State Level Evaluation of the Iowa SIM

In addition to collaboration with the federal evaluation, Iowa has established its own state-level evaluation that is separate from its program monitoring activities. The state-level evaluation is being conducted by the University of Iowa Public Policy Center. There are two parts to this evaluation: I) an assessment of the process and implementation of the SIM activities and initiatives and II) an assessment of the core SIM goals (primary outcomes).

Key Research Questions

The key research questions to be addressed in the statewide evaluation include:

1. How are the SIM interventions being implemented around the state of Iowa? To what extent are each of the SIM interventions being implemented consistently and what is the level of diffusion?

2. What non-SIM factors or statewide programs are in place that could also impact the SIM-specific goals?

3. How effective has the implementation of SIM been? What is the level of awareness and use of SIM activities by impacted groups?

4. Does the SIM decrease the use of tobacco?

5. Does the SIM improve outcomes of care for people with obesity?

6. Do SIM efforts improve the care of people with diabetes?

7. Does the SIM improve obstetrics outcomes?

8. Does the SIM improve medication safety?

9. Does the SIM reduce the rate of preventable readmissions?

10. Does the SIM reduce the rate of preventable emergency visits?

11. Does the SIM increase the proportion of payments linked to value-based purchasing?

12. Does the SIM decrease the total cost of care?

13. What system, practice, and consumer level factors may contribute to SIM outcomes? Changes within the health care system in Iowa through SIM are widespread and variant, however, we will attempt to describe when an intervention may have contributed to the meeting of a goal.

I. Implementation/Process Evaluation for Award Year 3

The objective of the implementation/process evaluation is to describe the structure of the initiatives/activities being implemented in the SIM model and the characteristics of the communities and settings which are impacted by the SIM. To do this, we will gather both qualitative and quantitative data from stakeholders, providers, consumers, and health systems to evaluate how the SIM model is being used, who is using the interventions and to what degree, and the successes and challenges experienced by the populations most affected by the SIM initiatives. In addition to providing the contextual structure of the SIM activities, we will also describes the environment surrounding the SIM in Iowa by compiling information on statewide activities taking place outside of the SIM prior to and during implementation that may also affect the primary outcomes.

The key research questions for this part of the evaluation and a brief summary of the methods to address them follows.

1. How are the SIM interventions being implemented around the state of Iowa? To what extent are each of the SIM interventions being implemented consistently and what is the level of diffusion?

    Methods
    - Participate in bi-weekly phone conferences to receive status updates
    - Gather documents and information from SIM team
    - Review websites for updates

2. What non-SIM factors or statewide programs are in place that could also impact the SIM-specific goals?

    Methods
    - Focus on C3 and control counties
    - Search state websites and other documentation for concurrent healthcare initiatives

3. How effective has the implementation of SIM been? Level of use by impacted groups?

    Methods
    - Stakeholder Interviews
    - Provider Interviews
    - Patient/Consumer Surveys

4. What system, practice, and consumer level factors may contribute to SIM outcomes? Changes within the health care system in Iowa through SIM are widespread and variant, however, we will attempt to describe which intervention may have contributed to the meeting of aim or goal.

Based on the 2017 SIM Operational Plan, the primary SIM interventions proposed to further the SIM goals are quite similar to those proposed in 2016. In 2017, there may be additional activities or enhanced levels of already-in-progress activities that will be instituted by the SIM.

That being said, the implementation evaluation will focus on the activities and proposed changes to the activities for the primary SIM initiatives below.

- Roadmap to Improve Population Health (Diabetes Focus)
- Community and Clinical Care Initiative (C3)
- Statewide Alert Network (SWAN)
- Value-Based Purchasing (VBP) and work toward an Other Payer A-APM
- Technical Assistance (TA) for C3s and Healthcare Systems

Implementation Evaluation Data Sources and Proposed Measures

The following table provides a summary of the methods, level of evaluation, data sources, and measures we propose to use to evaluate each main SIM intervention/activity.

Summary of Evaluation Components

SIM Intervention	Level of Evaluation	Data Sources	Measures Proposed
Population Health	Local (C3) & Statewide	• Document Review • Provider Surveys/Interviews • Stakeholder Interviews • BRFSS	• Number of counties with social determinants as goals • Awareness of Statewide Strategies • Use of Statewide Strategies • Others TBD
C3	Local	• Document Review • Stakeholder Interviews • Statewide Consumer survey • Local Patient Experience Survey • Provider Surveys/Interviews • BRFSS	• Composition of C3s • Awareness of C3 plans • Attendance at TAs • Diabetes rates • Others TBD
SWAN	Statewide	• Provider Surveys/Interviews • SWAN-specific data, if possible • Claims, if possible	• Location of SWANs • Number of alerts • Awareness of SWAN • Utilization of SWAN
VBP	Statewide	• Provider Surveys/Interviews • Medicaid provider data • Wellmark provider data	• Awareness of VBP • Awareness & use of VIS • Location of VBP providers
TA	Local (C3) & Healthcare System	• Document Review • Stakeholder Interviews • Provider Surveys/Interviews	• Hours & Personnel • Attendance at TAs • Requests for TA • Topics of TA

II. Evaluation of Award Year 3 SIM Goals

Primary goals of the SIM include a) improving population health, b) transforming health care, and c) promoting sustainability. The following research questions are addressed through the state-led evaluation.

