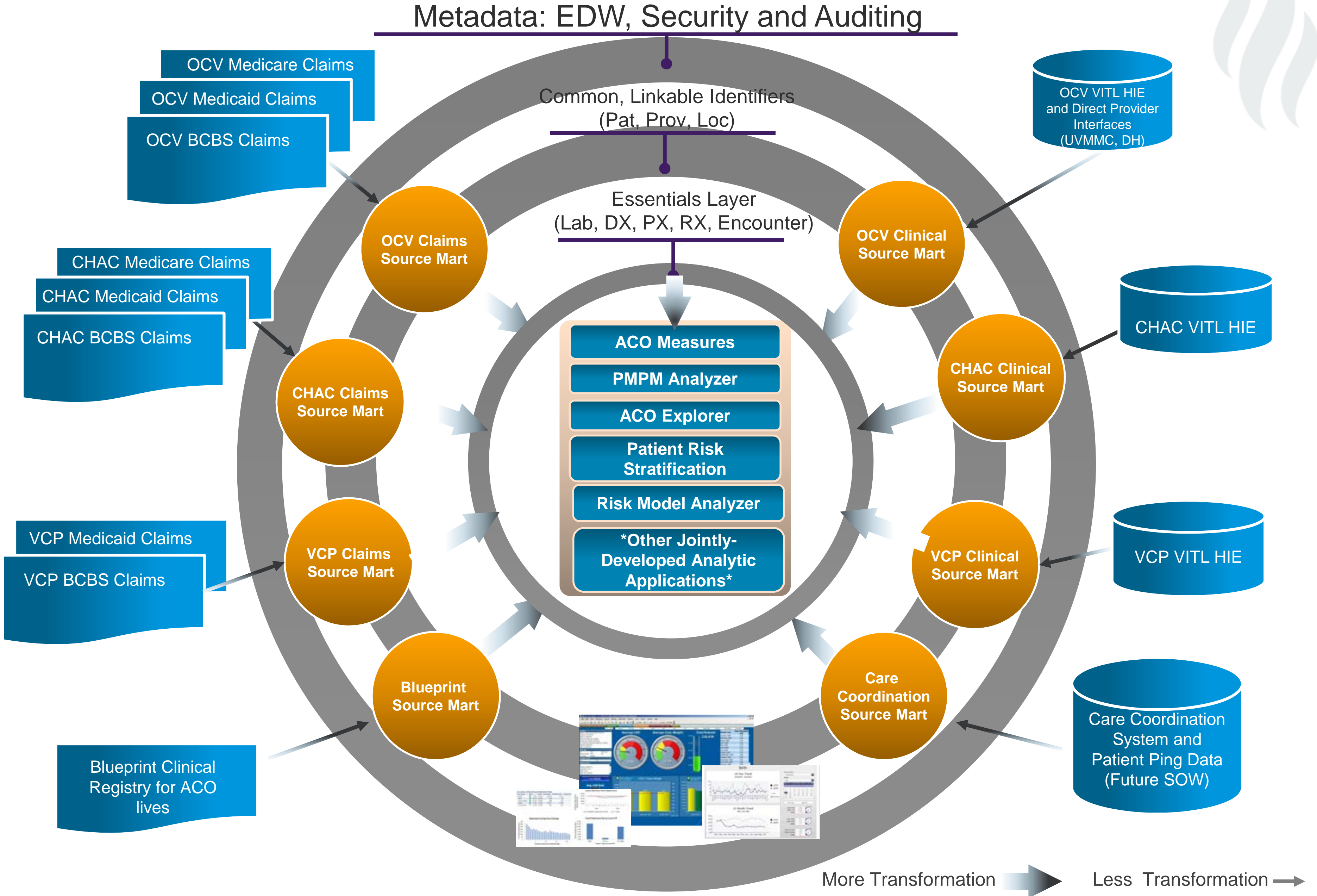
Proposed Combined EDW Platform (conceptual)



Proposed EDW Platform: Why so complex?

A platform with multiple claims and clinical data source marts is what the current environment allows:

- No single source of timely patient-identifiable claims data available to all 3 ACOs and the Blueprint. VHCURES doesn't contain patient identifiers, and ACOs are not given access anyway due to VHCURES data sharing policy restrictions
- Legal work to determine if and how ACOs can share data among each other for benchmarking and care coordination purposes (De-identification will likely be required for sharing)
- Confidentiality, Privacy, and security concerns around PHI and payer sensitive data likely create the need for separate data marts.
- Common infrastructure, metadata layers, and data definitions will get us much closer to the concept of a single source of truth for unified performance analysis.

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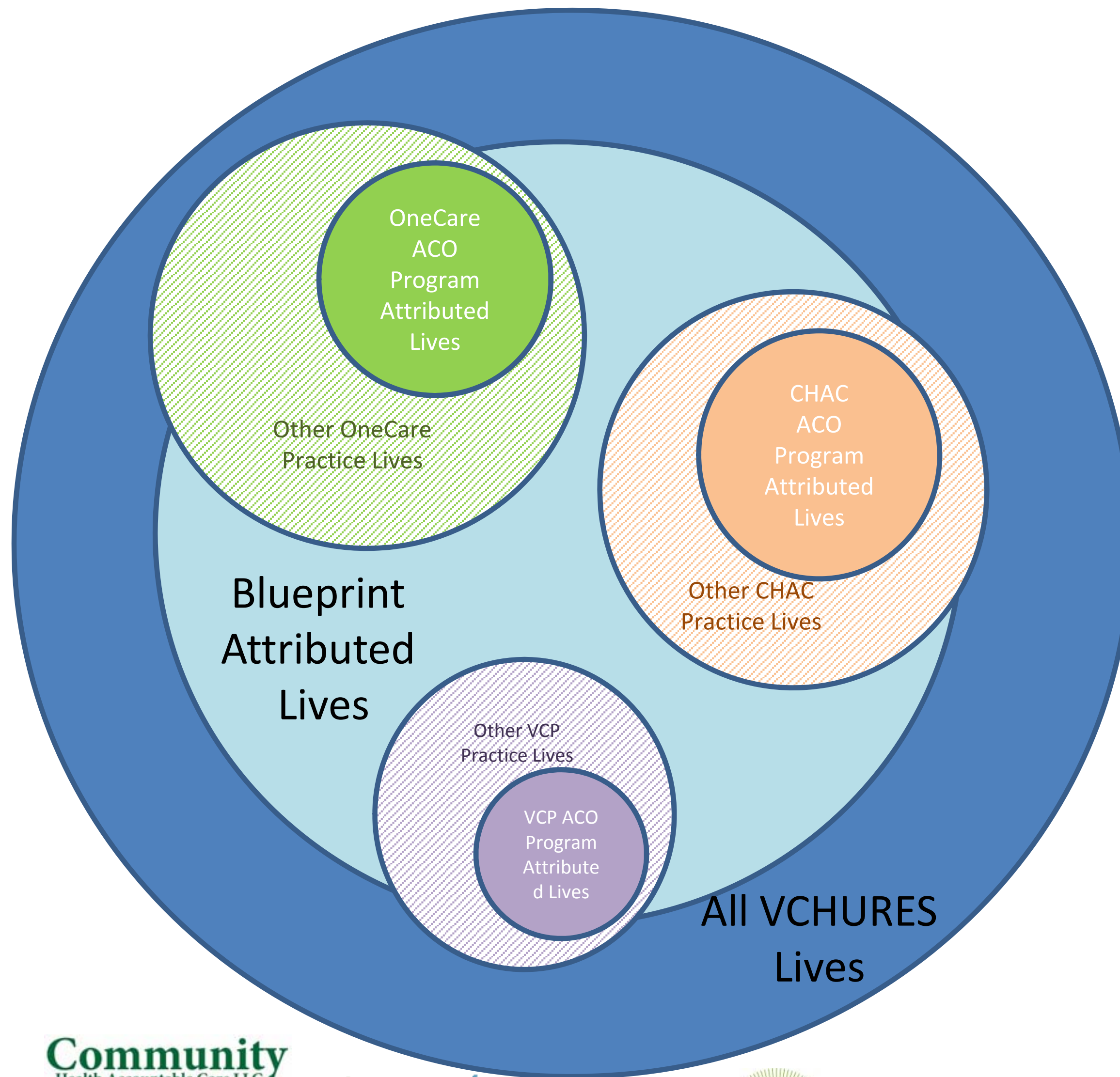
Unified Performance Reporting



Initial Vision: Unified Performance Reports

- Statewide
- Practice
- ACO
- HSA

Deeper Vision: Unified PHM support solutions with aligned processes and more defined roles across single "O"/3-ACOs, Blueprint, DVHA, and Community Collaboratives

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Health Catalyst PMPM Analyzer Application

Updated on Dec 30, 1899 at 00:00

Clear Selections | Current Selections

Search

Date

2011 2012 2013

Q1 Q2 Q3 Q4

Jan Apr Jul Oct

Feb May Aug Nov

Mar Jun Sep Dec

Week

Contract

Contract

Claim Type

Category

In Network

In Network

Care Process / Enc Detail

Program

Family

Process

Principal Dx

Principal Px

Paid Provider

NPI

Name

Specialty

State MN

Patient

HIC #

Name

Age Group

ZIP Code

PCP

Yearly Total PMPM	Yearly Total Payments
$1,003.28	$1,707,057,039

PMPM	Payments	% Total Paymts	Patients	Average Risk
$79.34	$134,992,363	7.91%	32312	9.45

Care Process

Program	PMPM	Payments	# Enc	$/Enc
Behavioral	$0.64	$1,095,215	1,516	$722
Cardiovascular	$13.21	$22,484,178	381	$59,014
Community Care	$1.64	$2,793,017	333	$8,387
Diagnostic Clinical Support Se...	$0.00	$1,062	1	$1,062
Gastrointestinal	$5.76	$9,792,755	309	$31,692
General Medicine	$6.80	$11,562,552	430	$26,890
Hematology-Oncology	$5.40	$9,190,742	2,377	$3,867
Musculoskeletal	$4.55	$7,743,692	615	$12,591
Neuroscience	$5.13	$8,720,469	1,374	$6,347
NULL	$0.05	$82,977	3	$27,659
Respiratory	$5.80	$9,861,268	7,004	$1,408
Surgery	$3.09	$5,256,442	540	$9,734
Therapeutic Clinical Support ...	$0.19	$329,933	5	$65,987
Unassignable	$26.89	$45,747,123	301,995	$151

