

CONNECTICUT
HEALTHCARE
INNOVATION PLAN



Health Information Technology Council Meeting

February 20, 2015

DRAFT

Meeting Agenda

Item	Allotted Time
1. Introductions	5 min
2. Public Comments	10 min
3. Minutes Approval	5 min
4. Interview Summary	10 min
5. Goal	5 min
6. Charge	50 min
7. Solution	15 min
8. Workload	10 min
9. Next Steps	10 min
10. Appendix	

Interview Summary Common Themes

- **HIT Council goal** is to recommend the key infrastructure required to support SIM Programs:
 - Technology to support SIM, not technology for technology's sake or broader applicability (as the single intent)
- **HIT Charge** is multifaceted:
 - Understand the big picture: Need to understand process and interactions among components to facilitate connectivity and data sharing
 - Design a consistent process for the development of designs required for key IT components
 - Develop an approach that is streamlined and inclusive
 - Identify high risk components that need attention and when they should be addressed
 - Recognize low hanging fruit and pursue to show success
- **HIT Solution** must be practical and successful
 - Use a release-based approach, starting with the “basic model” to fulfill the requirements for year 1
 - Implement subsequent releases to fill the gaps
 - Set and achieve realistic timelines
- **HIT Workload** is substantial based on the plan. Need to work offline in between council meetings and modify timeline and goals as required to ensure success:
 - Create Workstream/Design groups
 - Establish formal communications and interactions with other councils
 - Assess if we have right skills/resources to complete the work for each release
- **HIT Council meetings**
 - Members are committed to attending
 - Make meetings more interactive. Members want to be involved in making recommendations
 - Attend in person
 - Stay on topic with clear objectives
 - Send out materials ahead of time

Develop recommendations for the Healthcare Innovation Steering Committee with respect to HIT use by SIM participants (e.g. hospitals, practices, state agencies, consumers) to achieve the goals of the SIM initiatives. Specific recommendations and deliverables (outcomes) include:

- Review selected (owned) technologies
- Recommend solution set of technologies for unanswered questions
- Outline high-level diagram of the technology and interactions, and identify dependencies
- Develop implementation approach and roadmap
- Integrate HIT timeline with SIM Initiatives



HIT Council Goal: IT Components for SIM Programs

	SIM Innovation Grant Programs Components	EMPI	Consent Registry	Provider Dir	Reporting /Edge Server	AP CD	Direct Mssging Alert engine	Disease Reg, Crowd Sourcing	EHR SaaS	Care Analyzer	Other
Statewide	Population Health										No HIT
	Quality Measure Alignment										No HIT
	SSP based on Care Experience and Aligned Quality Measures	X	?	X	X	X		X			
	Value-based Insurance Design										No HIT
	Workforce Development										No HIT
Targeted	Medicaid QISSP			X						X	
	AMH Glide Path		X	X			X				
	Clinical Community Integration – TTA		X	X			X				
	Learning Collaborative										No HIT

X = priority for 2016
X = High Risk

From the CT SIM Operational Plan

“[There are] risks to the timeline associated with dependencies that all payers and providers are ready to launch technologies and allow indexing. Assume adjustments will be needed to timeline; early engagement of providers/health plans.”



From the Notice of Grant Award:

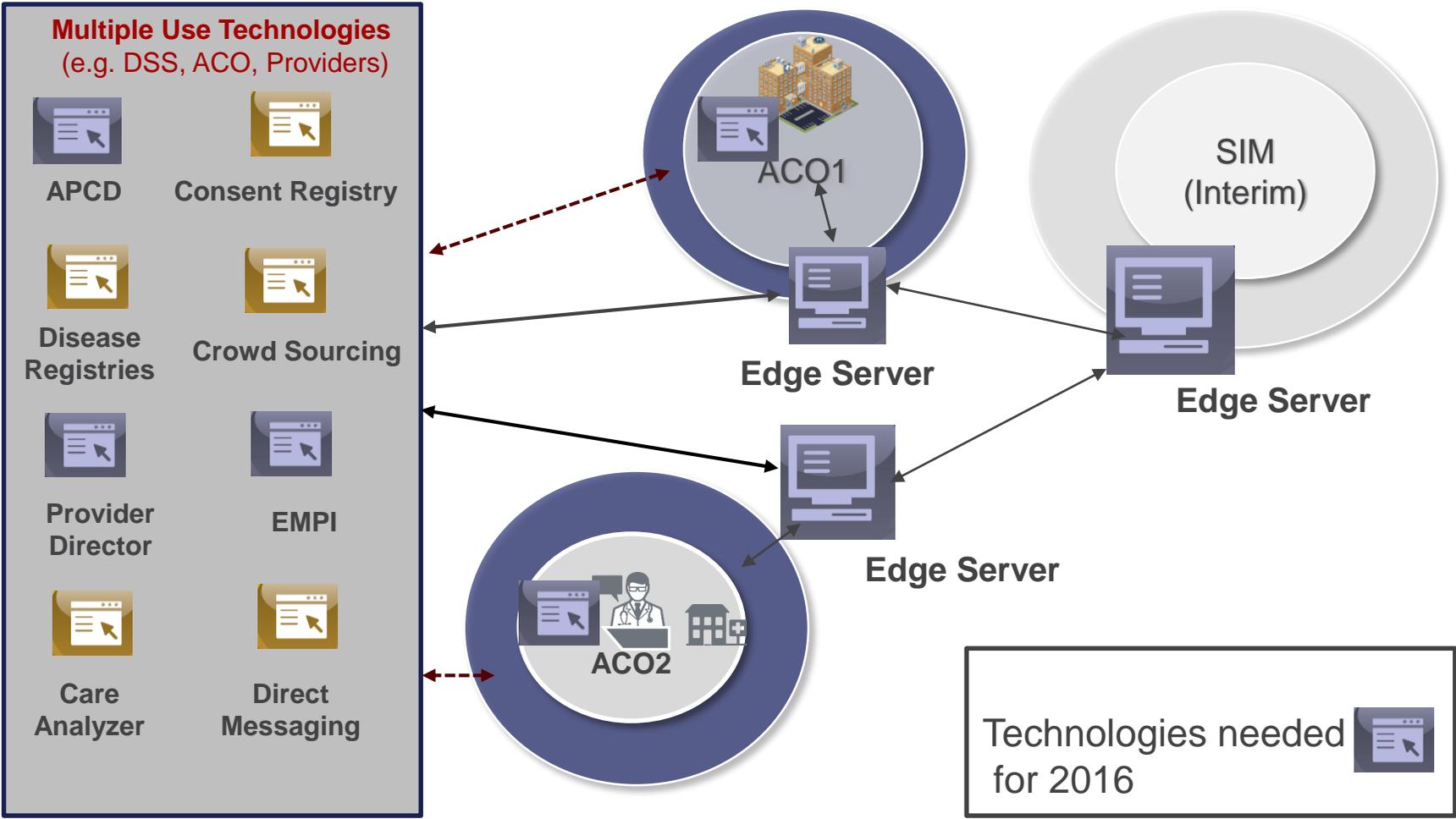
“If milestones are not met, funding may be restricted until a state can demonstrate adequate progress in meeting its milestones. CMMI reserves the right to require awardees to provide additional details and clarifications on the milestones throughout the performance period.

In addition, the Recipient agrees to participate with CMMI in developing a risk mitigation strategy to ensure the ability of the Recipient to achieve project milestones.”