1. Does the SIM decrease the use of tobacco?

   Measure - Proportion of people who have made a quit attempt.
   Data sources
   - BRFSS and YRBS data
   - Quitline data
   - Claims data

   Measure – Rate of tobacco use.
   Data sources
   - BRFSS and YRBS data

2. Does the SIM improve outcomes of care for people with obesity?

   Measure – Prevalence of obesity in adults.
   Data sources
   - BRFSS data

3. Do SIM efforts improve the care of people with diabetes?

   Measure - The percent of adults diagnosed with Diabetes with 2 or more Hemoglobin A1c tests in the last year.
   Data sources
   - Claims data

   Measure – The state wide diabetes rate will decrease.
   Data sources
   - BRFSS data

   Measure - Hospitalizations related to the long-term and short-term complications of diabetes.
   Data sources
   - IHA hospital inpatient data.

   Measure - ER visits for diabetes related issues.
   Data sources
   - IHA hospital inpatient and outpatient data.

   Measure - Providers will integrate the statewide strategies for the care of diabetes.
   Data sources
   - Provider survey.

4. Do SIM efforts improve the quality of life for people with diabetes?

   Measure – Quality of life measures.
   Data sources
   - Survey data

5. Does the SIM improve medication safety?

   Measure – Rate of Glucose monitoring.
   Data sources
   - Claims data

   Measure – Rate of anti-coagulation monitoring.
   Data sources
   - Claims data

6. Does the SIM reduce the rate of preventable readmissions?

   Measure – Rate of preventable readmissions.
   Data sources
   - IHA inpatient data
   - Claims data

7. Does the SIM reduce the rate of preventable emergency visits?

   Measure – Rate of preventable emergency visits.
   Data sources
   - IHA inpatient data
   - Claims data

8. Does the SIM increase the proportion of payments linked to value-based purchasing?

   Measure – Proportion of claims tied to VBP.
   Data sources
   - Claims data

9. Does the SIM decrease the total cost of care?

   Measure – Adjusted Total Cost of Care.
   Data sources
   - Claims data

SIM Goals Evaluation Data Sources and Proposed Measures for Award Year 3

SIM Evaluation Hypothesis List

Hypothesis	Measure	Data Source	State-established Outcome Targets	Outcome report date
Improve Population Health—Tobacco				
There will be an increase in the proportion of people interested in reducing tobacco use.	Number of people requesting information from the Quitline	Iowa Quitline data and claims data	2016: Increase 1.5% 2017: Increase 3.3% 2018: Increase 5.1%	10/31/2017 and 10/31/2018
The rate of tobacco use will decrease by 1 percentile over the 3 years of the SIM.	Rate of reported tobacco use (cigarettes)	BRFSS/ YRBS		10/31/2017 and 10/31/2018
Improve Population Health—Obesity				
Decrease adult obesity prevalence rates.	Weight and height measure	BRFSS/ YRBS	2016: Decrease 1.0% 2017: Decrease 1.9% 2018: Decrease 2.9%	10/31/2017 and 10/31/2018
Improve Population Health—Diabetes				
Increase the percentage of adults (aged 18 years or older) with diabetes having two or more A1c tests in the last year.	Hemoglobin A1c rates	Medicaid/ Wellmark claims data	2016: Increase 1.2% 2017: Increase 2.9% 2018: Increase 4.1%	10/31/2017 and 10/31/2018
The statewide diabetes rate will be reduced by 0.2 percentiles over the three years of the SIM.	Statewide diabetes rate	BRFSS		4/30/2019
The hospitalizations related to the long-term and short-term complications of diabetes will be reduced.	Admissions due to long-term and short term complication from diabetes	IHA inpatient file		4/30/2018

ER visits for diabetes related issues will be reduced.	ED visits due to long-term and short term complication from diabetes	IHA outpatient file		1/1/2018
Providers will integrate the statewide strategies for the care of diabetes.	Number of providers who integrate statewide strategies	Provider survey		1/1/2018
People with diabetes will experience improved quality of life (QoL).	Patient quality of life questions (to be determined)	Statewide consumer survey		10/31/2018
Improve Population Health—Medication Safety				
Increase the percentage of adults (aged 18 years or older) with diabetes having two or more A1c tests in the last year to monitor glucose rates.	Hemoglobin A1c rates	Medicaid/ Wellmark claims data	2016: Increase 1.2% 2017: Increase 2.9% 2018: Increase 4.1%	10/31/2017 and 10/31/2018
Monitoring of anti-coagulation medications will increase.	Hemoglobin A1c rates	Medicaid/ Wellmark claims data	2016: Increase 1.2% 2017: Increase 2.9% 2018: Increase 4.1%	10/31/2017 and 10/31/2018
Transform Health Care–Preventable Readmissions				
The SIM will reduce the annual rate of preventable readmissions by the third year.	Avoidable readmissions at 7days and 30 days (HEDIS)	IHA inpatient data	2016: Decrease 5% 2017: Decrease 15% 2018: Decrease 20%	10/31/2017 and 10/31/2018
Transform Health Care–Preventable ED visits				
The SIM will reduce the annual rate of preventable emergency department visits by the third year.	Rate of preventable ED visits as defined by NYC Billings algorithm	IHA outpatient file	2016: Decrease 5% 2017: Decrease 15% 2018: Decrease 20%	10/31/2017 and 10/31/2018

Promote Sustainability—Value Based Purchasing				
The proportion of provider payments linked to value-based purchasing contracts will increase to 50% by the third year.	Proportion of payments to Medicaid providers in VBP contracts	Medicaid provider dataset	2016: 25% 2017: 40% 2018: 50%	4/30/2019
The total cost of care per member will be reduced below the national average by the third year.	Cost of care per person in Iowa	3rd party vendor/ Medicaid/ Wellmark/ Medicare claims		4/30/2018 and 4/30/2019