Diagnosis / Procedure / HCPCS

Principal Diagnosis	PMPM	Payments	# Enc	$/Enc
-	$24.77	$42,147,864	301912	$140
008.8 | Intestinal infection d...	$0.12	$205,270	4	$51,317
008.45 | Intestinal infection ...	$0.29	$485,291	8	$60,661
008.63 | Enteritis due to no...	$0.01	$22,075	1	$22,075
009.0 | Infectious colitis, en...	$0.02	$30,779	1	$30,779
034.0 | Streptococcal sore t...	$0.00	$312	1	$312
035 | Erysipelas	$0.00	$255	4	$64
038.0 | Streptococcal septi...	$0.13	$224,430	2	$112,215
038.2 | Pneumococcal sept...	$0.06	$97,490	1	$97,490
038.3 | Septicemia due to a...	$0.16	$270,473	1	$270,473
038.8 | Other specified sept...	$0.11	$192,591	3	$64,197
038.9 | Unspecified septicemia	$2.29	$3,892,508	41	$94,939
038.11 | Methicillin suscepti...	$0.37	$631,928	3	$210,643
038.12 | Methicillin resistant...	$0.06	$104,575	1	$104,575

Claim Type / Specialty / Provider

Claim Type	PMPM	Payments	# Enc	$/Enc
Inpatient Claim	$48.16	$81,948,292	1100	$74,498
Outpatient Claim	$5.02	$8,538,093	1512	$5,647
RIC O LOCAL CARRIER N...	$26.16	$44,505,978	314286	$142

Claim Payments by Patient

Patient	PMPM	Payments	Risk	# Enc	$/Enc
Phronie Newens	$0.79	$1,335,740	149.11	103	$12,968
Laithen Poser	$0.70	$1,199,110	121.13	13	$92,239
Yonni Swire	$0.60	$1,019,465	6.80	16	$63,717
Glynice Labes	$0.57	$972,400	0.49	79	$12,309
Deida Seaton	$0.49	$826,788	110.56	115	$7,189
Lank Fraine	$0.47	$801,112	-	10	$80,111
Dominion Vanes	$0.45	$770,593	8.53	48	$16,054
Gaylyn Banglard	$0.44	$747,938	114.82	34	$21,998
Mandela Jullian	$0.40	$679,889	111.62	61	$11,146
Haidi Collet	$0.38	$654,875	12.31	8	$81,859
Goebel Philbrick	$0.37	$636,098	8.14	57	$11,160
Ingred Mougenel	$0.36	$610,130	135.70	53	$11,512
Auric Stow	$0.35	$592,276	72.82	26	$22,780
Barrie Crasford	$0.34	$586,482	13.13	71	$8,260
Hiyab Kimblin	$0.34	$577,097	36.32	23	$25,091

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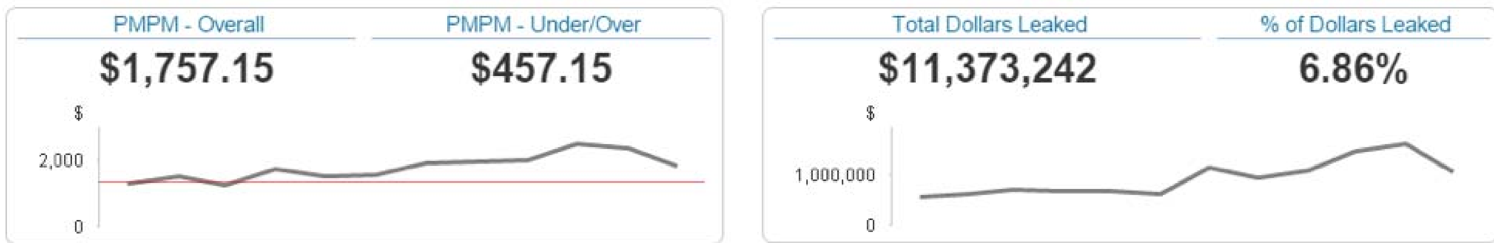
Health Catalyst ACO Explorer Application



Change View

Cost | Leakage

Claim Payments by Specialty

Specialty	Claim Payments
Family Medicine	$148,835,601
Acute Care Hospital	$8,989,242
Oncology	$1,472,914
DME	$1,327,638
Cardiology	$854,877
Internal Medicine	$708,956
Emergency Medicine	$626,831
HEMATOLOGY/ONC...	$611,032

Claim Payments by Attributed Provider

Attributed Provider	Claim Payments
Rives Deport	$5,203,416
Safiah McCraine	$4,580,385
Ericlee August	$4,365,984
Delorise Fawdrey	$3,667,106
Malon Enrigo	$3,474,789
Shanikqua Fausset	$3,353,282
Pemella Slocum	$3,248,041
Alandra Manthroppe	$3,111,012

Claim Payments by Patient

Patient	Claim Payments
Giorgios Ollerhead	$1,290,308
Ebbony Edelmann	$1,212,732
Gaylyn Bangiard	$1,025,689
Glynice Labes	$1,021,317
Eurasia Lynes	$1,013,889
Keriana Hurley	$847,445
Sinthia Govett	$838,022
Nanette Van Salzberger	$837,126

Claim Payments by Procedure

Procedure	Claim Payments
PTCA OR CORONAR...	$6,798,009
ANGIO OTH NON-CO...	$5,486,201
CONT MECH VENT 9...	$5,444,158
PACKED CELL TRAN...	$4,768,880
TOTAL KNEE REPLA...	$3,077,528
HEMODIALYSIS	$2,815,428
CONT MECH VENT <...	$2,678,518
MISCELLANEOUS S...	$2,314,934

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Health Catalyst ACO Measures Application

Summary | **Analysis** | Worklist | Patient | Measure Properties

ACO Measure Analysis

Updated at 08:59 on Mar 02, 2015

Search

Year
2010

Quarter
Q1 Q2

Month
Jan Apr
Feb May
Mar Jun

Practice
Cottonwood Clinic
Granite Hospital
MillRock Clinic

Payor
Medicare
BCBS

Membership
MCH
PBJ

Primary Specialty
AD/PED IMM
Allergy/Immunology
Anatomic / Clinical Pathol
Anatomic Pathology
Anesthesiology
Cardiology
Cert. Reg Dental Assist
Cert/SurgTech/First Asst
Certified Nurse Practioner
Certified Nurse Specialist
Certified Ophthalmic Tech

Provider Name
Aaronson, Jorien Levolia
Abade, Domanick Lisha
Abate, Chrystina Jakob
Abate, Curvin Ravion
Abatelli, Erdem Kayce
Abatelli, Micayla Alesia
Abazi, Marsel Debrea
Abba, Ulrica Skylene
Abbe, Karysa Laiylah
Abberley, Allyn Labaron

Final Overall Quality Score	Care Coordination/Safety	Clinical Care for At Risk Populations	Patient/Caregiver Experience	Preventive Health
71.70%	75.70%	73.30%	63.20%	72.50%
45.9/64 pts.	16.65 /22 pts.	8.8 /12 pts.	8.85 /14 pts.	11.6 /16 pts.
	Min. Attainment Level NOT Met: 60.0%	Points Per 100 Patients: 1.74	Points Per 100 Patients: 1.19	Points Per 100 Patients: 0.05

Measure Summary

Measure	Current Percentile	Score	Next Percentile Threshold	# N required for Next Percentile	Current Points / Possible Points	Points Per 100 Pati...
ACO 2 - CAHPS: How Well Your Doctors Communicate	40th	43.28	50.00	238	1.25 / 2.00	0.05
ACO 15 - Pneumonia Vaccination Status for Older Adults	60th	73.72	84.55	1554	1.55 / 2.00	0.01
ACO 20 - Breast Cancer Screening	60th	70.76	76.43	899	1.55 / 2.00	0.01
ACO 19 - Colorectal Cancer Screening	60th	77.40	78.13	167	1.55 / 2.00	0.01
ACO 17 - Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	< 30th	7.00	30.00	7819	0 / 2.00	0.01
ACO 14 - Preventive Care and Screening: Influenza Immunization	70th	76.26	97.30	5341	1.7 / 2.00	0.00

of Opportunities

Practice
MillRock Clinic
Cottonwood ...
Granite Hospital
0
50,000

on Opportunites by Provider

0 1,000 2,000 3,000 4,000
Doidge, Macelyn L...
Gile, Spicie Mert
Deport, Rives Elis...
Esterbrook, Kelia ...
McCraine, Safiah ...
De Domenicis, Sh...
Archbold, Heberto ...
Stillwell, Katrina St...
Fausset, Shanikqu...
Slocum, Pemella...
Dougher, Laquana...
Stollenwerck, Kha...
Haggus, Dujuan T...
Pevsner, Shauntrio...
Halsho, Brittany K...
0% 50% 100%
Opportunity % of Total

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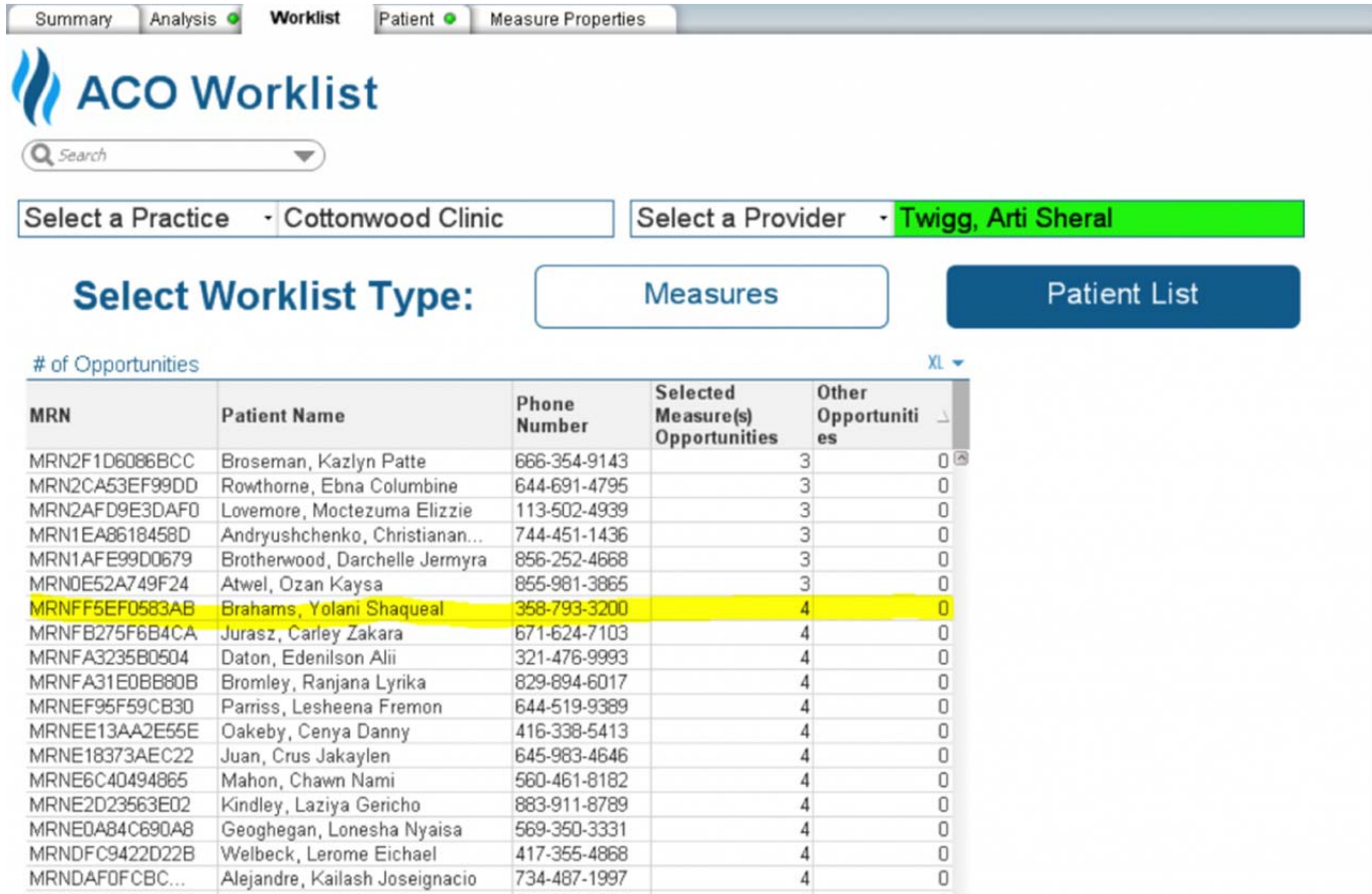
VERMONT Blueprint for Health