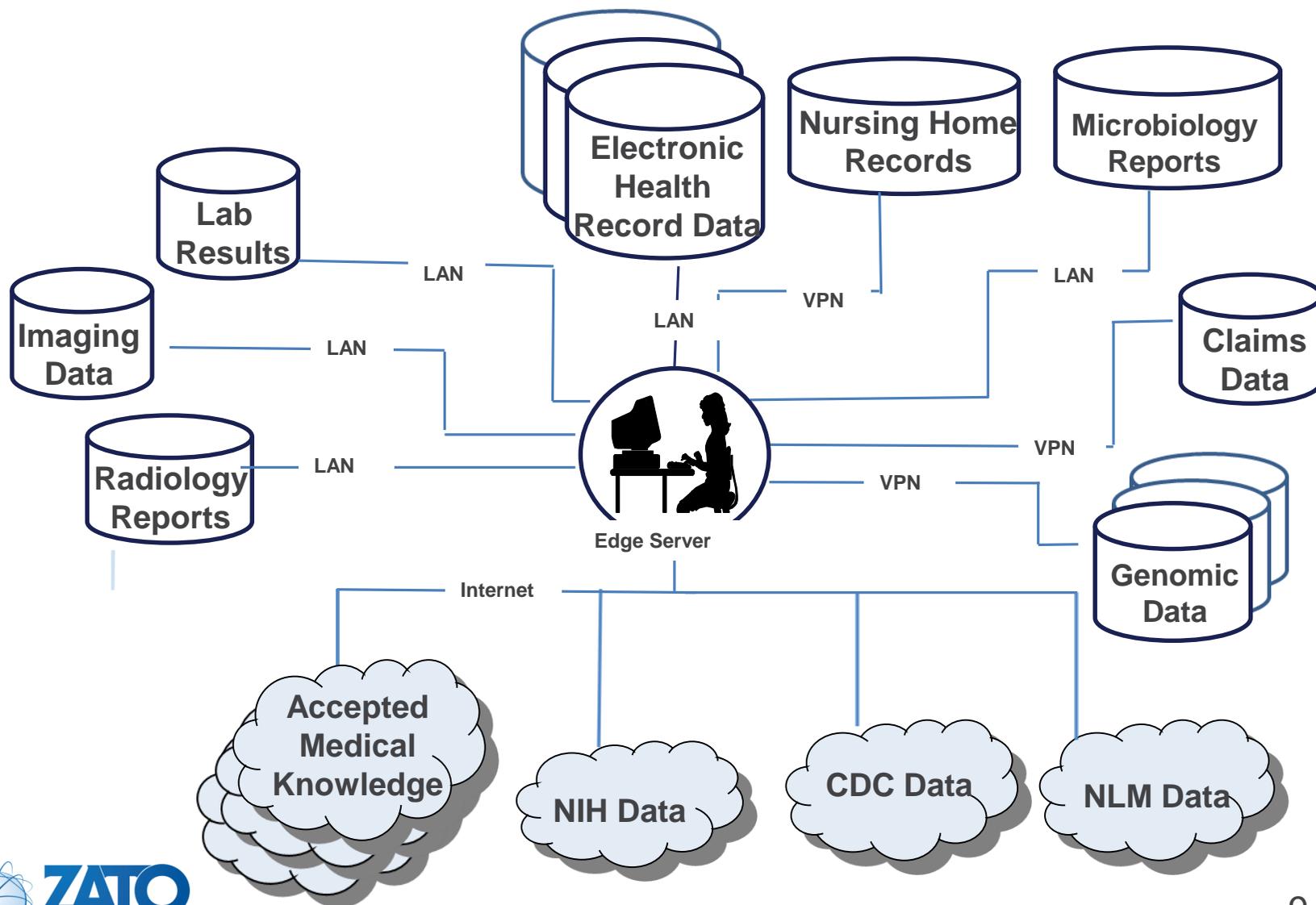
HIT Charge: 2016 Scope of components and Interactions

Components and interactions for 2016 include clinical and claims data, data exchanges and scorecards. This slide and the following ones outline the process, edge server capabilities, information flow and scope - using a scenario approach.

Assumption: DURSA's have been signed for the participating organizations.