VITL
VERMONT INFORMATION TECHNOLOGY LEADERS

Health Catalyst ACO Measures- Worklist



MRN	Patient Name	Phone Number	Selected Measure(s) Opportunities	Other Opportunities
MRN2F1D6086BCC	Broseman, Kazlyn Patte	666-354-9143	3	0
MRN2CA53EF99DD	Rowthorne, Ebna Columbine	644-691-4795	3	0
MRN2AFD9E3DAF0	Lovemore, Moctezuma Elizzie	113-502-4939	3	0
MRN1EA8618458D	Andryushchenko, Christianan...	744-451-1436	3	0
MRN1AFE99D0679	Brotherwood, Darchelle Jermyra	856-252-4668	3	0
MRN0E52A749F24	Atwel, Ozan Kaysa	855-981-3865	3	0
MRNFF5EF0583AB	Brahams, Yolani Shaqueal	358-793-3200	4	0
MRNFB275F6B4CA	Jurasz, Carley Zakara	671-624-7103	4	0
MRNFA3235B0504	Daton, Edenilson Alii	321-476-9993	4	0
MRNFA31E0BB80B	Bromley, Ranjana Lyrika	829-894-6017	4	0
MRNEF95F59CB30	Parriss, Lesheena Fremon	644-519-9389	4	0
MRNEE13AA2E55E	Oakeby, Cenya Danny	416-338-5413	4	0
MRNE18373AEC22	Juan, Crus Jakaylen	645-983-4646	4	0
MRNE6C40494865	Mahon, Chawn Nami	560-461-8182	4	0
MRNE2D23563E02	Kindley, Laziya Gericho	883-911-8789	4	0
MRNE0A84C690A8	Geoghegan, Lonesha Nyaisa	569-350-3331	4	0
MRNDFC9422D22B	Welbeck, Lerome Eichael	417-355-4868	4	0
MRNDAF0FCBC...	Alejandre, Kailash Joseignacio	734-487-1997	4	0

Community Health Accountable Care LLC — Transitioning Our Communities for Better Health
HEALTH FIRST
OneCareVermont
VERMONT Blueprint for Health
VITL — Vermont Information Technology Leaders

Health Catalyst ACO Measures- Patient Detail

Summary | Analysis | Worklist | Patient | Measure Properties

ACO Worklist

Search

Select a Practice: Cottonwood Clinic

Select a Provider: Twigg, Arti Sheral

Select Worklist Type: Measures | Patient List

# of Opportunities

MRN	Patient Name	Phone Number	Selected Measure(s) Opportunities	Other Opportunities
MRNFF5EF0583AB	Brahams, Yolani Shaqueal	358-793-3200	4	0

Patient Name:
Brahams, Yolani Shaqueal

MRN:
MRNFF5EF0583AB

Demographics:
Phone: 358-793-3200
Age: 58
Race: White
Ethnicity: Not Hispanic or Latino

Primary Care Provider:
PCP: Twigg, Arti Sheral
Last Visit: 5/8/2010

Patient Population

Measure #	MeasureNM	Compliance
ACO 14	Preventive Care and Screening: Influenza Immunization	✓
ACO 16	Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow Up	✓
ACO 17	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention	⛔
ACO 18	Preventive Care and Screening: Screening for Clinical Depression and Follow-up Plan	✓
ACO 19	Colorectal Cancer Screening	⛔
ACO 20	Breast Cancer Screening	⛔
ACO 21	Preventive Care and Screening: Screening for High Blood Pressure and Follow-up Documented	✓

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Project Timelines

ID	Task Name	Start	Finish
1	Visioning and Discovery	1/1/2016	1/29/2016
2	Project Design Planning	2/1/2016	2/26/2016
3	Legal/Contracting Work	1/1/2016	3/30/2016
4	Technical Implementation	4/1/2016	12/30/2016
5	Education and Dissemination	11/1/2016	1/30/2017

2016: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec | 2017: Jan

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Health Catalyst Technical Implementation Sample Roadmap *(subject to design and scope)*

Infrastructure and Connectivity | Source Marts | Risk Models | Applications

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Months 7-12
Connectivity/File Sharing	VITL; CHAC	VCP; VITL; CHAC	VCP	Blueprint			
ACO Claims			Map, install, configure and deploy	Map, install, configure and deploy	Map, install, configure and deploy		
Blueprint Data				Clinical Registry	Clinical Registry	Claims	
HIE		CHAC	CHAC	CHAC; VCP	VCP	VCP	
Risk Model Analyzer		Install claims based risk models-Medicare	Install claims based risk models-Medicaid, BCBS	Install and configure Non Claims based Risk Models and QV visualization	Install and configure Non Claims based Risk Models and QV visualization		
ACO Explorer				Release 1 - Medicare		Release 2 – Medicaid, BCBS	
PMPM Analyzer		Release 1 - Medicare	Release 1 - Medicare	Release 1 - Medicare; Release 2 – Medicaid, BCBS	Release 2 – Medicaid, BCBS	Release 2 – Medicaid, BCBS	Release 2 – Medicaid, BCBS
Patient Risk Stratification		Release 1 - Medicare	Release 1 - Medicare	Release 1 - Medicare; Release 2 – Medicaid, BCBS	Release 2 – Medicaid, BCBS	Release 2 – Medicaid, BCBS	Release 2 – Medicaid, BCBS
ACO Measures		Release 1 - Medicare	Release 2 – Medicaid, BCBS	Release 2 – Medicaid, BCBS	Release 3 – Clinical Data	Release 3 – Clinical Data	Release 3 – Clinical Data
New Jointly-Developed Application							Release 1

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Proposal Budget

Project Goal	Requirement	Amount
Technical Integration of CHAC and VCP/Healthfirst Data into Health Catalyst	Health Catalyst One-Time Perpetual License Fees	$ 555,000.00
	One Time Health Catalyst Professional Services Fee for Implementation work	$ 266,000.00
	Hosting Fees- 2016	$ 184,200.00
	Connectivity	$ 240,000.00
	Qlikview Licenses	$ 13,500.00
	VITL Implementation Fees for CHAC and VCP Clinical Datamarts	$ 98,000.00
	VITL hosting fees for CHAC and VCP datamart- 2016	$ 48,000.00
	Subtotal Technical Integration	**$ 1,404,700.00**
Legal Work to support multi-ACO and Blueprint Data Sharing and Collaboration	CHAC Legal Fee Support	$ 25,000.00
	VCP Legal Fee Support	$ 25,000.00
	OCV Legal Fee Support	$ 25,000.00
	Subtotal Legal	**$ 75,000.00**
Staff Time for Planning and Design for PHM Analytic outputs	CHAC Staff for Planning and Implementation	$ 65,000.00
	VCP Staff for Planning and Implementation	$ 65,000.00
	OCV Staff for Planning and Implementation	$ 65,000.00
	Onpoint Consulting Services for work related to Blueprint data integration	$ 10,000.00
	Subtotal Staff Time	**$ 205,000.00**
Project Management	Project Management Contractor	$ 150,000.00
	Subtotal Project Management	**$ 150,000.00**
	Grand Total	**$1,834,700.00**

OneCareVermont

Summary

- **CHAC, Healthfirst and OCV have a strong history of collaboration**
- Together we believe that statewide, multi-ACO **collaboration is significantly better than duplicating scarce resources** and allows for the 3 ACOs and Blueprint to **work together to promote evidence-based medicine, improve beneficiary engagement, meet quality and cost metrics and coordinate care in a more efficient manner**
- To this end, we intend in 2016 to **design and deploy an integrated data, analytic and Population Health Management (PHM) infrastructure** based on a combination of existing and planned OneCare, Blueprint, and VITL capabilities in order to increase use of advanced analytics for all three ACOs

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Attachment 8b: Vermont ACO Integrated Informatics Proposal

Community Health Accountable Care LLC — Transitioning Our Communities for Better Health | HEALTH FIRST | OneCareVermont | VERMONT Blueprint for Health | VITL Vermont Information Technology Leaders

General Information:

Lead Organization Applying: University of Vermont Medical Center, Inc.
Collaborating Organizations: OneCare Vermont, LLC

Key Contact for Applicant: Todd Moore
Relationship to Applicant: employed
Key Contact Email: todd.moore@onecarevt.org
Key Contact Phone Number: 802-847-1844
Key Contact Mailing Address: 356 Mountain View Drive, Suite 301

Fiscal Officer (must be different from Key Contact): Abraham Berman
Relationship to Applicant: employed
Fiscal Officer Email: abraham.berman@onecarevt.org
Fiscal Officer Phone Number: 802-847-0887
Fiscal Officer Mailing Address (if different from Key Contact): N/A

Project Title and Brief Summary

<u>**Vermont ACO Informatics Integration Project**</u>

In 2016, CHAC, VCP/Healthfirst, and OneCare Vermont will design and deploy an integrated data, analytic and Population Health Management (PHM) toolset infrastructure in support of ACOs and HSA Community Collaboratives, in collaboration with the Blueprint for Health, working toward a highly integrated model under APM for 2017. The approach would be based on a combination of existing and planned OneCare, Blueprint, and VITL capabilities to generate support tools and increase use of advanced analytics for all three ACOs under a coordinated infrastructure.

The output of this project will include: (1) a single integrated data warehouse for all ACO-attributed lives, leveraging the existing OneCare Health Catalyst Warehouse for use by CHAC and VCP/HealthFirst, and including the ability to have both ACO-specific and combined 3-ACO instances for reporting and analytics, (2) new and re-envisioned practice, HSA, Statewide, and ACO-level analytic reports and appropriate ad hoc analysis capacity that can coherently include and report on ACO program-attributed, Blueprint-attributed, and other available population data, (3) a design of how data and informatics could work under a single "O" in 2017 assuming further evolution is possible under the APM, and 4) a plan for appropriate ACO use of the Blueprint all-payer linked claims and clinical datasets in support of a successful statewide population health management model.

The parties agree to work together to solve technical and DUA issues to facilitate timely and accurate data, and apply the ACO Gateway models to enable matched clinical information for enhanced, automated quality measurement and PHM support efforts. The parties would also work together to jointly support PHM process design for more substantial use of the VITL Access provider portal, the Event Notification System (ENS), and Care Coordination tools from both previously-funded SIM projects and ACO software portfolio capabilities, as well as develop a plan for the appropriate integration of data from the Blueprint Clinical Registry system

Budget Request Summary

Project Goal	Amount
Technical Integration of CHAC and VCP/Healthfirst Data into Health Catalyst	$ 1,404,700.00
Legal Work to support multi-ACO and Blueprint Data Sharing and Collaboration	$ 75,000.00
Staff Time for Planning and Design for PHM Analytic outputs	$ 205,000.00
Project Management	$ 150,000.00
Total	**$1,834,700.00**

Activities for which the applicant is requesting funding

Community Health Accountable Care (CHAC), Vermont Collaborative Physicians (VCP) and OneCare Vermont (OCV) are requesting support to fund a common data analytics infrastructure needed to combine clinical and claims data in support of strong population health management tools for ACO-attributed lives. We are also seeking funds in partnership with the Blueprint for Health in order to design and deliver new and re-envisioned practice, HSA, Statewide, and ACO-level analytic reports and appropriate ad hoc analysis capacity that can coherently include and report on ACO program-attributed, Blueprint-attributed, and other available population data.

Specifically we are requesting:

1. Funds to support the technical integration of CHAC and VCP claims and clinical data from VITL onto the Health Catalyst data warehouse platform currently utilized by OCV, in the amount of $1,404,700.
2. Funds to offset legal fees required to resolve issues related to Data Use Agreements, Informatics System Collaboration and Data Sharing, in the amount of $75,000.
3. Funds to support staff time from OCV, CHAC, VCP, to manage the technical and legal aspects of integrating ACO claims data and clinical data and Onpoint resources for

planning and design work related to the delivery of new and re-envisioned practice, HSA, Statewide, and ACO-level analytic reports and appropriate ad hoc analysis capacity, in the amount of $205,000.

4. Funds to support a contracted Project Management resource to oversee the work streams described in this proposal, in the amount of $150,000.

CHAC, VCP and OCV have a successful and positive history of collaboration, and aspire together to implement a vision of service-area focus on population health management by the full continuum of care and services, with all providers regardless of ACO affiliation. We operate with a high degree of collaboration with Vermont Blueprint for Health programs. Our track record of impact, collaboration, and community-based focus is clear and has been demonstrated in our efforts in statewide Learning Collaboratives, jointly-facilitated Regional Clinical Performance Committees, ACO Quality Measure training and collection initiatives, and other jointly-attended forums. We believe a common and integrated approach to informatics and technology will allow us to collaborate even further, to prevent redundancy, to reduce provider confusion with overlapping or conflicting reports, and to identify opportunities to improve care delivery across the continuum of care through advanced analytics. We view this project as the mechanism by which the three ACOs and the Blueprint for Health will agree to the principles and design of unified performance reporting for Vermont providers, and to provide the necessary analytics to prepare for taking downside risk in 2017 under the All Payer Model.

Number of Providers and Patients Impacted

The networks for the three multi-payer ACO Shared Savings programs in CHAC, VCP/HealthFirst and OCV include: UVMMC and its 1,000 plus providers; D-HH and its 800 plus providers; all community PPS and Critical Access Hospitals in VT and their employed physicians; VT's one behavioral health specialty hospital and its employed physicians; FQHCs; RHCs; community/private physician practices; 10 home health care and hospice organizations in VT;

28 skilled nursing facilities in VT; and all 10 designated community mental health centers in VT. Combined, the 3 ACOs account for over 4500 Vermont providers across the continuum of care.

This combination of large geographical reach and full continuum of care under a collaborative model has provided a powerful foundation for population health management (PHM) for our combined attributed population of over 160,000 Vermonters.

Relationship to VHCIP goals

Starting in December of 2013, OCV received a one (1) year funding opportunity under SIM to support medical leadership, quality improvement, analytics and data, and clinical facilitation to collectively support Vermont's Accountable Care Organizations' capacity to meet the Three Part Aim.

OCV's work has complemented Vermont Blueprint for Health's successful commitment to primary care by bringing together Vermont's full provider continuum to execute on innovative, highly reliable, evidenced based population health management strategies that improve the lives of Vermonters.

To date, the deliverables under the grant have been met by:

- Selecting clinical priorities that align with and complement other statewide reform initiatives
- Supporting (financial, data and human resources) the development/transformation of 14 RCPCs/UCCs in every Health Service Area (HSA) in collaboration with the medical community, the continuum of care providers, the Blueprint for Health, and the other ACOs throughout the state (See Attachment B: Example Bennington RCPC Charter)
- Contracting with physician and advanced practice providers in all 14 HSAs to be clinical champions and support the clinical priorities of the RCPCs/UCCs

- Launching a statewide Learning Collaborative forum, with over 120 participants in attendance, to support performance improvement work on OCV emergency room and readmission/admission clinical priorities approved by the OCV CAB
- Developing and disseminating, at the Learning Collaborative, Readmission Change Packets which identify best practice based interventions and ideas for implementing small tests of change tools for addressing risk; Best Practice Risk Assessment Tools; Needs Assessments with a step by step guide, including some sample teach back tools; PDSA Tool; and Force Field Analysis
- Completing the quality measurement training and collection process for three (3) Shared Savings Programs with OCV, CHAC and VCP.

In addition to the VHCIP funding granted to OCV for the above initiatives, all three ACOs worked together with VITL on developing a proposal for, implementing, and now monitoring the ACO Gateway and Gap Remediation projects.

Impact on similar projects (ongoing or anticipated)

The work described in this proposal is directly related to and advances the value of the following SIM-grant funded projects already proposed or underway in the state:

1) ACO Gateway Project
    - The filtering and message routing mechanism created by VITL and Medicity to create the “ACO Gateways” for OCV and CHAC are foundational to being able to capture clinical data from the VHIE in the Health Catalyst platform.
2) VCP Gateway Project (proposed)
    - Creating a gateway for VCP will be required foundational work to capture clinical data for VCP beneficiaries in the Health Catalyst platform.
3) VITL Gap Remediation Project

- Analytic systems can only provide value when the quality and quantity of source data is sufficient. The gap remediation work performed by VITL is critical to ensuring that the ACOs have high-quality clinical data from our participants to support quality and outcomes measurement, and is a pre-requisite to this project along with the VITL Data Quality project mentioned below.

4) VITL Data Quality Project (under way)
   - As mentioned above, data quality is critical to the success of any analytics initiative. VITL's efforts to improve the quality of data coming from clinical source systems are foundational work for this project.
5) Blueprint Clinical Registry Migration Project
   - The DocSite clinical registry is a rich repository of clinical data for Blueprint and ACO attributed lives, with history preceding what is available through currently VITL. Developing a plan for use of this important asset will be essential to developing a collaborative PHM approach.
6) Expanding Population Health Strategies Project (multi-ACO Learning Collaboratives)
   - RCPC/UCC efforts and statewide learning collaboratives are informed by and rely on population health data that is presented in a digestible and relevant manner.

Applying project learning on a state-wide basis

As previously described, the combination of statewide reach, full continuum of care providers, 3 ACOs, and the Blueprint for Health under a collaborative informatics model has the potential to form a strong population health management platform able to meet the Three Part Aim for a population of over 160,000 lives. The output of the integrated informatics platform will provide direct benefit to statewide providers through the following forums:

- Joint meetings between clinical and administrative leadership of CHAC, HealthFirst, OCV and Blueprint.

- RCPCs/UCCs - represent local multidisciplinary teams that carry out the clinical priorities and engage in data driven process improvement activities. The established RCPCs/UCCs in each HSA have invited participation from the following entities:

  - Leaders from the 3 ACOs
  - Vermont Blueprint for Health
  - OCV contracted Regional Clinician Representatives and Clinical Consultants
  - Clinical and Quality Improvement experts from local or referring hospital systems
  - Representation from the primary care community, including FQHCs, RHCs and independent providers
  - Representation from care coordination entities (e.g., Blueprint Community Health Team extenders, commercial payers, SASH)
  - Continuum of care providers (home health, skilled nursing, hospice, designated agencies etc.)
  - Content experts (pediatric mental health, palliative care, chronic care etc.)
  - State agencies that serve the populations (e.g., VDH, VCCI and IFS)

Members of the RCPC/UCC team foster involvement and ownership at the local level, leading the way on care and delivery transformation.

- Statewide Learning Collaboratives: In 2014, Clinical staff from all 3 ACOs and the Blueprint for Health worked with staff from the Green Mountain Care Board to develop and implement a statewide Learning Collaborative focused on improving care management for Vermonters. The goal of the Integrated Communities Care Management Learning Collaborative is to learn about and implement promising interventions to better integrate cross-organization care management; increase knowledge of data sources, and use data to identify at-risk people and understand their needs; improve communication between organizations; reduce fragmentation, duplication, and gaps in care; and determine if interventions improve coordination of care. Agnostic of ACO affiliation, this Collaborative included teams from 3 pilot

communities and included representation from both the healthcare community, and community agencies. Response to the initial Collaborative was so positive that in 2015 two additional cohorts of Learning Collaboratives began. These cohorts are reaching out to an additional eight (8) health service areas from across the state.

Integrated analytics designed and deployed by the 3 ACOs and the Blueprint will help advance Vermont's clinical improvement efforts across the regions of the state by delivering valuable and actionable information from a single source of truth, and with an integrated approach to measurement.

Data Sharing and Connection with Existing Health Information

The ability to provide comprehensive and real-time clinical information to every health care provider is an essential requirement as part of a Population Health Management infrastructure designed to reduce costs and provide better care.

OCV delivers population-level cost, quality, and utilization analytics to compare data at an HSA-level on a number of key metrics. Additionally, custom analyses and patient-level detail reports are developed from the OCV informatics platform to support RCPC/UCC quality improvement projects.