HIT Charge: Edge Server Schematic and Data Sources



HIT Charge: Edge Server Capabilities

- Cooperative federated analysis across data centers and organizations
- Decentralized retrieval, extraction, analysis, discovery, alerts in parallel
- Medical NLP, rules base, medical ontology, automated coding
- Across multiple EHRs and other clinical data simultaneously
- API integration with any software stack components
- Data interoperability across diverse hardware platforms
- Available pre-installed as an IBM/Zato Power Linux appliance (IZPOWER)

No need to aggregate and centralize all of the data

HIT Charge: Scope and HIT analysis using a scenario

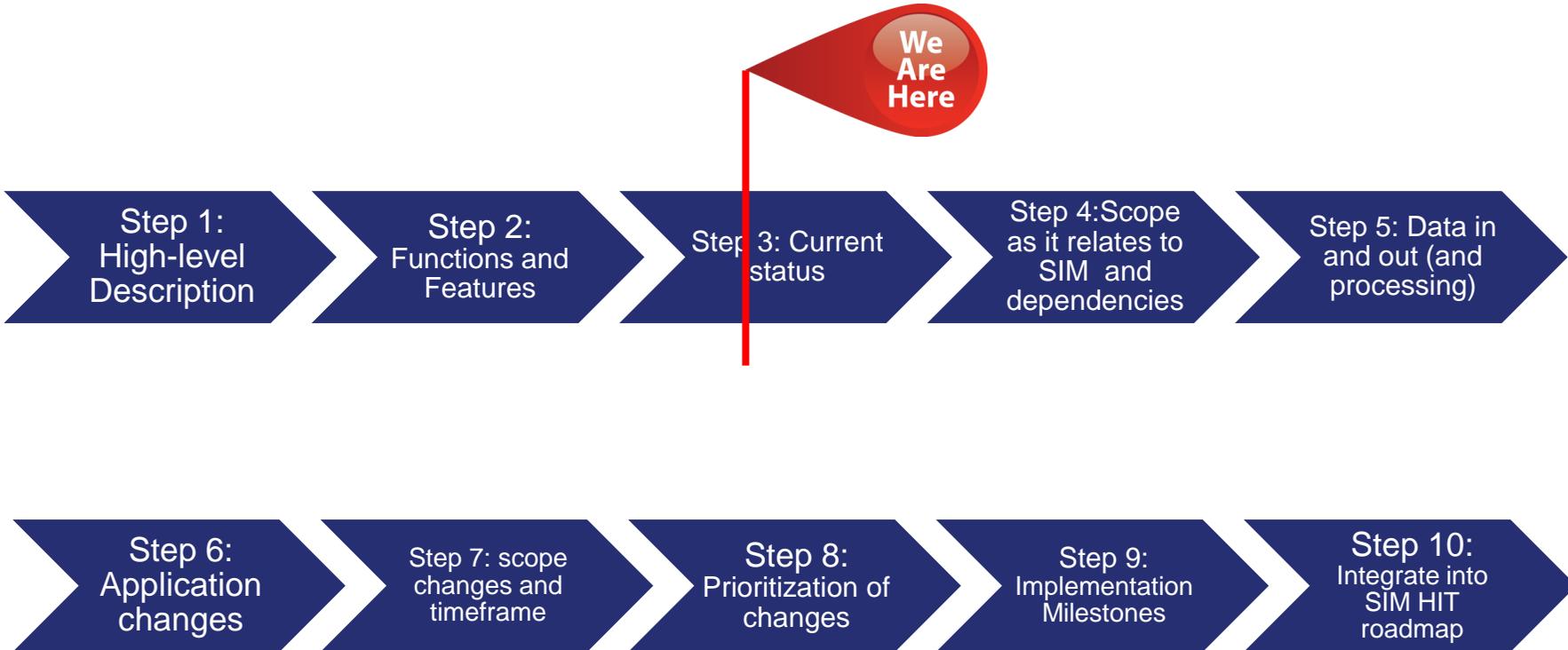
Scenario: HTN quality measure flow (all payers). Dr. Smith is a Family Practice Physician working at Advanced Network 1. Jane Doe has hypertension. Her blood pressure is 145/95. The data is entered into the organization's EHR. The quality measure checks for patients with hypertension under control (<140/90). How is Jane Doe's reading and Dr. Smith's metric for this measure captured and reported?

Process step	SIM HIT Responsibility	Provider's Responsibility	HIT Components
BP is entered into EHR	NA	Provider's EHR	EHR
ACO1 HTN metric	ACO1 edge server transmits data from EHR to the SIM edge server	Signed SIM DURSA allows edge servers to pull indexed data for the relevant measure	Edge servers, EMPI, Provider Directory, Quality Metrics
HTN Metric - all participating providers	SIM edge server send request to all edge servers for HTN measure by ACO, entity, provider.	Edge server accesses EHR (read only)	Edge servers
Comparative analysis and production of score cards	Aggregates measure by ACO, entity, and provider. Reports are pushed out to the providers	NA	All of above

HIT Charge: Ten Steps to Frame Concept to Implement Plan Approach

The Ten Step approach assures consistency of design and identifies when we need input and review with other groups.

Ten Steps from Concept to Implementation



HIT Charge: Ten Steps to Frame Concept to Implementation Plan

Work Step	Description
1. High level Description	Brief explanation of the technology component(s) capabilities and data
2. Functions and Features	Further drill down on the major processing functions and technology features provided by the component.
3. Current Status of Component	Description of the status of the technology as it relates to the SIM initiatives. Does the state already own it, is it in production, etc. Needed to understand if it is ready for productive use – both from the technology and data population perspectives. We need access to the technical staff to get the current status on purchased products.
4. Scope as it relates to SIM (and identification of dependencies)	Description of the specific capabilities that will be needed to support the SIM initiatives. What are they and how will they be used. For example. SIM needs the EMPI to uniquely identify patients and provide information on possible matches. The dependency is the database has clean data and is up to date.
5. Data in and out (and processing)	High level description of the data needed by the technology component to complete the necessary processing and what data will result from the processing and where it is sent.
6. Component changes to meet SIM requirements	Identification of new data and functionality needed to an existing system or proposed commercial new product in order for it to perform the required processing and produce the output (files, scorecards)

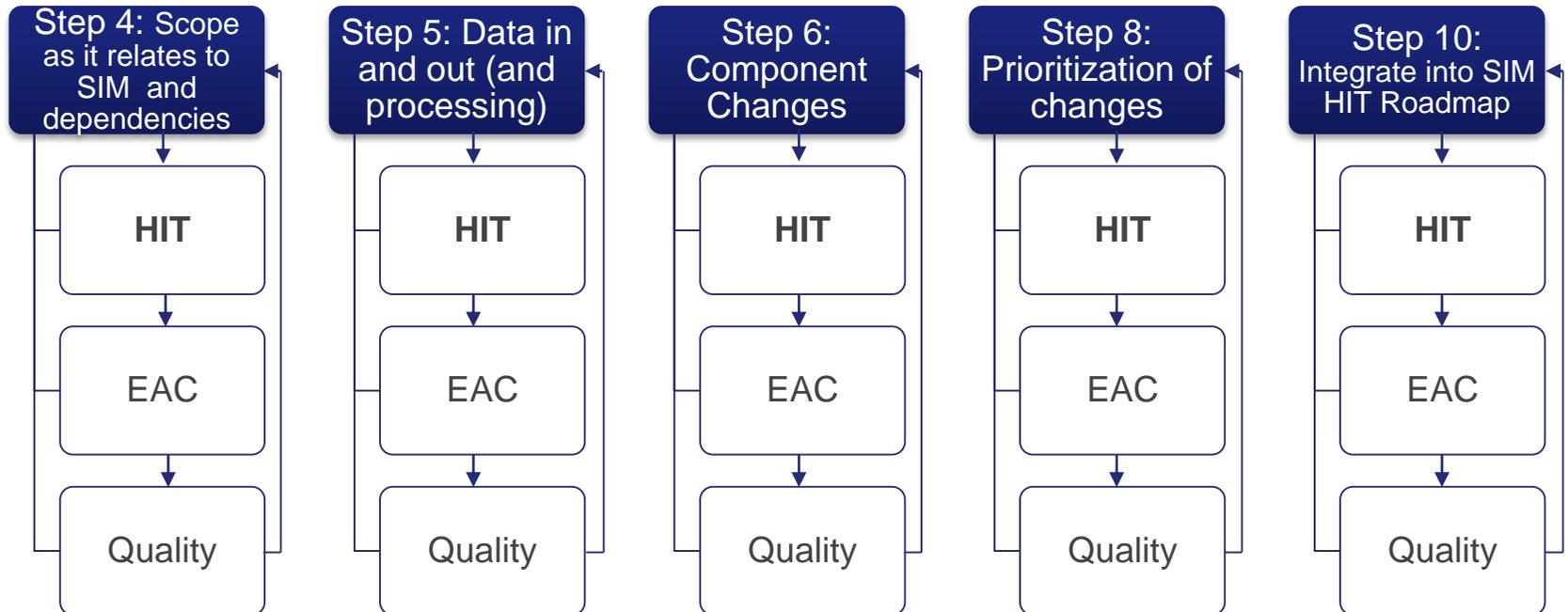
HIT Charge: Ten Steps to Frame Concept to Implementation Plan

Work Step	Description
7. Component change resources (effort, resources and timeframe)	The resources and time commitment to design, program and test the required changes. We need access to the technical staff to complete this work.
8. Prioritization/ recommendation on changes	Taking into consideration the additional costs, time delay and staff resources, the council will need to prioritize changes or perhaps options for one change, and then make a recommendation to the proper Council and/or Steering Committee.
9. Implementation milestones (for the component)	The delivery and testing dates for the changes and the overall impact on the technology component implementation timeline; We need access to the technical staff to get the current status on purchased products.
10. Integrate into SIM HIT Roadmap	The updated SIM HIT Roadmap recommended by the council.

HIT Charge: HIT Council Interactions with Workgroups

- For each step that requires interactions with other groups, HIT Council will provide a template of needed information, questions and options from the appropriate source group
- The receiving group will complete template and review with HIT Council members
- Component recommendations and HIT SIM roadmap impact presented to entire HIT Council for review, discussion and final recommendation

Note: For each step we need to adjust the arrows and identify the involved workgroups if any as appropriate for each component



HIT Council Solution: Scope

The HIT Council develops the roadmap and is responsible for the design and interaction recommendations.

High level design and interactions

1-2 Definition – high level description of the application components

2-4 Functional requirements – processing and current status

5 Data and analytics requirements – sources and output

6-8 Changes and new technology options including identification, prioritization and recommendations.

9-10 Roadmap (and timeline) – what needs to come first, second, etc.

HIT Council

Technical design, programming, testing and implementation

1) Architecture design and infrastructure requirements

2) Detailed design of the application components

3) Software and interface development

4) Testing

5) Release and support

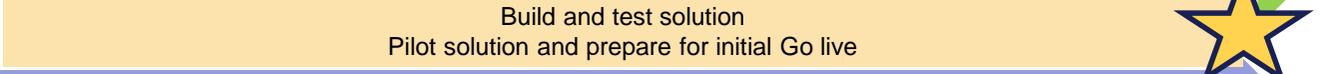
Technical Team

HIT Solution: Streamlined 2016 Approach

2015	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan 2016
	First Quarter			Second Quarter			Third Quarter			Fourth Quarter			Q1

2016 Measure Pathway to Production Proof of Concept

Example ACO measures
 8 – readmissions
 27 – HbA1C >9
 28 – HTN 140/90



- ID Components (EMPI suite, Edge server suite, APCD, ACO systems)
- Document Assumptions
- Design Pathway to production
- Present to HISC

Workload: 2016 solution and HIT workstreams

2015	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan 2016
	First Quarter			Second Quarter			Third Quarter			Fourth Quarter			Q1

Purchase Consent Registry and Edge Server Solution.

Procure Disease Registries and EHRs
Direct Messaging ready

SIM HIT/Analytics Requirements defined and in 3 year plan

APCD, EMPI, Provider Directory, Direct Messaging – amend contracts

Re purpose QRDA for eCQMs
Work with PMO on DURSA



Build and test solution
Pilot solution and prepare for initial Go live



1

2016 Design

Edge and Analytics (after pilot)

SIM HIT Solution Technical Design, testing

2

Consent Registry

Messaging

DR/CS (If needed)

SIM Hit Solution V2 in 2016 +

APCD – full capabilities

EHS (If needed)

HIT Solution: Consent Registry Capabilities

Patient consent registry encompasses the rules for sharing and accessing of the patient's health information through an health information exchange for treatment, payment, and health care operations purposes. Specific requirements will come from other SIM councils, working with the HIT council.

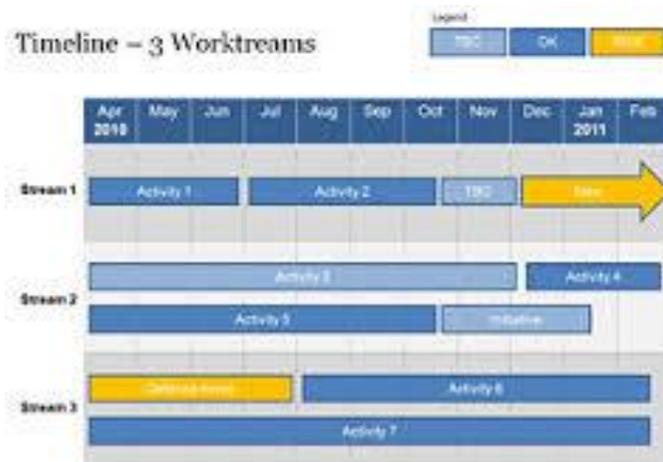
Consent registry functionality encompasses the following:

- **General types of consent**
 - Opt-in – Default is that patient health information is not shared. Patients must actively express their consent to share.
 - Opt-out – Default is for patient health information to automatically be available for sharing. Patients must actively express their desire to not have information shared if they wish to prevent sharing.
- **Patient – specific.** Patients may choose to give providers and HIEs full access to their information, limited access, or no access at all.
 - Limited access can include:
 - Blocking information types or data sources for a single patient.
 - The circumstances in which the release will take place (e.g., any time or emergencies only)
 - Who has the right to access the data (e.g., health care providers, HIEs).

Workload: Options

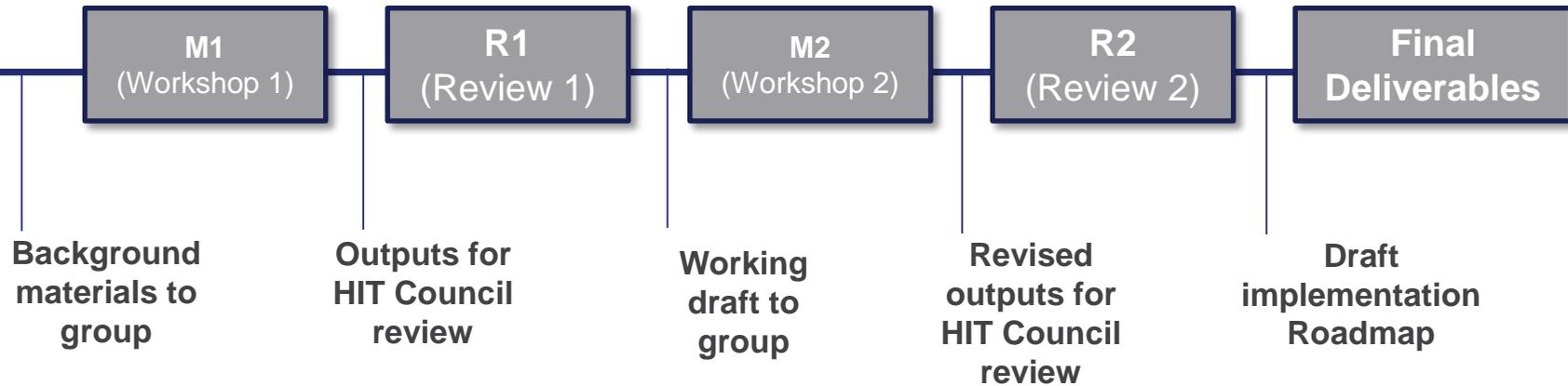
How will the Council need to work to meet the timelines?

- Off line work groups/ work streams
- Dedicated resources
- More meetings
- All of the above



Workload: Work stream Process Example

HIT Council Design Group Process



Offline information/input gather from HIT participants and experts

Consolidation of roadmaps from work groups into Solution Roadmap and timeline

Agree to new milestones and approach

Develop work plan

Establish work groups and solicit volunteers

Identify resource needs



Appendix

HIT Charge:

Risk Rated Information Technology Components

SIM HIT Component	Description	Risk
EMPI	Enterprise Master Patient Index is an application that is to store multiple patient identifiers indexed to a unique ID. The system uses a matching algorithm and patient demographic data to determine if a patient is already in the database or not.	H/M
Consent Registry	Consent registry is a database of patients that can be queried by the Model Test participants to assess status with respect to sharing of patient information.	H/M
Physician Directory	Database of the state’s providers and supporting information such as identifier, specialty, practice site(s). This is already in production.	M
Quality Performance Metrics Reporting/ Edge Server	This technology and applications process the incoming metrics related to inpatient providers and practices. Scorecards are sent back.	H
Direct Messaging	Direct messaging send electronic messages between providers and systems allowing secure exchange of clinical information such as discharge summaries, orders, CCDs.	M
Alert Engine	Event-driven, rules-based application that receives a message of a patient event (e.g. discharge) and creates an outbound message for the appropriate providers and sites.	M

Risk Legend:

- H** – new commercial or home grown technology, long implementation timeframe, critical to solution’s success
- M** - Installed but needs enhancements or available commercial product that may need changes, key technology component
- L** - Available commercially requiring no changes or may not be needed for the solution

HIT Charge: Risk Rated Information Technology Components

SIM HIT Component	Description	Risk
All Payer Claims Database	Application and database that stores relevant patient claims information for each encounter. The data is indexed by provider, patient, site and other identifiers needed for population analysis.	H
Disease Registries	Clinical data stores for specific chronic conditions (e.g. diabetes, CHF) or types of patients (e.g. pediatrics). Data is collected for these registries in much greater detail than stored in an EHR and is used to support population health planning analyses and interventions.	L
Crowd Sourcing (associated with registries)	Used in conjunction with the registries, a crowd sourcing application can solve medical issues by accessing many different experts.	L
EHR Software as a Service (SaaS)	EHRs for facilities that do not have a certified electronic health record systems.	L
Care Analyzer	Application that combines care opportunities, risk and care giver efficiency to provide a more complete member assessment. Uses The Johns Hopkins ACG predictive models.	M
Mobile Applications	TBD – there are thousands of mobile apps to support providers (diagnosis, medications, communications) and patients (communications, reminders, chronic condition management).	L
Risk Legend:	<p>H — new commercial or home grown technology, long implementation timeframe, critical to solution's success</p> <p>M - Installed but needs enhancements or available commercial product that may need changes, key technology component</p> <p>L - Available commercially requiring no changes or may not be needed for the solution</p>	

HIT Council Goal: SIM State Wide Programs

SIM Innovation Grant Program	Description
Population Health	The plan's purpose is to improve population health through the identification of area of critical health resource burden and the use of best practice interventions.
Quality Measure Alignment	This program creates one set of quality measures for all entities in the SIM and develop a common scorecard.
SSP based on quality and Care experience - patient	Care survey completed by the patients. The results are used to determine shared savings back to the providers.
SSP based on quality and Care experience - provider	Development and implementation of specialist, PCP and hospital scorecards that identify care gaps and incorporate national measures.
Value-based Insurance Design	Program that engages patients and removes barriers to critical prevention and treatment services.
Community Health Worker	Training programs with three area community colleges to provide healthcare worker education – both basic and specialty.

SIM Innovation Grant Program	Description
Medicaid QISSP	Initiative to establish and test a complementary shared savings program
AMH Glide Path	Program designed to provide practical, onsite technical support to facilitate transformation towards medical home recognition for practices that are part of Advanced Networks selected to participate in Medicaid QISSP
Clinical Community Integration – TTA	Targeted Technical Assistance to Advanced Networks and FQHCs selected to participate in Medicaid QISSP.
Learning Collaborative	Program to optimize and balance practice and participant enrollment