Reporting is generated by a team of highly-skilled technical and business analysts at OCV who employ state-of-the-art approaches to covered population demographic profiles, disease state and episode registries, risk assessment, utilization analysis, cost performance, and population clinical measurement. Internal and external benchmarking, opportunity analysis, predictive modeling, and decision support are appropriately embedded in all approaches.
Specific examples of analyses performed by the OCV Analytics team to date include:

- Episode cost variation analysis by facility for Medicare beneficiaries receiving total joint replacements

- Inpatient cost and utilization comparisons between HSAs
- Readmission analysis
- Ambulatory sensitive condition admission rates by HSA
- Potentially avoidable emergency department use rates by HSA
- Home Health utilization and variation analysis by HSA
- Skilled Nursing Facility utilization and variation analysis by HSA
- Enhanced medication reconciliation reporting for a patient-centered medical home practice, combining claims and EMR data
- Beneficiary-level detail of patient risk factors for distribution to primary care providers

We envision that these types of analyses will be made available to CHAC and VCP and incorporated into an integrated analytic approach aimed at improving care for the Vermont population, regardless of ACO affiliation.

OCV, CHAC and VCP have collaborated with the Vermont Blueprint for Health to design co-branded provider and practice level reporting using the VHCURES all-payer claims database, the DocSite clinical registry, along with clinical data from the VHIE in order to meaningfully support care delivery transformation. These reports provide a comprehensive, multi-payer view of practice patient panels (including non-ACO beneficiaries) and will be designed to meet the measurement needs of the ACO while providing meaningful and actionable performance data for practices. Part of the objectives of this project are to continue design and planning work to ensure that reporting from the combined ACO analytics platform, in conjunction with valuable analytics from the Blueprint, will support the work of the RCPCs/UCCs.

Much effort has been focused in the last 2 years to increase the quantity and quality of data available for sharing between providers and ACOs for quality improvement and care coordination efforts. VITL's gap remediation projects have contributed to this effort. Practices have put significant resources into increasing the utility and interoperability of their EMR systems as well. For example, nearly all HealthFirst/VCP practices use EHRs, with 95% achieving Meaningful Use status through Medicare. Nearly all practices are also well-integrated with

VITL/HIE, with many large primary care practices already sending and receiving clinical data to and from the VHIE. HealthFirst/VCP has used previous SIM funds to enable and support community practices in collecting and documenting important population health measures in their EHRs over the past two years. The care being delivered by community practices according to population health measures is of very high quality according to all ACO quality reporting score cards, however VCP/HealthFirst does not currently have the capability to parse and manipulate claims data in an effective way, such that it can be paired with clinical data to give a "360 view" of the patient population. HealthFirst/VCP would like to march down the path of achieving this goal in alignment with OCV and CHAC, so that all provider networks in the state are able to review population health data with the same lens.

Successful Population Health Management requires the combination of claims from disparate payers and clinical data from the HIE to facilitate advanced analysis and reporting to participants, ACO leaders, and regulators. Additionally, the combination of data from the 3 ACOs and the Blueprint will allow for the analysis required to assess the feasibility and mechanism of creating a single "O" with full downside risk for a combined population in 2017.

Alternative funding sources sought

The annual operating budget for OCV is approximately $9M and is at scale with required capabilities. In 2015, the University of Vermont Medical Center (UVMMC) and Dartmouth-Hitchcock Health (D-HH) provided combined annualized funding of $4.7M. Additional funding in the amount of $2M came from network participants through participant fees and the remaining funds came from a VHCIP SIM grant. OneCare's informatics platform and personnel are funded through its operating budget.

CHAC's operations to date have been supported by a combination of member investment, VHCIP grants, and leveraged federal grants. In July 2015, the VHCIP Core Team approved additional funding to support CHAC's work, including $144,000 to support the selection and

implementation of an analytics solution for CHAC's claims data in 2016 (VHCIP grant amendment pending). If this proposal is approved, CHAC is committed to utilizing those funds in alignment with this joint analytics solution (e.g., to accelerate a provider portal implementation, etc.)

HealthFirst/VCP currently relies on SIM Grant funding to support its ACO infrastructure. SIM funds support an annual budget of approximately $300,000 per year. Previously, to support engagement in the Medicare Shared Savings program, HealthFirst partnered with Universal American. UA funded more robust analytics and care coordination ACO infrastructure at the level of $750,000 annually, but that funding stream ended on Dec 31, 2014. HealthFirst/VCP plans to continue support ACO infrastructure through shared savings or population-health payments that reward high-quality, low-cost ("high-value") care.

Technical Assistance Sought

At this time, we are not seeking technical support from State.

Return on Investment (cost and quality)

The integrated informatics approach we propose will provide CHAC and VCP/Healthfirst with an analytics platform that is significantly more affordable than what would be achievable if implementing independently. Quotes from vendors for a single implementation range from $144,000 to $1,250,000, however the products vary greatly and a lower-cost product would necessarily not have the capabilities of the solution envisioned in this proposal. Each organization would also need to fund labor for programmers, project managers, staff time for validation, create separate projects with VITL, etc. Each ACO could independently require an informatics budget of over $1 million annually to maintain separate and redundant systems.

Additionally, having multiple analytics systems with overlapping or conflicting information does nothing to advance us into a truly integrated Population Health Management Model with common definitions and approaches.

Synergy with other activities underway (avoiding duplication)

OCV, CHAC, VCP and Blueprint have a strong history of collaborating together with the goal of improving health care for the Vermont population. OCV, CHAC and VCP have participated in the following collaborative efforts:

- Aligned with the Vermont Blueprint for Health on quality measures linked to medical home payments
- Collaborated with the Vermont Blueprint for Health to provide co-branded practice level reporting using VHCURES, DocSite, and clinical data from the VHIE in order to meaningfully support care delivery transformation. These reports will be designed to directly support the work of the RCPCs/UCCs
- Partnered with the Vermont Blueprint for Health and VITL on an ACO data exchange initiative to serve our common goal for high quality, meaningful and actionable data that would bring efficiency to our care coordination and quality collection efforts.
- Partnered with the Vermont Health Care Innovation Project, the Vermont Blueprint for Health and its providers to develop and implement learning collaboratives aimed at building high-performing, multidisciplinary care coordination systems that include patients and families as partners. The learning collaboratives will explore whether integrated and collaborative care coordination services can improve quality of care, patient and family experience, and health and wellness while reducing the overall burden of cost to the health care system.

We believe that statewide, multi-ACO collaboration is significantly better than duplicating scarce resources and allows for the 3 ACOs and Blueprint to work together to promote evidence-based medicine, improve beneficiary engagement, meet quality and cost metrics and coordinate care in a more efficient manner.

Project Implementation Plan and Timeline

ID	Task Name	Start	Finish
1	Visioning and Discovery	1/1/2016	1/29/2016
2	Project Design Planning	2/1/2016	2/26/2016
3	Legal/Contracting Work	1/1/2016	3/30/2016
4	Technical Implementation	4/1/2016	12/30/2016
5	Education and Dissemination	11/1/2016	1/30/2017

A more detailed project plan will be developed as part of the “Project Design Planning” task listed above.

Budget Narrative

Project Goal	Requirement	Amount	Notes
Technical Integration of CHAC and VCP/Healthfirst Data into Health Catalyst	Health Catalyst One-Time Perpetual License Fees	$ 555,000.00	
	One Time Health Catalyst Professional Services Fee for Implementation work	$ 266,000.00	Maximum amount, subject to specific project scope and design
	Hosting Fees- 2016	$ 184,200.00	Annual fee
	Connectivity	$ 240,000.00	10K per IP per month
	Qlikview Licenses	$ 13,500.00	Data visualization tool required for Health Catalyst users. $1350 per named user, 5 for CHAC, 5 for VCP
	VITL Implementation Fees for CHAC and VCP Clinical Datamarts	$ 98,000.00	
	VITL hosting fees for CHAC and VCP datamart- 2016	$ 48,000.00	
	Subtotal Technical Integration	**$ 1,404,700.00**	
Legal Work to support multi-ACO and Blueprint Data Sharing and Collaboration	CHAC Legal Fee Support	$ 25,000.00	
	VCP Legal Fee Support	$ 25,000.00	
	OCV Legal Fee Support	$ 25,000.00	
	Subtotal Legal	**$ 75,000.00**	
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	OCV Staff for Planning and Implementation	$ 65,000.00	
	Onpoint Consulting Services for work related to Blueprint data integration	$ 10,000.00	
	Subtotal Staff Time	**$ 205,000.00**	
Project Management	Project Management Contractor	$ 150,000.00	Maximum amount, subject to specific project scope and design
	Subtotal Project Management	**$ 150,000.00**	
	Grand Total	**$1,834,700.00**	

Summary

CHAC, HealthFirst/VCP and OCV have a strong history of collaboration. Together we believe that statewide, multi-ACO collaboration is significantly better than duplicating scarce resources and allows for the 3 ACOs and Blueprint to work together to promote evidence-based medicine, improve beneficiary engagement, meet quality and cost metrics and coordinate care in a more efficient manner. To this end, in 2016 we intend to design and deploy an integrated data, analytic and Population Health Management (PHM) toolset infrastructure based on a combination of existing and planned OneCare, Blueprint and VITL capabilities in order to increase use of advanced analytics for all three ACOs under a coordinated infrastructure.

Attachments

Attachment A: Vermont ACO Integrated Informatics Proposal.ppt

Attachment B: Budget detail

Attachment 9: Status Reports – VHCIP Health Data Infrastructure Projects

VHCIP Project Status Reports – Health Data Infrastructure Focus Area
October 2015

Focus Area: Health Data Infrastructure **2**

Project: Expand Connectivity to HIE – Gap Analyses 2
Project: Expand Connectivity to HIE – Gap Remediation 3
Project: Expand Connectivity to HIE – Data Extracts from HIE 4
Project: Improve Quality of Data Flowing into HIE 5
Project: Telehealth – Strategic Plan 7
Project: Telehealth – Implementation 8
Project: EMR Expansion 9
Project: Data Warehousing 10
Project: Care Management Tools (Shared Care Plan/Universal Transfer Protocol Project) 11
Project: Care Management Tools (Event Notification System) 12
Project: General Health Data – Data Inventory 13
Project: General Health Data – HIE Planning 14
Project: General Health Data – Expert Support 15

Focus Area: Health Data Infrastructure

Focus Area: Health Data Infrastructure
Project: Expand Connectivity to HIE – Gap Analyses

Project Summary: The Gap Analysis is an evaluation of the Electronic Health Record (EHR) system capability of health care organizations, interface ability of the EHR system, and the data transmitted within those interfaces. Conducting the ACO Gap Analysis created a baseline determination of the ability of health care organizations to produce Year 1 Medicare, Medicaid, and Commercial Shared Savings ACO Program quality measure data. The VCP Gap Analysis is evaluating data quality among the 16 designated and specialized service agencies. Finally, the LTSS Gap Analysis was conducted to review the technical capability of LTSS providers statewide.

Project Timeline and Key Facts:

- January 2014 – VITL and ACO teams launch Gap Analysis of the ACO Program quality measures.
- July 2014 – Gap Analysis of the ACO Program quality measure data completed.
- September 2014 – HIS Professionals begins LTSS Technical Assessment.
- January 2015 – Scope of Work for VCP Gap Analysis finalized.
- February 2015 – Work begins for VCP Gap Analysis with introductory meeting with Designated Agencies.
- February 2015 – HIS Professionals submits draft of LTSS Technical Assessment and recommendations.
- April 2015 – LTSS Technical Assessment work put on hold pending federal approvals of funding.
- July 2015 – A total of 67 data quality meetings held with DAs & SSAs.
- October 2015 – LTSS Technical Assessment Final Report to be completed.

Status Update/Progress Toward Milestones and Goals:

- Gap Analysis of ACO Program data quality measures completed in January 2014.
- VITL has conducted numerous data quality interviews with the 16 Designated Mental Health and Specialized Service agencies (DAs and SSAs). VITL has also identified that a number of DA and SSA member agencies' structures are decentralized such that they operate as multiple independent agencies. VCP has confirmed the need for full assessments to be conducted at these agencies. VITL will be pursuing additional funding to accommodate this revised scope.
- LTSS Technical Assessment Final Report to be completed in October 2015 with recommendations on next steps.

Milestones:
Performance Period 1 (CY2014): Perform gap analyses related to quality measures for each payment program, as appropriate; perform baseline gap analyses to understand connectivity of non-Meaningful Use (MU) providers.
Performance Period 1 Carryover (CY2015): Perform gap analyses related to quality measures for each payment program, as appropriate; perform baseline gap analyses to understand connectivity of non-Meaningful Use (MU) providers.
Performance Period 2 (CY 2015): N/A
Performance Period 2 Carryover (CY2016): N/A
Performance Period 3 (CY 2016): N/A

Metrics: CORE_Health Info Exchange_[VT]

Additional Goals:
Lives Impacted: TBD
Participating Providers: 400

Key Documents:

- ACO Gap Analysis (Fall 2014)
- LTSS Final Report (Fall 2015)

State of Vermont Lead(s): Larry Sandage

Contractors Supporting: VITL; Vermont Care Partners; HIS Professionals; Bailit.
To view executed contracts, please visit the **VHCIP Contracts** page.

Additional Supporting Information: N/A

Focus Area: Health Data Infrastructure Project: Expand Connectivity to HIE – Gap Remediation
Project Summary: The Gap Remediation project will address gaps in connectivity and clinical data quality of health care organizations to the Health Information Exchange. The ACO Gap Remediation project improves the connectivity and data quality for all Vermont Shared Savings Program measures among ACO member organizations. The Vermont Care Partners (VCP) Gap Remediation will improve the data quality for the 16 Designated Mental Health and Specialized Service agencies (DAs and SSAs).
Project Timeline and Key Facts: • March 2015 – ACO Gap Remediation work begun by VITL and ACO member organizations • March 2015 – Terminology Services vendor identified by VITL • May 2015 – SET Team work completed by VITL and Medicity • July 2015 – Gap Remediation work continuing as 95 ADT, VXU, and CCD interfaces are in progress • October 2015 –Phase II ACO Gap Remediation proposal • October 2015 – VCP Gap Remediation proposal • January 2016 – Phase I ACO Gap Remediation work to be completed and Phase II Gap Remediation to begin • January 2016 – VCP Gap Remediation work to begin • December 2016 – VCP Gap Remediation work to be completed • December 2016 – Phase II ACO Gap Remediation to be completed
Status Update/Progress Toward Milestones and Goals: • ACO Gap Remediation project includes five projects: Interface and Electronic Health Record Installation, Data Analysis, Data Formatting, Terminology Services, and SE Team. • Contract with VITL executed. ACO Gap Remediation work has been in progress since March, with significant progress to date. • VITL and VCP proposed additional gap remediation work in Quarter 4 of 2015 for Performance Period 3. • The HIE/HIT Work Group is evaluating next steps based on the receipt of the LTSS Technology Assessment.
Milestones: *Performance Period 1 (CY2014):* N/A *Performance Period 1 Carryover (CY2015):* N/A *Performance Period 2 (CY 2015):* Remediate data gaps that support payment model quality measures, as identified in gap analyses: 1. Remediate 50% of data gaps for SSP quality measures by 12/31/15. 2. Develop a remediation plan for gaps identified in LTSS technical gap analysis by 12/31/15. *Performance Period 2 Carryover (CY2016):* Remediate data gaps that support payment model quality measures, as identified in gap analyses: 1. Remediate 50% of data gaps for SSP quality measures by 12/31/15. 2. Develop a remediation plan for gaps identified in LTSS technical gap analysis by 12/31/15. *Performance Period 3 (CY 2016):* 1. Remediate 65% of ACO SSP measures-related gaps as identified in fall 2015. 2. Report on LTSS remediation plan and incorporate into HIT Strategic Plan by 2/28/16. 3. Incorporate into Sustainability Plan by 10/31/16.
Metrics: CORE_Health Info Exchange_[VT]
Additional Goals: # Lives Impacted: # Participating Providers:
Key Documents: •
State of Vermont Lead(s): Georgia Maheras, Larry Sandage
Contractors Supporting: VITL; Vermont Care Partners; HIS Professionals; Pacific Health Policy Group. To view executed contracts, please visit the **VHCIP Contracts** page.
Additional Supporting Information: N/A

Focus Area: Health Data Infrastructure Project: Expand Connectivity to HIE – Data Extracts from HIE
Project Summary: This project provides a secure data connection from the VHIE to the ACOs analytics vendors for their attributed beneficiaries. Allows ACOs direct access to timely data feeds for population health analytics.
Project Timeline and Key Facts: • March 2014 – OneCare (OCV) Gateway build started. • February 2015 – Community Health Accountable Care (CHAC) Gateway build started.
Status Update/Progress Toward Milestones and Goals: • OCV Gateway nearly completed. Estimated completion by November 2015. • CHAC Gateway more than 50% complete. Estimated completion December 2015.
Milestones: *Performance Period 1 (CY2014):* N/A *Performance Period 1 Carryover (CY2015):* Develop ACO Gateways with OneCare Vermont (OCV) and Community Health Accountable Care (CHAC) to support transmission of data extracts from the HIE. *Performance Period 2 (CY 2015):* N/A *Performance Period 2 Carryover (CY2016):* N/A *Performance Period 3 (CY 2016):* N/A
Metrics: CORE_Health Info Exchange_[VT]
Additional Goals: # Lives Impacted: TBD # Participating Providers: TBD
Key Documents: •
State of Vermont Lead(s): Georgia Maheras
Contractors Supporting: Vermont Information Technology Leaders. To view executed contracts, please visit the **VHCIP Contracts** page.
Additional Supporting Information:

Focus Area: Health Data Infrastructure
Project: Improve Quality of Data Flowing into HIE

Project Summary: The Data Quality Improvement Project is an analysis performed of ACO members' Electronic Health Record on each of sixteen data elements. Additional data quality work with Designated Agencies (DAs) to improve the quality of data and usability of data for this part of Vermont's health care system. VITL will engage providers and make workflow recommendations to change data entry to ensure the data elements are captured. In addition, VITL will perform comprehensive analyses to ensure that each data element from each Health Care Organization (HCO) is formatted identically. VITL will work with the HCOs to perform some or all of the following: (1) The HCO can change their method of data entry; (2) the HCO's vendor can change their format used to capture data; and (3) a third party could use a terminology service to transform the data.

Project Timeline and Key Facts:

- March 2015 – VITL-ACO Data Quality work begins by deploying VITL's eHealth Specialist teams to member organizations for review of Data Quality input and workflow.
- July 2015 – Significant progress has been made in data quality assessment and initial phases of gap remediation through an existing underlying contract approved in Performance Period 1; additional gap remediation progress in Performance Periods 2 & 3 pending Federal approval of contract amendment

Status Update/Progress Toward Milestones and Goals:

- VITL contract in place includes a Terminology Services project to provide services to translate clinical data sets submitted to the HIE into standardized code sets.
- VITL contract in place to work with providers and the ACOs to improve the quality of clinical data in the HIE for use in population health metrics within the Shared Savings Program.
- Data quantity and quality improvements have resulted so far in raising from 17% to 39% of total OCV beneficiaries the capability within the statewide HIE at VITL to produce clinical quality ACO measures. Additional work toward the project goal of 62% will occur in Performance Period 2.
- Contracts with Vermont Care Network and VITL to improve data quality and work flows at Designated Mental Health Agencies (DAs). VITL will work with DAs to implement the desired state in each agency through the development of a toolkit that will provide the necessary documentation, workflows and answers to specific questions needed.

Milestones:

Performance Period 1 (CY2014): N/A

Performance Period 1 Carryover (CY2015): Data quality initiatives with the DAs/SSAs: Conduct 90 data quality improvement meetings with the DAs/SSAs to focus on the analysis of the current state assessments for each agency compared to the desired state to measure 'the gap'. Once the gap results are determined, individual custom remediation plans will be developed for each member agency.

Performance Period 2 (CY 2015):

1. Implement terminology services tool to normalize data elements within the VHIE by 10/1/15.
2. Engage in workflow improvement activities at provider practices to improve the quality of the data flowing into the VHIE as identified in gap analyses. Start workflow improvement activities in 30% of ACO attributing practices by 12/31/15.

Performance Period 2 Carryover (CY2016):

1. Implement terminology services tool to normalize data elements within the VHIE by 10/1/15.
2. Engage in workflow improvement activities at provider practices to improve the quality of the data flowing into the VHIE as identified in gap analyses. Start workflow improvement activities in 30% of ACO attributing practices by 12/31/15.

Performance Period 3 (CY 2016):

1. Engage in workflow improvement activities at provider practices to improve the quality of the data flowing into the VHIE as identified in gap analyses. Start workflow improvement activities in 50% of ACO attributing practices by 6/30/16. Complete workflow improvement by 12/31/16.
2. Engage in workflow improvement activities at designated mental health agencies (DAs) as identified in gap analyses. Start workflow improvement activities in all 16 DAs by 6/30/16 and complete workflow improvement by 12/31/16.

Metrics: CORE_Health Info Exchange_[VT]

Additional Goals:
Lives Impacted: TBD # Participating Providers: 977
Key Documents: • VITL Contract SIM Amendment 2 • SFY 15 Year-End VITL Progress Report • Gap Remediation Monthly Status Report – 8/31/15
State of Vermont Lead(s): Larry Sandage
Contractors Supporting: Behavioral Health Network/Vermont Care Network; Bi-State Primary Care Association/Community Health Accountable Care; HIS Professionals; UVM Medical Center/OneCare Vermont; Vermont Information Technology Leaders. To view executed contracts, please visit the **VHCIP Contracts** page.
Additional Supporting Information:

Focus Area: Health Data Infrastructure
Project: Telehealth – Strategic Plan

Project Summary: Vermont contracted with JBS International to develop a Statewide Telehealth Strategy to guide future investments in this area. The Strategy, developed in collaboration between the State of Vermont and private sector stakeholders, includes four core elements: a coordinating body to support telehealth activities; alignment of state policies relevant to telehealth; telehealth technology investments that are secure, accessible, interoperable, cloud-based, and aligned with Vermont's HIT infrastructure; and clinician engagement. The Strategy also includes a Roadmap based on Vermont's transition from volume-based to value-based reimbursement methodologies to guide prioritization of telehealth projects and their alignment with new clinical processes adopted as payment reform evolves.

Project Timeline and Key Facts:

- February 2015 – Contractor presents project plan to the HIE/HIT Work Group.
- March-July 2015 – Vermont Telehealth Steering Committee convenes in March 2015 to guide Telehealth Strategy development; the Steering Committee continues to meet through July.
- June 2015 – Telehealth Strategy draft submitted to DVHA contract manager.
- June 2015 – Contractor presents draft strategy elements to the HIE/HIT Work Group for comments.
- August 2015 – Final Strategy elements approved.
- June-September 2015 – Strategy review and editing.
- September 2015 – Final Strategy document approved by State of Vermont; final Strategy released.

Status Update/Progress Toward Milestones and Goals:

- JBS International convened the Vermont Telehealth Steering Committee in March 2015 to guide Telehealth Strategy development. Steering Committee members met biweekly via phone between March and July to come to consensus on a telehealth definition, identify guiding principles for the strategy, review key features on telehealth programs across the country, and develop strategy elements.
- A draft Statewide Telehealth Strategy was submitted to DVHA in June 2015; JBS worked with SOV staff to refine the Strategy between June and September 2015.
- The final strategy elements were approved by the HIE/HIT Work Group, Steering Committee, and Core Team in August 2015.
- The State of Vermont finalized the Strategy in September 2015 and released the final Strategy in mid-September.

Milestones:
Performance Period 1 (CY2014): N/A
Performance Period 1 Carryover (CY2015): N/A
Performance Period 2 (CY 2015): Develop Telehealth Strategic Plan by 9/15/15.
Performance Period 2 Carryover (CY2016): N/A
Performance Period 3 (CY 2016): N/A

Metrics: CORE_Health Info Exchange_[VT]

Additional Goals:
Lives Impacted: N/A
Participating Providers: N/A

Key Documents:

- A Statewide Telehealth Strategy for the State of Vermont
- Vermont Telehealth Pilots RFP

Lead(s): Sarah Kinsler

Contractors Supporting: JBS International.
To view executed contracts, please visit the **VHCIP Contracts** page.

Additional Supporting Information:

Focus Area: Health Data Infrastructure
Project: Telehealth – Implementation

Project Summary: Vermont is seeking pilot projects that can address a variety of geographical areas, telehealth approaches and settings, and patient populations over a 12-month time period. This RFP's primary purpose is to explore ways in which a coordinated and efficient telehealth system can support value-based care reimbursement throughout the state of Vermont. Successful proposals must demonstrate how they align with the health reform efforts currently being implemented as part of the SIM Grant process.

Project Timeline and Key Facts:

- August 2015 – Approval of draft RFP scope.
- September 2015 – Edits to draft RFP scope in response to comments; bid review team assembly.
- September 2015 – RFP released.
- October 2015 – Pilot projects to be selected.
- November 2015 – Pilot launch.
- November 2015-November 2016 – Pilot period.
- November 2016-December 2016 – Pilot project wrap-up, evaluation, and reporting.

Status Update/Progress Toward Milestones and Goals:

- A draft RFP scope was developed by the State and JBS International, drawing on the telehealth definition, guiding principles, and key Telehealth Strategy elements.
- The draft RFP scope was approved by the HIE/HIT Work Group, Steering Committee, and Core Team in August 2015.
- The RFP was released on September 18, 2015; the bid period closed on October 23, 2015.
- The bids are under review.

Milestones:

Performance Period 1 (CY2014): N/A
Performance Period 1 Carryover (CY2015): N/A
Performance Period 2 (CY 2015):

1. Release telehealth program RFP by 9/30/15.
2. Award at least one contract to implement the scope of work in the telehealth program RFP by 11/30/15.

Performance Period 2 Carryover (CY2016):

1. Release telehealth program RFP by 9/30/15.
2. Award at least one contract to implement the scope of work in the telehealth program RFP by 11/30/15.

Performance Period 3 (CY 2016): Make recommendations for the Sustainability Plan by 10/31/16.

Metrics: CORE_Health Info Exchange_[VT]

Additional Goals:
Lives Impacted: N/A – Program not yet launched.
Participating Providers: N/A – Program not yet launched.

Key Documents:

- A Statewide Telehealth Strategy for the State of Vermont
- Vermont Telehealth Pilots RFP

Lead(s): Sarah Kinsler

Contractors Supporting: TBD – to be selected in October 2015.

Additional Supporting Information:

Focus Area: Health Data Infrastructure Project: EMR Expansion
Project Summary: EMR Expansion focuses on assisting in the procurement of EMR systems for non-Meaningful Use (MU) providers. This would include technical assistance to identify appropriate solutions and exploration of alternative solutions.
Project Timeline and Key Facts: • January 2015 – EMR acquisition project begun with VITL, VCP, and ARIS for five Specialized Service Agencies (SSAs). • January-June 2015 – VITL assists Vermont DMH in procuring new EMR solution for State Psychiatric Hospital. • February 2015 – Draft LTSS Technical Assessment submitted by HIS Professionals to assist in establishing. understanding of technical gaps among LTSS providers. • July 2015 – Vendor selected for SSA EMR acquisition and contract negotiations completed. • August 2015 – Contract executed for SSA EMR acquisition. • October 2015 – LTSS Technical Assessment and recommendations to be completed.
Status Update/Progress Toward Milestones and Goals: • EMR acquisition for five Specialized Service Agencies complete. • LTSS Technical Assessment to be completed in October 2015 with recommendations for 2016 for further actions. • VITL contract with the Department of Mental Health to support procurement of the EMR system for the State's new hospital.
Milestones: *Performance Period 1 (CY2014):* N/A *Performance Period 1 Carryover (CY2015):* N/A *Performance Period 2 (CY 2015):* 1. Assist in procurement of EMR for non-MU providers: Vermont State Psychiatric Hospital (by 6/30/15) and Developmental Disability agencies (by 12/31/15). 2. Explore non-EMR solutions for providers without EMRs: Develop plan based on LTSS technical gap analysis. *Performance Period 2 Carryover (CY2016):* N/A *Performance Period 3 (CY 2016):* N/A
Metrics: CORE_Health Info Exchange_[VT]
Additional Goals: # Lives Impacted: TBD # Participating Providers: TBD
Key Documents: •
State of Vermont Lead(s): Larry Sandage
Contractors Supporting: VITL, Vermont Care Partners, ARIS. To view executed contracts, please visit the **VHCIP Contracts** page.
Additional Supporting Information: N/A

Focus Area: Health Data Infrastructure
Project: Data Warehousing

Project Summary: The VCN Data Repository will allow the Designated Mental Health Agencies (DA) and Specialized Service Agencies (SSA) to send specific data to a centralized data repository. Long-term goals of the data repository include accommodating connectivity to the Vermont Health Information Exchange (VHIE), as well as Vermont State Agencies, other stake holders and interested parties. In addition to connectivity, it is expected that this project will provide VCN members with advanced data analytic capabilities to improve the efficiency and effectiveness of their services, and support the Triple Aim of health care reform. This project will also allow the network to show the incredible value it provides to the people of Vermont and participate more fully in health care delivery reform. Additionally it will support the agencies as we transition from a fee for service reimbursement structure, to an outcome based payment methodology.

Project Timeline and Key Facts:

- March 2015 – RFP released for this project.
- May 2015 – Selection Committee selects preferred vendor and begins contract negotiations.
- September 2015 – Vendor contract executed.
- September 2016 – Phase One as defined in contract to be completed.

Status Update/Progress Toward Milestones and Goals:

- Vermont Care Network (VCN/BHN) is working on behalf of Designated Mental Health Agencies (DAs) and Specialized Service Agencies (SSAs) to develop a behavioral health-specific data repository, which will to aggregate, analyze, and improve the quality of the data stored within the repository and to share extracts with appropriate entities.
- VCN/BHN contract has been approved by DVHA.
- VCN/BHN is working on finalizing the contract now that DVHA has approved the contract.
- Data quality work, data dictionary development, training of analytic software, and other supporting tasks are all in progress to support the project once the team is ready for implementation.

Milestones:

Performance Period 1 (CY2014): N/A

Performance Period 1 Carryover (CY2015): Prepare to develop infrastructure to support the transmission, aggregation, and data capability of the DAs and SSAs data into a mental health and substance abuse compliant Data Warehouse.

Performance Period 2 (CY 2015):

1. Implement Phase 1 of DA/SSA data warehousing solution by 12/31/15 (implementation follows implementation project plan).
2. Procure clinical registry software by 12/31/15.
3. Develop a cohesive strategy for developing data systems to support analytics by 12/31/15.

Performance Period 2 Carryover (CY2016):

1. Implement Phase 1 of DA/SSA data warehousing solution by 12/31/15 (implementation follows implementation project plan).
2. Procure clinical registry software by 12/31/15.
3. Develop a cohesive strategy for developing data systems to support analytics by 3/1/16.

Performance Period 3 (CY 2016):

1. Implement Phase 2 of DA/SSA data warehousing solution by 12/31/16.
2. Begin to implement cohesive strategy for developing data systems to support analytics by 12/31/16.

Metrics: CORE_Health Info Exchange_[VT]

Additional Goals:

Lives Impacted: 35,000
Participating Providers: 5,000

Key Documents: Data Repository RFP

State of Vermont Lead(s): Larry Sandage

Contractors Supporting: Behavioral Health Network/Vermont Care Network; HIS Professionals; Stone Environmental; Vermont Information Technology Leaders; TBD.
To view executed contracts, please visit the **VHCIP Contracts** page.

Focus Area: Health Data Infrastructure

Project: Care Management Tools (Shared Care Plan/Universal Transfer Protocol Project)

Project Summary: The Shared Care Plans/Universal Transfer Protocol (SCÜP) project will provide solutions to specific use cases, such as Shared Care Plans (SCP) and Universal Transfer Protocols (UTP), to Vermont's provider organizations. These projects will ensure that the core components of both a universal transfer protocol and a shared care plan will be captured in a technical solution that allows providers to electronically exchange critical data and information as they work together in a team based, coordinated model of care; particularly when people transition from one care setting to another.

Project Timeline and Key Facts:

- September 2014 – Contractor im21 beings UTP discovery.
- February 2015 – Draft UTP charter and final UTP report submitted.
- April 2015 – Through Learning Collaboratives, the need for a technical solution for Shared Care Plans is identified; UTP and SCP projects are aligned under a single project named SCÜP.
- June 2015 – Discovery on aligned SCP/UTP project begins.
- July 2015 – Requirements gathering sessions with multiple communities are performed and initial technical and business requirements are drafted.
- August 2015 – Requirements are validated with target communities.
- October 2015 – Technical Assessments of existing or proposed solutions meeting SCÜP use cases are reviewed for alignment.
- November 2015 – Final technical proposal to be submitted to HIE/HIT by SCÜP team.

Status Update/Progress Toward Milestones and Goals:

- Contractor performed discovery and drafted a Universal Transfer Protocol charter in 2014 and early 2015.
- Integrated Care Management Learning Collaborative Cohort 1 communities requested shared care planning tools.
- Universal Transfer Protocol and Shared Care Plan projects have merged. New project, SCÜP, currently in discovery and design phase.

Milestones:

Performance Period 1 (CY2014): N/A

Performance Period 1 Carryover (CY2015): Discovery project to support long- term care, mental health, home care and specialist providers through a Universal Transfer Protocol solution.

Performance Period 2 (CY 2015): Engage in discovery, design and testing of shared care plan IT solutions, an event notification system, and uniform transfer protocol. Create project plans for each of these projects and implement as appropriate, following SOV procedure for IT development:

1. Event Notification System: Procure solution by 11/1/15 implement according to project plan for phased roll out.
2. SCÜP (shared care plans and uniform transfer protocol): Create project plan for this project that includes business requirements gathering by 9/30/15; technical requirements by 10/31/15; and final proposal for review by 11/30/15.

Performance Period 2 Carryover (CY2016): Engage in discovery, design and testing of shared care plan IT solutions, an event notification system, and uniform transfer protocol. Create project plans for each of these projects and implement as appropriate, following SOV procedure for IT development:

1. Event Notification System: Procure solution by 11/1/15 implement according to project plan for phased roll out.
2. SCÜP (shared care plans and uniform transfer protocol): Create project plan for this project that includes business requirements gathering by 9/30/15; technical requirements by 10/31/15; and final proposal for review by 11/30/15.

Performance Period 3 (CY 2016): SCÜP: Launch pilot project based on approved proposal by 8/1/16. Impact 45 (15 in each of three communities) providers by 12/31/16.

Metrics: CORE_Health Info Exchange_[VT]

Additional Goals:

Lives Impacted: TBD

Participating Providers: TBD

Key Documents:

State of Vermont Lead(s): Larry Sandage

Contractors Supporting: Bailit Health Purchasing; im21; Vermont Information Technology Leaders.
To view executed contracts, please visit the **VHCIP Contracts** page.

Focus Area: Health Data Infrastructure Project: Care Management Tools (Event Notification System)
Project Summary: The Event Notification System (ENS) project will implement a system to proactively alert participating providers regarding their patient's medical service encounters. VITL and the Vermont ACOs are performing discovery, design, and piloting of proposed ENS solutions.
Project Timeline and Key Facts: • July 2014 – VITL begins ENS project. • August 2014 – Proof of concept begins with 2 selected vendors. • January 2015 – Research and discovery related to vendor selection. • September 2015 – Vendor selected. • October 2015 – VITL, State, and vendor are in contract negotiations.
Status Update/Progress Toward Milestones and Goals: • State of Vermont is working with VITL to procure Event Notification System. Contractor selected. Anticipated start date of 11/1/15.
Milestones: *Performance Period 1 (CY2014):* N/A *Performance Period 1 Carryover (CY2015):* Discovery project to support long- term care, mental health, home care and specialist providers through a Universal Transfer Protocol solution. *Performance Period 2 (CY 2015):* Engage in discovery, design and testing of shared care plan IT solutions, an event notification system, and uniform transfer protocol. Create project plans for each of these projects and implement as appropriate, following SOV procedure for IT development: 1. Event Notification System: Procure solution by 11/1/15 implement according to project plan for phased roll out. 2. SCÜP (shared care plans and uniform transfer protocol): Create project plan for this project that includes business requirements gathering by 9/30/15; technical requirements by 10/31/15; and final proposal for review by 11/30/15. *Performance Period 2 Carryover (CY2016):* Engage in discovery, design and testing of shared care plan IT solutions, an event notification system, and uniform transfer protocol. Create project plans for each of these projects and implement as appropriate, following SOV procedure for IT development: 1. Event Notification System: Procure solution by 11/1/15 implement according to project plan for phased roll out. 2. SCÜP (shared care plans and uniform transfer protocol): Create project plan for this project that includes business requirements gathering by 9/30/15; technical requirements by 10/31/15; and final proposal for review by 11/30/15. *Performance Period 3 (CY 2016):* SCÜP: Launch pilot project based on approved proposal by 5/1/16. Impact 45 (15 in each of three communities) providers by 12/31/16.
Metrics: CORE_Health Info Exchange_[VT]
Additional Goals: # Lives Impacted: # Participating Providers:
Key Documents: •
Lead(s): Georgia Maheras, Larry Sandage
Contractors Supporting: Vermont Information Technology Leaders. To view executed contracts, please visit the **VHCIP Contracts** page.
Additional Supporting Information:

Focus Area: Health Data Infrastructure
Project: General Health Data – Data Inventory

Project Summary: Vermont has engaged a contractor, Stone Environmental, to complete a statewide health data inventory that will support future health data infrastructure planning. This project will build a comprehensive list of health data sources in Vermont, gather key information about each, and catalogue them in a web-accessible format. The resulting data inventory will be a web-based tool that allows users (both within the State and external stakeholders) to find and review comprehensive information relating to the inventoried datasets.

Project Timeline and Key Facts:

- November 2014: Contract executed.
- December 2014: Project launch.
- January 2015: Project convenes Steering Committee to guide work.
- January-May 2015: Dataset discovery and initial information collection.
- February-May 2015: One-on-one meetings with steering committee members and other key stakeholders.
- April-May 2015: Dataset prioritization.
- May 2015-August 2015: Contract on hold pending CMMI approval of Performance Period 2 budget.
- August 2015: Project re-launched.
- September-November 2015: Data collection on prioritized datasets, recommendations development.
- November 2015: Recommendations presented to Health Data Infrastructure Work Group.

Status Update/Progress Toward Milestones and Goals:

- Contractor selected and contract executed; work was on hold May-August 2015 pending federal budget approval.
- Work on data inventory is nearly complete. Initial dataset discovery began in January. Datasets are logged in an online system (linked below).
- Contractor, working with SOV staff and key stakeholders, has identified ~20 high priority datasets for deeper data collection; additional data collection on these prioritized datasets began in May 2015 and relaunched in September.
- Contractor has engaged in research on possible portal framework options, and has tentatively selected a solution.

Milestones:

Performance Period 1 (CY2014): Conduct data inventory.
Performance Period 1 Carryover (CY2015): Complete data inventory.
Performance Period 2 (CY 2015): N/A
Performance Period 2 Carryover (CY2016): N/A
Performance Period 3 (CY 2016): N/A

Metrics:

CORE_Health Info Exchange_[VT]

Additional Goals:

Lives Impacted: N/A
Participating Providers: N/A

Key Documents:

- Stone Environmental Health Data Inventory Contract
- Preliminary Inventory (password required)

State of Vermont Lead(s):

Contractors Supporting: Stone Environmental.
To view executed contracts, please visit the **VHCIP Contracts** page.

Additional Supporting Information:

Focus Area: Health Data Infrastructure Project: General Health Data – HIE Planning
Project Summary: The HIE Planning project resulted from a perceived gap in high-level planning and research in local and nationwide best practices for providing a robust, interoperable ability to transmit accurate and current health information throughout the Vermont health care landscape. This project will conduct further research in best practices around improving clinical health data quality and connectivity resulting in recommendations to the HIE/HIT Work Group. Additionally, the HIE/HIT Work Group has participated on multiple occasions in the 2015 revision of Vermont Health Information Technology Plan, which is scheduled for release in January 2016.
Project Timeline and Key Facts: • December 2014 – Contractor selected for HIE Planning project. • April 2015-September 2015 – HIE Planning project contracting process put on hold pending Federal approval. • October 2015 – HIE Planning work to begin.
Status Update/Progress Toward Milestones and Goals: • Contractor selected and kickoff meeting with outlined roles and responsibilities conducted.
Milestones: *Performance Period 1 (CY2014):* Provide input to update of state HIT plan. *Performance Period 1 Carryover (CY2015):* Continued support, input, and participation into the Vermont HIT Plan. *Performance Period 2 (CY 2015):* 1. VHCIP will provide comment into the HIT Strategic Plan at least 4 times in 2015. 2. HDI work group will identify connectivity targets for 2016-2019 by 12/31/15. *Performance Period 2 Carryover (CY2016):* 1. VHCIP will provide comment into the HIT Strategic Plan at least 4 times in 2015. 2. HDI work group will identify connectivity targets for 2016-2019 by 12/31/15. *Performance Period 3 (CY 2016):* Develop connectivity targets for 2016-2019 by 6/30/16.
Metrics: CORE_Health Info Exchange_[VT]
Additional Goals: # Lives Impacted: N/A # Participating Providers: N/A
Key Documents: •
State of Vermont Lead(s): Georgia Maheras
Contractors Supporting: Stone Environmental. To view executed contracts, please visit the **VHCIP Contracts** page.
Additional Supporting Information:

Focus Area: Health Data Infrastructure Project: General Health Data – Expert Support
Project Summary: This is a companion project to all of the projects within the Health Data Infrastructure focus area. Due to the nature of those projects, we need specific skills to support the State and stakeholders in decision-making and implementation. The specific skills needed are IT Enterprise Architects, Business Analysts, and Subject-Matter Experts.
Project Timeline and Key Facts: • Accessed as necessary to support various Health Data Infrastructure projects.
Status Update/Progress Toward Milestones and Goals: • IT-specific support to be engaged as needed. • Enterprise Architect, Business Analyst and Subject Matter Experts identified to support the design phase of SCÜP.
Milestones: *Performance Period 1 (CY2014):* N/A *Performance Period 1 Carryover (CY2015):* N/A *Performance Period 2 (CY 2015):* Procure appropriate IT-specific support to further health data initiatives – depending on the design of projects described above, enterprise architects, business analysts, and others will be hired to support appropriate investments. *Performance Period 2 Carryover (CY2016):* Procure appropriate IT-specific support to further health data initiatives – depending on the design of projects described above, enterprise architects, business analysts, and others will be hired to support appropriate investments. *Performance Period 3 (CY 2016):* Procure appropriate IT-specific support to further health data initiatives – depending on the design of projects described above, enterprise architects, business analysts, and others will be hired to support appropriate investments.
Metrics: CORE_Health Info Exchange_[VT]
Additional Goals: # Lives Impacted: N/A # Participating Providers: N/A
Key Documents: •
State of Vermont Lead(s):
Contractors Supporting: Stone Environmental; TBD. To view executed contracts, please visit the **VHCIP Contracts** page.
Additional Supporting Information: