State Innovation Model (SIM) Evaluation Report on Award Year 4 (AY4) Activities
Overview of SIM Implementation Activities from November 2018 – April 2019
October 30, 2019

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Contents
List of Tables ......................................................... 4
List of Figures ......................................................... 5
Executive Summary .................................................. 6
Introduction ............................................................ 8
  Report Focus and Organization ................................. 8
Methods ................................................................. 9
Iowa’s State Innovation Model (SIM) ............................... 11
  Vision and Goals .................................................. 11
  Governance ......................................................... 11
Results of the SIM Evaluation ...................................... 13
  Review of Stakeholder Engagement Activities ............... 13
  Governor’s Healthcare Innovation and Visioning Roundtable . 14
Evaluation of Implementation Activities ......................... 15
  Community and Clinical Care (C3) Initiatives ............... 15
  Statewide Admission, Discharge, and Transfer (ADT) Alerting . 29
  Value Based Purchasing ....................................... 31
  Technical Assistance Initiatives ............................... 35
Statewide Survey ..................................................... 41
Introduction ........................................................... 42
Methods ................................................................. 43
  Survey Instrument ............................................... 43
  Analyses .......................................................... 44
  Results ........................................................... 45
Appendices ............................................................. 59
  Appendix A. C3 Site Sustainability Plans ....................... 59
  Appendix B. Full Award Year 3 C3 Site Report ............... 61
  Appendix C. Letter from Governor Reynolds .................. 70
  Appendix D. IHIN PatientPing FAQ ............................. 72
  Appendix E. AIMM Sustainment Package ....................... 77
List of Tables

Table 1. C3 Site Stakeholder Experiences .........................................................10
Table 2. SIM Stakeholders ..................................................................................13
Table 3. Year 1, Year 2, and Year 3 Self-Assessment of Care Coordination Activities ..............................................................20
Table 4. C3 Progress on the Required Care Coordination Tactics ......................22
Table 5. Awareness of C3 Activities .................................................................25
Table 6. Activities and Outcomes of All C3 Initiatives Meeting Community Member Needs .....................................................................25
Table 7. Health System IHIN and Patient Ping Contract Statuses .......................30
Table 8. Summary of Technical Assistance (TA) Activities* ................................35
Table 9. SIM Unplugged series details ..............................................................36
Table 10. Topics covered in SIM Statewide Learning Events ...............................36
Table 11. Learning Community (LC) Registrants - Position Type Definitions ....36
Table 12. Learning Community Registrants - Stakeholder Type Definitions ....37
Table 13. SIMplify Website Activity by Types of Posts ..................................39

Statewide Survey

Table 1. Demographic Characteristics ...............................................................45
### List of Figures

**Figure 1.** C3 sites by Cohort and Integrator Organization .......................... 16
**Figure 2.** Diabetes Programming Map .................................................. 18
**Figure 3.** Percent of Required Care Coordination Tactics Rated by Status across all C3 sites .......................................................... 23
**Figure 4.** Statewide ADT Network Map ............................................. 30
**Figure 5.** Value Based Purchasing Enrollment by MCO .......................... 32
**Figure 6.** Excerpt from October 2018 IME and MCO contracts ............... 33
**Figure 7.** Learning Community Registration by Position Type .................. 37
**Figure 8.** Learning Community Registration by Stakeholder Type ............... 38
**Figure 9.** SIMplify Website Usage Over Time by Type of Discussion Post Entry ............... 40

**Statewide Survey**

**Figure 1.** C3 AY2/SIM AY3 C3 Counties ............................................. 44
**Figure 2.** Overall Physical & Mental Health ......................................... 46
**Figure 3.** Chronic Physical & Mental Health Conditions .......................... 46
**Figure 4.** Functional Limitations From Any Impairment Or Health Problem ............... 47
**Figure 5.** Diabetes, Obesity, & Smoking Among Iowans .......................... 47
**Figure 6.** Percentage Of Iowans With Diabetes Related Stress ................. 48
**Figure 7.** Use Of Hospital-Based Services Due To Diabetes ....................... 49
**Figure 8.** Diabetes Self-Management And Support .................................. 49
**Figure 9.** Healthcare Providers Recommendations To Overweight Individuals ............... 50
**Figure 10.** Economic Food Insecurity .................................................... 51
**Figure 11.** Self-Reported Physical Activity (PA) ....................................... 51
**Figure 12.** Walking And Biking For Transportation .................................. 52
**Figure 13.** Healthcare Provider Advice For Tobacco Cessation ..................... 53
**Figure 14.** Routine Primary Care Service Use, Need, And Unmet Need ........... 53
**Figure 15.** Urgent Primary Care Service Use, Need, And Unmet Need ............. 54
**Figure 16.** Specialty Care Use, Need, And Unmet Need .............................. 54
**Figure 17.** Mental Health Service Use, Need, And Unmet Need ..................... 55
**Figure 18.** Dental Care Use, Need, And Unmet Need ................................ 56
**Figure 19.** Emergency Department Use And Hospitalizations ....................... 56
**Figure 20.** Types Of Transportation To Healthcare Visits ............................ 57
**Figure 21.** Barriers To Transportation For Healthcare Visits ........................ 58
Executive Summary

This report covers the process and implementation activities of the State Innovation Model (SIM) test grant in Iowa during award year 4 (November 2018 – April 2019). The objective of the process and implementation evaluation is to describe the structure of the interventions and actions being utilized in the SIM initiative and identify advances and challenges encountered during implementation and sustainability efforts.

A variety of methods were used to gather the information provided in this report. The University of Iowa Public Policy Center (PPC) team reviewed documents and collected information from pertinent websites, participated in bi-weekly phone conferences with the state SIM team, participated in monthly phone conferences with the state SIM team, the Center for Medicare and Medicaid Innovation (CMMI) and the national evaluators, and conducted surveys and interviews with several C3 stakeholder groups to understand how the SIM initiative was being implemented during this time period and identify the successes and challenges encountered. A summary of some of the successes and challenges in the implementation of the SIM activities in this reporting period are below.

Stakeholder Engagement

- Members of the Governor’s Healthcare Innovation and Visioning Roundtable, Social Determinants of Health workgroup, Healthy Communities workgroup, and Data Sharing workgroup all plan to continue to meet to advance SIM goals beyond the SIM funding period.
- The Iowa Governor’s Office stated explicit support to sustain the assemblage of the Roundtable, goals, processes, and strategies.
- SIM-related workgroups plan to include Iowa Total Care, the Medicaid MCO which began a contract in July 2019, so alignment with SIM goals will continue with this post-SIM stakeholder.

Community and Clinical Care Initiatives (C3s)

- Year-3 data collection for the seven C3s is complete and indicates stakeholders continue to be on board, aware of, and participating in their planning and development.
- Advances have been made towards developing and hardwiring care coordination into the continuum of health and social services.
- Diabetes initiatives are fully operational but will be difficult to sustain without funding for staff training.
- Local and regional relationships have evolved and mechanisms are in place to support their future and development.
- Data sharing is underway but continues to be a challenge.
- Program sustainability plans have been set and in some instances will be sustained.
- Each C3 advanced the Iowa Department of Health care coordination statewide strategy and all are sustaining some of this work and/or have integrated it into their operations.
- Healthcare provider involvement in the initiatives is still unclear and appears to be limited. However, community partners, care coordinators and diabetes educators are aware of and engaged in C3 planning, development, and implementation and are using and advancing C3 data sharing tools towards improving patient outcomes.
- The statewide landscape of diabetes programming is growing in alignment with the C3 focus on diabetes management. In Iowa, state-certified DSME (Diabetes Self-Management Education) programs are reimbursed by Medicaid and some private insurers. Thus, efforts to promote state-certification of DSME programs is another strong policy angle for SIM activities. Thirty-two additional DSME sites in the state have received the designation of state certified since 2017, with 103 total state certified sites in Iowa in 2019 (Figure 2).
- In exit interviews, C3 staff and steering committee members share, success, challenges, and recommendations for the future.
Statewide Admission, Discharge, and Transfer (ADT) Alerting

- During this reporting period, the SWAN (Statewide Alert Notification), which was used in prior years for Statewide Admission, Discharge, and Transfer (ADT) alerting, ended in April 2019.
- SWAN vendor, the IHIN (Iowa Health Information Network), will continue providing Iowa hospitals with ADT alerts through a partnership with PatientPing.
- Some IHIN clients opted to continue their contracts with IHIN to receive PatientPing alerts, and some opted to contract directly with PatientPing (Table 7). Three of the Medicaid ACOs which were original SWAN users (Mercy, UnityPoint, and Broadlawns), opted to contract directly with Patient Ping.
- Since the 2018 Award Year 3 SIM report, 21 SWAN-participating hospitals have discontinued participation in the current PatientPing/ IHIN hybrid statewide ADT system.

Value Based Purchasing (VBP) and Quality Metrics

- **VBP population threshold met:** Both participating MCOs were successful in meeting the December 2018 goal of 40% lives covered in VBP.
- **Exit and Addition of Medicaid Payer:** During this reporting period, UnitedHealthcare withdrew from Iowa’s Medicaid management, and Iowa Total Care began (effective July 1). VBP contracts with terms to reflect updates to quality measures and percent of population covered are being negotiated at the time of this report.
- **Transition of quality measures:** During this reporting period, the standard VIS measures were removed from VBP contracts and replaced with HEDIS measures of each MCOs choice.

Technical Assistance (TA)

- **Focus on sustainability:** SIM TA in AY4 included efforts to measure and communicate the value of the SIM work, maintain a community of support for health transformation, and provide tools for ongoing progress towards SIM goals.
- **Addition of TA partner:** Topos was added to the SIM TA team during this reporting period, and developed value-based messaging with C3 sites to support advocacy and sustainment of ACH work.
- **ACH expansion:** Nine new C3 sites were onboarded during this reporting period, and their proposal requirements were in alignment with the original C3 site requirements (ACH characteristics).

SIM Statewide Survey Key Findings

- Nearly 30% of respondents in C3 counties reported excellent mental health, yet only 14% reported excellent physical health.
- Respondents in C3 counties reported less food insecurity than respondents in control counties yet reported more obesity.
- More than 70% of C3 and control respondents received primary care when needed and approximately 90% received urgent care when needed.
- Nearly 20% of C3 and control respondents could not access dental care when needed.
Introduction
The State Innovation Model (SIM) is a federal grant program administered by the Centers for Medicare and Medicaid Service’s (CMSs) Center for Medicare and Medicaid Innovation (CMMI). The purpose of this grant program is to provide funding for states to develop innovative ways to address the “triple aim” of healthcare reform; namely, to improve the patient experience of care and population health while simultaneously reducing health system costs. To do this, states are encouraged to use SIM funding to transform their public and private healthcare payment and delivery systems.

CMMI has awarded three types of SIM grants -- Model Design, Model Pre-Test, and Model Test awards.\(^1\) Design grants were awarded to states/entities to design plans and strategies to transform healthcare in their states. Test states received awards to implement their plans for comprehensive statewide healthcare transformation. In 2013, Iowa received a Model Design award and in 2015 received a $43 million Model Test award to implement and test its plan over the course of four years.

Report Focus and Organization
This report covers the process and implementation activities of the SIM initiative test grant in Iowa during the third and fourth quarters of the fourth implementation year (November 2018 – April 2019). The objective of the process and implementation evaluation is to describe the structure of the interventions/actions being utilized in the SIM initiative and the characteristics of the communities and settings which are impacted by the SIM. The key questions addressed in this report include:

1) How were the SIM interventions implemented around the state of Iowa?
2) What non-SIM factors or statewide programs are in place that could also impact the SIM-specific goals?
3) How were strategies to promote sustainability of SIM initiatives implemented?

This report is organized by providing a summary update about each SIM activity or intervention (to address questions 1 & 2 above) followed by a section on the sustainability strategies relevant to that activity (to address question 3 above).

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Methods

The PPC state-level evaluation of Iowa’s SIM includes both qualitative and quantitative methods and incorporates multiple data sources and collection methods to capture information from many areas of the healthcare system (local, regional, and state-level; patient, provider, payer, and other stakeholders). The overall evaluation includes two-parts: 1) assessment of the process and implementation of the key SIM interventions and activities and, 2) assessment of the core SIM goals (primary outcomes used to measure the success of the SIM). As noted previously, this report focuses on part 1, the description of and progress update on the implementation activities in this reporting period.

A variety of methods were used by the PPC evaluation team to gather the information provided in this report. To provide data to inform key questions 1 and 2, the team regularly conducts a systematic environmental scan of SIM-related initiatives. This includes a review of documents and information collected from pertinent websites, review of documents requested from SIM partners, including work group meeting minutes, work plans, and survey and evaluation instruments, and participation in phone conferences with the state SIM team, CMMI, and the national evaluators.

The following specific sources were used to gather information. Sources were reviewed at least quarterly.

Websites

- Iowa Department of Public Health
- Iowa Department of Human Services
- Iowa Healthcare Collaborative
- Iowa Medicaid Enterprise
- Centers for Medicare & Medicaid Services State Innovation Models Initiative
- SIMplify (the Iowa SIM initiative website for the community partners)
- Amerigroup Iowa
- UnitedHealthcare of Iowa
- Iowa Health Information Network (IHIN)
- Centers for Disease Control and Prevention (CDC)

Periodic Publications

- SIMplify newsletter
- Community and Clinical Care (C3) proposals, action plans, and quarterly reports
- Iowa SIM quarterly reports to CMMI
- Quarterly MCO reports

In addition to secondary data collection, the PPC team conducted a variety of stakeholder surveys and interviews to understand how the C3 initiative was being implemented and perceived by stakeholders during this time period. The PPC evaluation team includes a subcontractor, Rural Health Solutions (RHS), a consulting company with national rural health development, research, and evaluation expertise. RHS focused efforts on evaluation of the Community and Clinical Care (C3) initiatives. Table 1 provides a summary of the stakeholder groups asked to provide input on their experiences with the C3 initiatives during this reporting period.

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Table 1. C3 Site Stakeholder Experiences

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Method</th>
<th>Timing of Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3 Steering Committee Members</td>
<td>Web-based survey</td>
<td>April 2019</td>
</tr>
<tr>
<td>C3 Steering Committee Members</td>
<td>On site group exit interview</td>
<td>March/April 2019</td>
</tr>
<tr>
<td>C3 Community Coalition members</td>
<td>Web-based survey</td>
<td>March/April 2019</td>
</tr>
<tr>
<td>C3 Community Coalition members</td>
<td>Exit interview</td>
<td>March/April 2019</td>
</tr>
<tr>
<td>C3 Healthcare Providers</td>
<td>Mailed Survey</td>
<td>April 2019</td>
</tr>
<tr>
<td>C3 Program Officers</td>
<td>Care Coordination matrix</td>
<td>April 2019</td>
</tr>
<tr>
<td>C3 Diabetes Educators</td>
<td>Telephone Interview</td>
<td>April 2019</td>
</tr>
</tbody>
</table>
Iowa’s State Innovation Model (SIM)

Vision and Goals

The overall vision of the Iowa SIM Test Award during its first two years was to transform healthcare to improve the health of Iowans. In AY3, the SIM vision was revised to “Iowans experience better health and have access to accountable and affordable healthcare in every community.” This vision and updated driver diagram continued to be the foundation for AY4 planning and implementation. The figure on the following page is the AY3 and AY4 driver diagram.

The SIM focuses efforts around two primary drivers: 1) delivery system reform and 2) payment reform. Delivery system reform centers on equipping providers in the community and healthcare systems with tools to engage in population health and to educate them on value outcomes as a way to support their initiation into payment reform. Payment reform centers on aligning payers and providers in value based purchasing (VBP). The combination of these two reform efforts is intended to achieve statewide healthcare transformation where providers are paid based on quality and value, and communities and health systems work together to produce a healthy population.

The primary implementation strategies used by the SIM to address the aims of the grant cross both primary drivers but focus on a variety of activities. These include:

- Funding community and clinical care coalitions (C3s),
- Deployment of a statewide Admissions, Discharge, and Transfer (ADT) alerting system
- Instituting value based purchasing (VBP) as a method of payment reform, and
- Providing technical assistance (TA) at both the community and healthcare system levels.

Governance

With oversight from the Governor’s office, the governance of the Iowa SIM is primarily led by representatives from the Iowa Department of Human Services (DHS) and the Iowa Department of Public Health (IDPH). Two representatives from the governor’s cabinet, specifically the Director of DHS and the Director of IDPH, are responsible for working with the state executive and legislative branches. Senate file 505 requires DHS to report on SIM activities annually to a legislative committee; however, both DHS and IDPH interact with legislators more frequently as needed.

The Director of DHS is the recipient of the SIM grant and as such, DHS is accountable for the operation and execution of the SIM activities. IDPH partners with DHS to implement particular functions of the SIM grant. The Iowa Healthcare Collaborative (IHC) provides technical assistance and quality improvement support services to healthcare providers and other stakeholders. These three entities have the primary responsibilities for carrying out the majority of the SIM activities.
Iowa SIM Vision:
Iowans Experience Better Health and Have Access to Accountable, Affordable Healthcare in Every Community

**Healthcare Innovation & Visioning Roundtable**

**GOALS by the end of 2019**

- Healthcare costs are reduced while quality is improved by:
  - Increase Medicaid and Wellmark provider participation in ACOs to 50%
  - Increase the number of lives covered under either a Medicaid or Wellmark VBP to 50%
  - Receiving approval of at least one Other Payer Advanced APM program from CMS
  - Reduce Total Cost of Care by 15% below expected Wellmark and Medicaid

- Patients are empowered and supported to be healthier by:
  - Reduce the rate of potentially preventable readmissions in Iowa by 20%
  - Reduce the rate of potentially preventable ED visits in Iowa by 20%
  - Reduce the rate of the Hospital Acquired Conditions (HAC) to met the national goal (97/1000) by focusing on a 20% reduction to Clostridium Difficile and All Cause Harm measures
  - Increase the number of provider organizations that are financially successful in Alternative Payment Models under Medicaid & Wellmark

**PRIMARY DRIVERS**

- **Payment Reform: Align Payers In VBP**
  - Align clinical and claims-based quality measures linked to payment
  - Increase contracts with ACOs that include up and down side risk
  - Educate stakeholders on ACO Models in Iowa
  - Mature infrastructure and use of HIT analytics to support VBP
  - Elevate the use of Social Determinant of Health data within VBP programs

- **Delivery System Reform: Equip Providers**
  - Develop common language and a shared vision of delivery system reform across payers
  - Implement Accountable Communities of Health pilot to prepare communities for value based delivery models
  - Address patient social needs through linkages to community based resources
  - Utilize the Iowa Health Information Network and the Statewide Alert Notification System to optimize transitions of care
  - Develop a community scorecard for process improvement that emphasizes and raises the standards of care
  - Improve use of HRAs that collect SDH and measure health confidence
  - Provide technical assistance to providers engaged in transformation and value based models

**Secondary Drivers**

- Quality Measurement
- Health IT Enhancement

**ROADMAP TO IMPROVE POPULATION HEALTH**
Results of the SIM Evaluation

Review of Stakeholder Engagement Activities

There are many stakeholders who are integral to the implementation of the SIM in Iowa. Partners in the SIM vision and implementation include payers, providers, communities, state governmental entities, and others. Table 2 provides a list of SIM stakeholders organized by sector.

Table 2. SIM Stakeholders

<table>
<thead>
<tr>
<th>State Government</th>
<th>Payers</th>
<th>Providers</th>
<th>Communities</th>
<th>Contracted Entities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Iowa Department of Human Services (DHS)</td>
<td>• MCO: Amerigroup</td>
<td>• Accountable Care Organizations (ACOs)</td>
<td>• C3 community care teams</td>
<td>• Iowa Healthcare Collaborative (IHC)</td>
</tr>
<tr>
<td>• Iowa Department of Public Health (IDPH)</td>
<td>• MCO: United-Healthcare</td>
<td>• Independent primary care providers</td>
<td>• Social services agencies</td>
<td>• 3M Analytics</td>
</tr>
<tr>
<td>• Iowa Medicaid Enterprise (IME)</td>
<td>• Wellmark</td>
<td>• Hospitals</td>
<td>• Local government</td>
<td>• Public Policy Center (PPC)</td>
</tr>
<tr>
<td>• Governor’s Office</td>
<td>• MCO: Iowa Total Care (July 1 start)</td>
<td></td>
<td>• Local and county public health</td>
<td>• Iowa Health Information Network (IHIN)</td>
</tr>
<tr>
<td>• Iowa Department on Aging</td>
<td></td>
<td></td>
<td>• Healthcare consumers</td>
<td></td>
</tr>
</tbody>
</table>

During this reporting period, a primary stakeholder in the SIM, namely a Medicaid MCO (UnitedHealthcare), began transitioning out of SIM involvement. In March 2019, the state announced the withdrawal of UnitedHealthcare from Iowa’s Medicaid management, effective June 30, 2019. In response, (and in conjunction with the November 2017 withdrawal of AmeriHealth Caritas Iowa) Iowa DHS announced the addition of an MCO, namely, Iowa Total Care, a Centene subsidiary, to Iowa’s Medicaid management in February 2019. Iowa Total Care is expected to begin Medicaid management in Iowa starting July 1, 2019.

The following sections describe some of the main stakeholder engagement activities and stakeholder experiences with these activities.

SIM Communication Workgroup

The SIM Communication Workgroup, which began in May 2017, held bimonthly meetings during this reporting period. The Communication workgroup provides a platform for members of the SIM team to discuss updates, successes, barriers, grant requirements, and progress towards goals. The SIM communication workgroup discontinued regular meetings in April 2019.

Standardized Social Determinants of Health (SDH) Workgroup

The SIM team convened a group of stakeholders with the end goal of standardizing social determinants of health data collection across the state. Since its inception in June 2017, members of the SDH workgroup have held monthly meetings. Members of the SDH workgroup include state government entities, public health, payers, health systems, provider groups, health and social service providers. The goal of the SDH workgroup is to “suggest standardized measures and provide guidance for collecting, analyzing, reporting, and utilizing the data to our stakeholders through education and advocacy.” The SDH workgroup progressed towards its goal by completing activities listed below throughout the reporting period.

- Collaborated with State Data Center to produce a dashboard of SDH measures across the state
- Identified standardized measures to replace AssessMyHealth SDH screening tool (use ended in April 2019)
- Standardized SDH measures were adopted by IME and are intended to be included in next iteration of MCO contracts
• Developed briefs on key topics (income, housing, and food) from an environmental scan to
guide the Healthy Communities Roundtable Workgroup
• Activities and meetings will continue beyond the SIM funding period

Governor’s Healthcare Innovation and Visioning Roundtable

The AY4 Operational Plan for the Iowa SIM included plans to convene a Governor’s Healthcare Innovation and Visioning Roundtable (indicated as the Roundtable from this point forward), which would be responsible for gathering stakeholders, planning the remaining years of the SIM, and sustaining the SIM initiatives beyond the granting period.

During this reporting period, no Roundtable meetings were convened, but a meeting was held on June 20, 2019 (after SIM funding ended in April 2019). The Roundtable chair underwent a transition during this period with the departure of Jerry Foxhoven, Iowa DHS director in June 2019. The June 2019 Roundtable meeting was chaired by interim Director of the Iowa Department of Human Services, Gerd Clabaugh. Roundtable meetings continue to be facilitated by Health Management Associates (HMA). Since the Roundtable’s beginning in December 2017, seven Roundtable meetings have been held.

In response to the September 2018 recommendations the Roundtable shared with the Iowa Governor’s Office, Governor Reynolds released a letter in October 2018. The full letter is in Appendix C, and the content includes explicit support to sustain the assemblage of the Roundtable, goals, processes, and strategies. The Governor’s letter also describes recommendations for public and legislative engagement, along with regular evaluation of progress.

The workgroups formed and monitored by the Roundtable (Healthy Communities and Data Sharing and Use) continued to meet regularly throughout this reporting period.

Roundtable Vision

Working inside and outside the healthcare system, we will create healthier communities and transform the delivery and financing of care to enable all Iowans to live longer and healthier lives.

Healthy Communities Workgroup

The Healthy Communities workgroup met three times during this reporting period (January, March, and April 2019). During these meetings the group defined Healthy Community Partnerships (HCP) and recommended expanding into more Iowa communities. The HCPs envisioned by the Healthy Communities workgroup have similar qualities to the ACH and C3 models, including a multi-sector coalition, integrator organization, SDH screening, and care coordination.

Data Sharing Workgroup

The Data Sharing Workgroup met less regularly due to complications surrounding information sharing and shared investments.

Stakeholder Engagement Summary

• Members of the Governor’s Healthcare Innovation and Visioning Roundtable, Social Determinants of Health workgroup, Healthy Communities workgroup, and Data Sharing workgroup will all continue to meet to advance SIM goals beyond the SIM funding period.
• The Iowa Governor’s Office stated explicit support to sustain the assemblage of the Roundtable, as well its goals, processes, and strategies.
• SIM-related workgroups plan to include Iowa Total Care, the Medicaid MCO beginning a contract in July 2019, so alignment with SIM goals will continue with this new stakeholder.
Evaluation of Implementation Activities

The implementation activities from the end of AY3 into AY4 were a continuation of previous activities to promote the two primary drivers of the Iowa SIM; namely, delivery system reform (equipping providers with tools and technical assistance on how to use the tools and information) and payment reform (establishment of quality measurement and promotion of value based purchasing contracts). The following outline shows how the activities will be organized and presented in this section.

I. Healthcare Delivery System Reform
   1. Community and Clinical Care Initiatives (C3s)
   2. Statewide Admission, Discharge, and Transfer (ADT) Alerting

II. Payment Reform
   3. Value-Based Purchasing (VBP)
   4. Quality Measures and the Value Index Score (VIS)

III. Technical Assistance (TA)

The rest of this section provides a description of each activity, the status of implementation during this reporting period, and the experiences of stakeholders with each SIM implementation activity.

Community and Clinical Care (C3) Initiatives

SIM-funded Community and Clinical Care (C3) Initiatives were designed to transform healthcare delivery by promoting care coordination across the traditional divide between medical, public health, and social service delivery systems. There are seven C3 service regions across the state that include 15 counties. The following map (Figure 1) shows the C3 sites and associated service areas for SIM AY3 and AY4.

Figure 1 shows the two cohorts of C3 sites, specifically the 7 sites which began C3 activities in 2016 (Muscatine, awarded in 2017, is also included), along with the 9 sites which were awarded in SIM Award Year 4. The C3 sites now cover 25 counties in the state, including independent awards to two counties which were involved in the Webster County C3 (cohort 1 C3). Figure 1 also displays symbols categorizing each integrator organization (i.e. grantee) at each C3 site. Compared to the first C3 cohort, which was primarily comprised of government public health agencies, the second cohort had more representation of healthcare-based C3 site leadership, along with an ACO.
The structure and function of the C3s are based on the Accountable Community of Health (ACH) model of health care delivery. The ACH model was designed to bring stakeholders from a variety of sectors (health care, behavioral health, public health, social services, and community-based supports) together to address not just the medical factors but also the non-clinical factors (social determinants of health) that influence health.

Specific to the SIM, the C3s have two primary functions:

1) Develop and implement population-based, community-applied interventions for their target population, individuals at risk for, or who currently have diabetes

2) Address social determinants of health through care coordination

In this reporting period, the PPC evaluation team assessed the progress and status of the C3 initiatives implemented during their final award year (which ended April 30, 2019). This section describes how C3s are meeting the tenets of the ACH model and their progress in establishing sustainable diabetes initiatives and integrated provision of enhanced care coordination.

In addition, this section includes the experiences of several stakeholder groups as they relate to the C3 initiative. The stakeholders interviewed or surveyed for their experiences included various entities from the local C3s (program staff, steering committee and community coalition members, providers, and diabetes educators).

Sustainability

In AY4, C3 sites included specific activities that address sustainability in their C3 action plans (See each site’s full suitability plan in Appendix A). These plans included initiatives such as:

- Preparation of the delivery system by attending educational opportunities focusing on payment reform.

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• Removal of policy and regulatory barriers through implementation of local data sharing agreements.
• Incorporation of target population data into the local CHNA/HIP process and assuring polices for sharing patient information are in place.
• Improvement of the CHNA/HIP process through clinical-community collaboration
• Implementation of system-wide change strategies to support the provision of clinical and community care coordination and promote sustainability.

**Target Population – Individuals with Diabetes**

In SIM AY4, the C3 focus of activities on improving the health of a particular target population, namely individuals with diabetes. One of the SIM activities involves promoting “population based, community applied” interventions designed to encourage providers to use evidence-based care and support patients in self-managing their health conditions. One of the ways C3 initiatives do this is through leveraging existing community evidence-based programming supporting diabetes self-management such as the Diabetes Self-Management Education and Training (DSME) program, the Better Choices, Better Health program (also known as the Stanford Chronic Disease Self-Management Program (CDSMP)), and the National Diabetes Prevention Program (NDPP).

In Figure 2, diabetes-related programming in Iowa is highlighted. Diabetes education programs/sites are indicated by the colored circles; those with state certification are indicated with a star inside the circle.

Diabetes education programs are widespread across the state and it is important to note those with state certification. All DSME programs included in this map are American Diabetes Association Recognized Education Programs. This accreditation qualifies Medicare program participants for cost reimbursement and, in Iowa, state-certified DSME programs are reimbursed by Medicaid and some private insurers. Thus, efforts to promote state-certification of DSME programs is another strong policy angle for SIM activities. Efforts to implement this part of the population health initiative of the SIM during this reporting period have involved many policy levers for change including establishment of cooperative agreements and relationships, helping build infrastructure, and offering financial incentives through reimbursement for education programs. While the number of DSME sites have remained constant, 32 additional DSME sites in the state have received the designation of state certified since 2017, with 103 total state certified sites in Iowa in 2019. Other diabetes programming in the state, specifically NDPP sites and Better Choices, Better Health program (also known as CDSME) sites have maintained a constant presence since 2017.

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Figure 2. Diabetes Programming Map

Note: all program sites may not be visible on the map, due to overlap in dense locations

**DSME:** Diabetes Self-Management Education (DSME) is a 10-hour program for people diagnosed with diabetes which provides education on medical management and self-care behaviors [Source: ADA Recognized Education Programs and American Association of Diabetes Educators accredited programs]

**BCBH:** Better Choices, Better Health (BCBH) (also known as Chronic Disease Self-Management Program/Education (CDSMP)) is a six week workshop (15 hours total) for individuals with chronic conditions to improve health outcomes through managing lifestyle behaviors [Source: Iowa Department of Public Health]

**NDPP:** National Diabetes Prevention Program (NDPP) is a yearlong program (16 sessions + 6 follow-up sessions) that can help prevent or delay type 2 diabetes for people with prediabetes [Source: CDC NDPP Registry]

**State Certification:** The IDPH certifies diabetes outpatient education programs – certification is necessary to obtain reimbursement from Medicaid and some private insurers in the state of Iowa [Source: Iowa Department of Public Health]

**Care Coordination**

In June of 2016, the Iowa Department of Public Health published its “Care Coordination Statewide Strategy.” The mission was to, “Establish coordinated patient care as the standard in Iowa” while the vision was, “By 2019, improve patient outcomes and experiences through coordinated delivery of healthcare and community services in the right order, at the right time, and in the right setting.” The strategy included four goals, each with objectives (13 total) and related tactics (41 total) to reach the objectives. Using this strategy document, a strategy matrix was developed to document and track each of the C3’s work on each of the tactics. The matrix included each of the tactics by objective and goal along with columns to report the status for each of the tactics: 1) no activity, 2) planning underway, 3) developing, 4) implementation initiated/underway, 5) complete and/or fully operational or 6) not applicable and/or not intending to implement. In September 2016, April 2017, April 2018, and April 2019 each C3 completed and self-reported the status of each tactic on the matrix (* except for Muscatine C3 who completed their first matrix in April 2017).

Looking just at the status of the 41 tactics at project end in April 2019, we see that the each of the C3s made advances/changes towards completely or fully operatizing most of the strategies. The status of all the tactics, by C3, are summarized as follows:

- Webster County C3 reported all tactics as “implementation initiated/underway” or “complete and/or fully operational”. Advances were made in two tactics: 3.2c establish processes for referral follow-up between and among community-based services and clinical providers and 1.3a increase recognition and capacity to address social determinants of health through
education and incorporation within health risk assessments to identify patient-specific needs which moved from “implementation initiated/underway” to “complete and/or fully operational”.

- Linn County C3 reported movement in 12 tactics and in some instances, movement was from “activity planning” or “developing” a tactic to “no activity” and/or “no longer planning to implement”. At year end, Linn County C3 had 8 tactics with “no activity” and/or “no longer planning to implement”, no tactics with “planning underway”, 5 tactics “developing”, 20 tactics with “implementation initiated/underway”, and 8 tactics “complete and/or fully operational”. Five tactics advanced to “complete and/or fully operational” during the year. Of all the C3s, Linn County has the largest number of tactics reported as “not applicable” and/or “not intending to implement”.

- Marion County C3 reported all tactics as “developing” (1), “implementation initiated/underway” (1), or “complete and/or fully operational” (39) and reported the most amount of movement (25 tactics) to “complete and/or fully operational” of all the C3s.

- Sioux County C3 continued to report 6 tactics with “no activity”, as well as 13 tactics with “implementation initiated/underway” and 22 tactics “complete and/or fully operational”. The 6 tactics with no activity included: 1.1c increase access to needed medical services in locations and at times that meet patients where they are; 2.1a establish designated roles for involvement of pharmacy, behavioral health, and other specialty providers as members of the patient care teams; 2.1c encourage involvement of team member participation in care services in alignment with highest scope of practice; 2.1e promote the use of evidence-based team development and improvement practices, such as TeamSTEPPS, to ensure team execution and efficiency in patient care and safety; 2.2c encourage use of EHR patient access or patient portals to facilitate direct availability and inclusion of information by patients and caregivers; and 2.3a create and maintain policies for patient-centered care practices across team settings, emphasizing inclusive team-based care, shared-decision making, and patient activation strategies. Sioux County was second of the C3s in its number of tactics that moved to “complete and/or fully operational” (17 tactics) during the grant year.

- Dallas County C3 reported limited movement in tactics during the grant year with no tactics with “no activity”, 2 tactics with “planning underway”, 12 tactics “developing”, 13 tactics with “implementation initiated/underway”, and 14 tactics “complete and/or fully operational”. Of these, 4 tactics moved status during the grant year, including: 1.1a establish person and family engagement (PFE) as a standard of care through inclusion practices at the direct level of care through leadership/administration; 1.2c designate defined care coordination roles and/or responsibilities with the clinic, practice, or organization; 2.1b develop and maintain protocols and processes to facilitate reciprocal care communication among care teams members, setting expectations for reciprocal communication and closer of referral; and 4.1a encourage full use and optimization of electronic health record capacities to facilitate collection and capture of patient population health status and care coordination processes.

- Great River C3 reported changes in status for 21 of the tactics with no tactic reported as “no activity” or “not applicable and/or not intending to implement”. Most of the changes were from “planning” to “implementation initiated/underway” or “complete and/or fully operational”. Two tactics were reported as “complete and/or fully operational” including: 1.2e increase awareness and capacity to address social determinants of health (SDH), promoting inclusion of SDH as a component of implemented health risk assessments (HRAs) and 3.2a build, enhance and maintain collaborative relationships and functional referral mechanisms between health care systems and community-based services.

- Muscatine C3 reported its baseline data for all tactics in 2018 because this was its first year of Iowa SIM C3 funding. In 2019 they reported 1 tactic with “no activity”, no tactics with “planning underway”, 9 tactics “developing”, 17 as “implementation initiated/underway”, and 14 as “complete and/or fully operational”. The three tactics that moved from “no activity” to being addressed as part of the C3 include: 1.3a increase recognition and capacity to address SDH through education and incorporation within HRAs to identify patient-specific needs; 2.1e promote the use of evidence-based team development and improvement practices, such as TeamSTEPPS, to ensure team execution and efficiency in patient care and safety; and 2.3c identify and incorporate non-clinical services that can be used in care coordination practice processes and protocols to support comprehensive patient-centered care.
The C3 initiative has a variety of goals related to the SIM but one of the original intentions for the C3 communities was to establish coordinated patient care to link clinical and community-based services and address social determinants of health. At the local level, the C3 communities are designed to be on the forefront of providing enhanced care coordination activities as part of their role on the SIM.

At the end of each award year for the C3 grants, we asked the lead staff for each C3 initiative to self-rate their progress with some of the tactics advocated in the Care Coordination statewide strategy plans to get a sense of where the C3 communities were with regard to care coordination activities. For each of the tactics under the care coordination objectives assessed, progress was ranked from 0-5:

0 = Not Applicable/Not Intending to Implement
1 = No Activity
2 = Planning Underway
3 = Developing
4 = Implementation Initiated/Underway
5 = Completed/Fully Operational

Scores were calculated for each site by summing the status rankings and dividing by the number of tactics. The scores presented in Table 3 are aggregated over the original six C3 sites. The Musctine C3 site was not included because it was in its first year of operation during this reporting period.

Table 3. Year 1, Year 2, and Year 3 Self-Assessment of Care Coordination Activities

<table>
<thead>
<tr>
<th>Objective (# Tactics)</th>
<th>End of Award Year 1</th>
<th>End of Award Year 2</th>
<th>End of Award Year 3</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Advance patient centered care practices (7)</td>
<td>3.2</td>
<td>3.6</td>
<td>3.9</td>
<td>+</td>
</tr>
<tr>
<td>1.2 Facilitate the impactful delivery of healthcare services (5)</td>
<td>3.2</td>
<td>4.2</td>
<td>4.5</td>
<td>++</td>
</tr>
<tr>
<td>1.3 Establish coordinated connections to needed community-based services (3)</td>
<td>3.4</td>
<td>4.3</td>
<td>4.7</td>
<td>++</td>
</tr>
<tr>
<td>2.1 Develop multi-discipline patient-centered care teams (6)</td>
<td>2.3</td>
<td>2.8</td>
<td>3.8</td>
<td>+++</td>
</tr>
<tr>
<td>2.2 Use of HIT to facilitate cross-communication and documentation (4)</td>
<td>3.1</td>
<td>3.1</td>
<td>3.7</td>
<td>+</td>
</tr>
<tr>
<td>2.3 Establish standardized processes and protocols for collaborative care delivery (3)</td>
<td>3.2</td>
<td>3.7</td>
<td>3.9</td>
<td>+</td>
</tr>
<tr>
<td>2.4 Enhance collaboration among healthcare providers, community-based services, and the payer community (3)</td>
<td>2.4</td>
<td>3.1</td>
<td>3.6</td>
<td>++</td>
</tr>
<tr>
<td>3.1 Align community-based services for each patient/service recipient to ensure greatest impact (3)</td>
<td>3.9</td>
<td>4.4</td>
<td>4.6</td>
<td>+</td>
</tr>
<tr>
<td>3.2 Connect clinical services with community-based services (4)</td>
<td>3.6</td>
<td>4.4</td>
<td>4.7</td>
<td>++</td>
</tr>
<tr>
<td>4.1 Promote and enhance the use of HIT to identify, track, and monitor population health (3)</td>
<td>3.2</td>
<td>3.4</td>
<td>3.8</td>
<td>+</td>
</tr>
</tbody>
</table>

[+] = Increase in score from Year 1 to Year 3 of 0.5-0.9; [++] = Increase in score from Year 1 to Year 3 of 1.0-1.4; [+++] = Increase in score from Year 1 to Year 3 of 1.5 or more

In Award Year 3, the C3 sites reported progress toward implementation for all the care coordination objectives. Similar to Award Year 2 results, objectives related to facilitating and establishing the connections necessary to link patients’ clinical and community-based service needs (1.2, 1.3, 3.1, 3.2) were most likely to be in the implementation stage during year 3. The remaining objectives, specifically, advancing patient centered care (1.1), standardizing processes and protocols for care delivery (2.3), developing multi-disciplinary care teams (2.1), enhancing collaboration among
important stakeholders (2.4), and using HIT (2.2, 4.1) were all approaching the implementation stage at the end of award year 3. Tactics 2.1 and 2.2 (developing multi-disciplinary care teams and use of HIT, respectively) made notable gains between Year 2 and Year 3, with Tactic 2.1 making the greatest gains across three years.

As seen in Figure 3, all tactics progressed steadily towards implementation over the C3 award years. This figure was created from the aggregate ratings shown in Table 3.

**Figure 3. Self-Rated Progress of Care Coordination Tactics Over Time (aggregated across sites)**
C3 sites were required to develop activities for their initiatives for five specific care coordination tactics. Table 4 presents the developmental progress of the C3s in meeting this requirement after each year of SIM funding based on C3 site self-assessments. The table shows each required care coordination tactic, the progress levels for tactic implementation, and how many C3 sites rated themselves at each level.

### Table 4. C3 Progress on the Required Care Coordination Tactics

<table>
<thead>
<tr>
<th>Required Care Coordination Tactic</th>
<th>Stage of Implementation</th>
<th>Year 1 end # Sites</th>
<th>Year 2 end # Sites</th>
<th>Year 3 end # Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1f. Promote the implementation of comprehensive and high quality health risk assessments (HRAs) that identify patient, clinical, social, and community needs.</td>
<td>No Activity Planning</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Implementation Started</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Fully Operational</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>1.2c. Designate defined care coordination roles and/or responsibilities with the clinic, practice, or organization.</td>
<td>No Activity Planning</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Implementation Started</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Fully Operational</td>
<td>-</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>1.3a. Increase recognition and capacity to address SDH through education and incorporation within HRAs to identify patient-specific needs.</td>
<td>No Activity Planning</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Implementation Started</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Fully Operational</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1.3b. Identify available assistance within the community and establish points of contact to enable resource sharing and referral.</td>
<td>No Activity Planning</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Implementation Started</td>
<td>3</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Fully Operational</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2.2a. Promote the use of available HIT resources to allow mutual access to patient care information from all appropriate members of the patient care team, i.e., Iowa Health Information Network (IHIN), shared electronic health records (EHR) view, and messaging functionalities.</td>
<td>No Activity Planning</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Implementation Started</td>
<td>3</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Fully Operational</td>
<td>1</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

Figure 4 shows the changes in the statuses of required tactics over time. The percentages displayed were calculated by adding together the number of tactics in each stage of implementation across sites, then dividing by all possible tactics (Year 1 denominator excluded C3 site added in Year 2). As the figure shows, the percentage of tactics reported as fully operation grew steadily over the C3 Award Years.
Stakeholder Experiences with the C3 Initiatives

To understand progress made by C3 communities toward SIM objectives, the evaluation team surveyed or interviewed a variety of stakeholders in the C3 initiatives. Within this evaluation period, PPC evaluators gathered insights about the C3s from:

- C3 Project Staff
- C3 Steering Committee Members
- C3 Community Coalition Members
- C3 Local Healthcare Providers
- C3 Clinic Managers and Diabetes Educator

A more detailed report from each of these data collection efforts can be found in Appendix B, referenced within each section. A summary of the findings from each follows.

C3 Project Staff

In the spring of 2019 (the end of this reporting period), PPC team evaluator RHS made site visits to each of the C3s. C3 project staff were interviewed to get an update on their activities, project strengths and successes, challenges to implementation, and to obtain an idea of their main needs and concerns. The following sections provides the highlights from these site visits.

Steering Committee Members

A web-based survey was conducted of all seven C3 steering committee members. Each C3 steering committee received a survey for their C3 resulting in seven C3 steering committee surveys. This approach allowed the survey instruments to be consistent while including introductions that reflected the names and geographic areas of each C3. The survey asked questions about the survey respondent’s role in the C3 and representation on the steering committee, as well as questions about awareness and knowledge of the local C3, participation in C3 activities, and satisfaction with C3 initiatives. Most questions in the survey used a Likert scale; survey respondents were asked to rate their agreement with various statements, using the ratings: “strongly disagree”, “disagree”, “neither agree nor disagree”, “agree”, and “strongly agree”. Thirty-three surveys were completed for an aggregate response rate of 52 percent with varying response rates by C3. Dallas County C3 and Webster County C3 had the highest survey response rates while Muscatine C3 had the lowest response rate. The steering committee survey included a brief overview of why the survey was being conducted and for those that needed additional information about the Iowa SIM and C3s, additional information was made available electronically. Two survey respondents, one from Dallas County C3 and one from Webster County C3 requested additional information. This is a strong indication that respondents are aware of the C3s and the SIM. Considering all of the questions asked, no survey
respondent reported they “strongly disagree” with any of the survey statements and therefore, this response has been omitted from all of the tables included in the report.

When asked to report their role on the C3 steering committee, survey respondents indicated they are public health providers (44%), hospital leaders (17.6%), clinic leaders (14.7%), healthcare providers (11.7%), and others (14.7%). When the survey asked, “I am aware of the C3’s role in my community”, survey respondents reported they “strongly agree” (64%), “agree” (33%), or “neither agreed or disagreed” (3%), all indicating a stronger awareness of the role of the C3s when compared to responses at the end of Year-1. When the survey stated, “I am aware of the C3 initiatives underway in my community”, survey respondents reported they “strongly agree” (67%) and “agree” (33%), again indicating an increase in awareness when compared to Year-1 and Year-2. When the survey stated, “I participate in local C3 initiative planning and development”, 52 percent “strongly agree”, 36 percent “agree”, 9 percent “neither agree nor disagree”, and 3 percent “disagree.” These data suggest there may have been a shift away from planning and development when compared to Year-2 activities.

All steering committee members from Linn County C3 “strongly agree” they participate in C3 planning and development, the same as Year-2. This is unique amongst all the C3s. C3 steering committee members were also asked if they participate in local C3 decision-making. Forty-eight percent “strongly agree”, 33 percent “agree”, 12 percent “neither agree nor disagree”, and 6 percent disagree they participate. These responses represent a decline in decision-making when compared to Year-2; however, all steering committee respondents from Linn County C3 and Sioux County C3 report they participate in local C3 decision-making. C3 steering committee members were asked to rate their agreement that the steering committee uses local patient data to drive C3 decision-making. They report they “strongly agree” (36%), “agree” (33%), or “neither agree nor disagree” (30%).

As indicated in Table 5 below, steering committee members were most in agreement with, “I am aware of social determinants of health and their impact on health outcomes”. We also see that 97 percent of steering committee members are aware of the gaps in diabetic services; however, awareness of the intended impact of care coordination appears to have declined. In Table 6 below we see a continued trend of steering committee members reporting they agree community members’ needs related to social determinants of health will be or are being addressed by the local C3 initiatives and they agree community partners/social services have been working more/better together to meet patient needs.

When C3 steering committee members were asked, “It’s important that I participate in the C3 steering committee”, 58 percent “strongly agree”, 36 percent “agree”, and 6 percent “neither agree nor disagree”, a slight decline when compared to Year-2. C3s were also asked about their satisfaction with the C3 and the initiatives underway in their communities, they reported: 44 percent are “very satisfied”, 47 percent are “satisfied”, and 9 percent are “neither satisfied nor dissatisfied”. Comparing this to Year-1 and Year-2, steering committee members appear to be more satisfied with C3 initiatives. a lower percentage of survey respondents were “very satisfied” in Year-2; however, no survey respondents were dissatisfied in Year-2. Linn County C3 steering committee members continue to be the most likely to be “very satisfied” (83%) with the local C3 and its initiatives. All steering committee members report they are aware that SIM funding for the C3s ends in 2019.
<table>
<thead>
<tr>
<th>C3 Activities and Initiatives</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware of social determinants of health and their impact on health outcomes.</td>
<td>AY 2</td>
<td>84%</td>
<td>13%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>AY 3</td>
<td>94%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Aware of the role of care coordination and its intended impact on health outcomes.</td>
<td>AY 2</td>
<td>69%</td>
<td>28%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>AY 3</td>
<td>55%</td>
<td>27%</td>
<td>9%</td>
</tr>
<tr>
<td>Aware of the gaps in diabetic services in community/region.</td>
<td>AY 2</td>
<td>50%</td>
<td>41%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>AY 3</td>
<td>52%</td>
<td>45%</td>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activities and Outcomes of the C3 Initiatives</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community members’ needs related to social determinants of health will be or are being addressed by the local C3 initiatives.</td>
<td>AY 1</td>
<td>42%</td>
<td>45%</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>AY 2</td>
<td>48%</td>
<td>36%</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>AY 3</td>
<td>55%</td>
<td>33%</td>
<td>9%</td>
</tr>
<tr>
<td>Community members’ diabetic needs will be or are being addressed because of the local C3 initiatives.</td>
<td>AY 1</td>
<td>39%</td>
<td>43%</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>AY 2</td>
<td>27%</td>
<td>61%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>AY 3</td>
<td>27%</td>
<td>39%</td>
<td>33%</td>
</tr>
<tr>
<td>Care coordination needs in my community will be or are being addressed through the local C3 initiative.</td>
<td>AY 1</td>
<td>40%</td>
<td>49%</td>
<td>11%</td>
</tr>
<tr>
<td>Local C3 is implementing care coordination for patients.</td>
<td>AY 2</td>
<td>52%</td>
<td>42%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>AY 3</td>
<td>55%</td>
<td>27%</td>
<td>9%</td>
</tr>
<tr>
<td>In the past year, community partners/social services have been working more/better together to meet patient needs.</td>
<td>AY 1</td>
<td>46%</td>
<td>43%</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>AY 2</td>
<td>44%</td>
<td>44%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>AY 3</td>
<td>52%</td>
<td>39%</td>
<td>9%</td>
</tr>
</tbody>
</table>
Local Healthcare Providers

A mailed healthcare provider survey was conducted of those healthcare providers participating in the Webster County, Marion County, and Great River C3s. The survey was mailed to 53 nurse practitioners, physicians, physician assistants, psychiatrists, and one registered nurse. The survey response rate was 20 percent, with five respondents reporting they are physicians, one reporting they are either a nurse practitioner, physician assistant, or nurse, and two not stating their profession.

The survey asked questions about C3 awareness, knowledge, and participation in C3 initiatives; C3 satisfaction overall; and background information on the survey respondent. For the awareness, knowledge, and participation questions, the respondents were asked to use a Likert scale ranging from “strongly disagree” to “strongly agree” (the same used in the steering committee and community coalition surveys) to rate the 17 statements provided. When asked about awareness of the SIM initiative, survey respondents either reported they “strongly agree” (50%) or “strongly disagree” (50%) they are aware. When asked about awareness of the local C3’s role in the community and activities underway in the community, healthcare providers were most likely to report they “strongly disagree” (56%) they are aware. When asked about whether they are aware of the local and regional health and social services available to patients, again healthcare providers either report they “agree” (50%) or “strongly disagree” (50%) they are aware. This awareness is considerably lower when compared to Year-2 survey findings when 71 percent “strongly agreed” or “agreed” they are aware.

Although survey respondents didn’t report a strong awareness of the C3’s roles and activities, 44 percent “strongly agree” or “agree” and 44 percent “neither agree nor disagree” that they support their clinic’s collaboration with C3 initiatives and activities. Additionally, 33 percent “agree” and 56 percent “neither agree nor disagree” that they actively encourage the clinic’s collaboration with C3 initiatives and activities. Healthcare providers who “agree” they are aware of the SIM also report more awareness of the C3 as a whole and more support for clinic involvement.

No healthcare provider reports they “strongly agree” or “agree” they use information from the C3’s care coordination database to learn more about their patients. Two healthcare providers report they “agree” they are better able to support patients’ needs related to their social determinants of health because of the local C3 initiatives. These same providers report they “agree” that they are able to support patients’ diabetic needs because of the local C3 initiative. No healthcare provider reports being satisfied with their role in the C3.

Although the survey response rate continues to be low and survey respondents continue to report a lack of awareness of the C3s and their work, C3 staff report C3 activities are being imbedded in care coordination activities and operations of clinics and local public health without attributing the work to the C3 and its goals and/or without direct involvement by healthcare providers. Also, a likely factor is referrals into the C3 are being made by clinic care coordinators or health navigators, limiting the healthcare providers’ contact and exposure to the C3 as a whole.

Clinic Managers and Diabetes Educator

Telephone and on-site interviews were conducted of 12 diabetes educators and 3 care coordinators engaged with their local C3. Care coordinators and diabetes staff agree their operations have not changed solely because of the C3s; however, the C3 has had a direct impact on components and more broadly on their organizations as a whole. For example, they report the C3 work has been an integral part of broader changes where roles, degree of care coordination and integration, patient engagement, and operations are constantly changing due to ACOs, managed care, other insurers, grant funded initiatives (e.g., SIM and National Association of Community Health Centers - NACHC), local boards of health/county boards, and health policy in general. Some of the care coordinators noted new care coordinator/health navigator positions have been added to their organizations. All care coordinators and diabetes educators are working to improve access, handoffs between providers/services, patient involvement, and patient outcomes as well as decrease duplication of unnecessary services. Additionally, they report C3s have impacted care coordination and diabetes care by bringing internal stakeholders and community partners together to understand roles, responsibilities, programs and services; educating patients, providers, and community members on care coordination/health navigation, social determinants of health, and diabetes; supporting local initiatives such as public safety programs and diabetes education programs; and providing resources that support care coordinator positions who directly improve patient outcomes.
Care coordinators and diabetes staff agree their participation in the C3 has improved transparency, knowledge of local and regional health and social services resources, local and regional partnerships, and awareness of the need and process to uncover and address patients’ social needs. They agree their organizations are committed to long-term implementation of C3 goals. However, for some organizations, without additional funding for extensive care coordination services, including those directed at diabetes patients, will no longer be made available. Instead, where feasible they will integrate care coordination into funded and operating programs and services, such as the First Five Program, congregate dining, home care, and community paramedicine.

**Steering Committee Focus Groups**

In March/April 2019, at the end of three-year grant period, steering committee focus groups were conducted with all C3s except for Webster County C3. All but one focus group was conducted face-to-face. The focus groups shared their greatest successes/accomplishments and challenges, expectations and plans for the C3 moving forward, and recommendations for communities and regions developing or implementing care coordination.

**Greatest Successes:**

- Building community partnerships and relationships
- Establishing care coordination
- Identifying local resources and sharing that knowledge throughout the community
- Meeting the needs of community members who would have gone without care or would have been underserved
- Better identifying, serving, and educating pre-diabetes and diabetes patients
- Increasing community partners/key stakeholders’ understanding of the impact of social determinants of health
- Improving referral and organizations’ internal processes

**Greatest Challenges:**

- Time given the availability of limited staff and the duration of the C3 funding
- Community members are not aware of the services available to them, including those offered by local public health
- Assess My Health survey instrument which was not discussed by all C3s before implementation
- Restrictions on funding use
- Data sharing
- Lack of incentives to fully support people towards health and wellness
- Local politics
- Organizations and people that get stuck in their silos
- Staff turnover within the C3 and at the state level
- Standardizing processes across various systems, clinics, and/or across state lines

**C3 Team Exit Interviews**

All C3 lead staff (11) participated in project exit interviews as part of the Iowa SIM evaluation. The interviews were either on-site or by telephone during March/April 2019. Staff were asked questions about sustainability plans, local and regional system changes related to diabetes and care coordination, C3 participation requirements and funding, and their role as lead staff.

Highlights and themes from the exit interviews are as follows:

- Most will have some level of staff dedicated to maintaining C3 components, most likely focusing on relationship building and care coordination
- Most will maintain a form of their steering committee, but plans related to management and structure are still being developed
• Use of care coordination data management systems has increased, but it has been slow to adopt. Partner organizations’ staff were more likely to get onboard if they were required to use the tools
• Data sharing agreements and having agreements in place to maintain data privacy is and was complicated, and delayed and/or hindered initiatives
• Local health provider participation had less to do with provider type and more to do with people/leadership
• Internal workflows are unique to each organization and impact data sharing, care coordination, and processes overall
• Change takes a lot of time when multiple stakeholders with different drivers are at the table making decisions, creating plans, and dedicating staff time
• C3s are seeking or have obtained other funding sources to support program components
• Community health needs assessments are being used and adapted based on lessons learned from the C3s
• Community-wide care coordination entry points were established throughout some of the C3 so regardless of where a patient enters the system, they have access to care coordination
• Opportunities exist to leverage other programs and services, such as First Five within local public health or Medicare programs within clinics and hospitals

Unique programs or services that were developed and/or activities that should be noted, include but were not limited to:

• Roadshows to educate clinic staff and providers on diabetes education, the referral process, and/or care coordination
• Establishment and branding of a local population health consortium that was the result of the C3
• Community paramedicine look-alike
• Regional health coach training for schools, clinics, pharmacies, hospitals, gyms, and other partners
• Regional care coordination simulation to identify gaps in services and service knowledge

One C3 noted that from the start of the C3 they had sustainability at the forefront of decision-making and it was a factor that determined whether any initiative would move forward. This included establishing a sustainability committee during Year-1. They reported that this approach continues to be a critical factor in their ability to maintain and develop C3 programs. Another C3 noted that, “until there is pain within the system, and they have no choice but to change, the system will not change.” This they believe is a reflection of people who do not embrace change and reimbursement systems that continue to be based on volume.

When C3s discussed the technical assistance and support provided to them through the Iowa SIM, all reported some of the support was beneficial. Areas where support was lacking related to on-boarding and initial C3 training, data sharing between C3s, buy-in from the leaders and managers of the Iowa SIM, and lack of defined/unclear roles and responsibilities of leaders and mangers of the Iowa SIM.

For future projects, C3s leaders and steering committee members reported the following suggestions:

• Start small but think broadly.
• Always leave a seat at the table for community partners.
• Establish a community-wide matrix with patients in the middle.
• Maintain the project focus during a 3-year grant cycle as it’s critical to sustain success. Most healthcare organizations are operating within a rapidly changing environment so significant shifts in scope can delay and/or decrease participation by local stakeholders.
• Plan funding based on need. For example, Year-1 planning sites had access to less funding during implementation than Year-1 implementation sites. This seemed counter to needs.
• Include a steering committee as a required component as this was key towards building local partnerships, identifying local services and capabilities, securing buy-in, and educating participants.
• Identify and secure an integrator organization that is neutral, has extensive community/regional knowledge, can commit the time and resources, and works best given community relations. This organization may vary from region to region based on role, resources, connections, staff, as well as other factors.

• Provide technical assistance that includes on-boarding, is tailored to community or regional need, includes a menu of standards services, and includes regular sharing between initiatives (e.g., C3s).

• Share best practices from other state’s SIM initiatives, in particular those focusing on social determinants of health, diabetes and care coordination.

Summary of the C3 Initiative

• Year-3 data collection for the seven C3s is complete and indicates stakeholders continue to be on board, aware of, and participating in their planning and development.

• Advances have been made towards developing and hardwiring care coordination into the continuum of health and social services

• Diabetes initiatives are fully operational but will be difficult to sustain without funding for staff training.

• Local and regional relationships have evolved and mechanisms are in place to support their future and development.

• Data sharing is underway but continues to be a challenge.

• Program sustainability plans have been set and in some instances will be sustained.

• Each C3 advanced the Iowa Department of Health’s care coordination statewide strategy and all are sustaining some of this work and/or have integrated it into their operations.

• Healthcare provider involvement in the initiatives is still unclear and appears to be limited. However, community partners, care coordinators and diabetes educators are aware of and engaged in C3 planning, development, and implementation. They are using and advancing C3 data sharing tools towards improving patient outcomes.

• The statewide landscape of diabetes programming is growing in alignment with the C3 focus on diabetes management. In Iowa, state-certified DSME (Diabetes Self-Management Education) programs are reimbursed by Medicaid and some private insurers. Thus, efforts to promote state-certification of DSME programs is another strong policy angle for SIM activities. Thirty-two additional DSME sites in the state have received the designation of state certified since 2017, with 103 total state certified sites in Iowa in 2019 (Figure 2).

• In exit interviews, C3 staff and steering committee members share, success, challenges, and recommendations for the future.

Statewide Admission, Discharge, and Transfer (ADT) Alerting

Statewide ADT alerting has been a SIM goal since inception, with the intention to help transform the healthcare delivery system by improving the quality of care coordination activities and, as a result, reduce the rates of preventable readmissions and preventable ED visits. During this reporting period, the SWAN (Statewide Alert Notification), which was used in prior years to achieve this goal, ended in April 2019.

While the SWAN was discontinued, its vendor, IHIN (Iowa Health Information Network), will continue providing Iowa hospitals with ADT alerts through a partnership with PatientPing. While some Iowa hospitals opted to continue their contracts with IHIN to receive PatientPing alerts, some opted to contract directly with PatientPing (Table 7). Three of the Medicaid ACOs which were original SWAN users (Mercy, UnityPoint, and Broadlawns) opted to contract directly with PatientPing. Appendix D is a Frequently Asked Question document developed by IHIN to inform stakeholders during the transition from SWAN to PatientPing.

In AY3, a SWAN+ pilot was planned, and while the SWAN+ was never fully launched, PatientPing offers similar functionalities as the SWAN+ pilot, such as real-time notifications. To assist SWAN users in transitions to PatientPing, a demonstration webinar was conducted in April 2019.

Table 7. Health System IHIN and Patient Ping Contract Statuses

<table>
<thead>
<tr>
<th>Contracted directly with PatientPing and are using IHIN as the pass-through for their ADT feeds</th>
<th>SWAN Participants that send ADTs to IHIN and have given permission to pass the ADTs to PatientPing</th>
<th>Contracted directly to PatientPing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genesis UIHC and 8-Affiliates – Pending - Onboarding and testing are completed through IHIN and testing with PatientPing will begin once PatientPing/UIHC have final contract signed.</td>
<td>Clarinda and Spencer</td>
<td>MercyOne and Affiliates (Mercy and Trinity), UnityPoint Health and Affiliates, Broadlawns</td>
</tr>
</tbody>
</table>

The following map (Figure 5) provides the geographical distribution of the 118 targeted hospitals in Iowa, which ones are participating in the statewide ADT system (and in what capacity), and an indication of which of those hospitals fall within the C3 regions (shaded counties). Hospitals with representation on C3 steering committees are indicated by a star. If the hospital is sending alerts to the statewide ADT system (any combination of PatientPing and IHIN participation), the circle and/or star is filled in. Changes to statewide ADT participation are noted, with each color indicating the level of participation and noting discontinued participation since the 2018 SWAN participant list (21 hospitals).

Figure 5. Statewide ADT Network Map

Data sources: Hospitals sending ADTs from IHIN staff on June 28, 2019
C3 Steering Committee hospitals from IDPH staff via C3 work plans July 3, 2017
Iowa Hospital Data from Centers for Medicare & Medicaid Services 2017 Provider of Services file Retrieved August 2018
Summary of Statewide Admission, Discharge, and Transfer (ADT) Alerting

- During this reporting period, the SWAN (Statewide Alert Notification), which was used in prior years for Statewide Admission, Discharge, and Transfer (ADT) alerting, ended in April 2019.
- SWAN vendor, IHIN (Iowa Health Information Network), will continue providing Iowa hospitals with ADT alerts through a partnership with PatientPing.
- Some IHIN clients opted to continue their contracts with IHIN to receive PatientPing alerts, and some opted to contract directly with PatientPing (Table 7). Three of the Medicaid ACOs which were original SWAN users (Mercy, UnityPoint, and Broadlawns) opted to contract directly with Patient Ping.
- Since the 2018 Award Year 3 SIM report, 21 SWAN-participating hospitals have discontinued participation in the current PatientPing/ IHIN hybrid statewide ADT system.

Quality Measures

In all prior years of the SIM, the goal of payment reform included aligning payers around standardized quality measures to inform value-based payments. The metric selected at the beginning of the SIM was the Value Index Score (VIS), the calculation of which was facilitated by 3M Analytics. Due to issues with the ability to stabilize MCO encounter data, 3M was unable to provide baseline information for use in the VBP contracts. During this reporting period, the state’s contract with 3M was terminated and the VIS requirements in MCO contracts were replaced with a subset of HEDIS measures from the Medicaid Adult and Child Coresets. The subsets of measures which determine payments were selected by each MCO, so standardization of quality measures across payers was not fully realized.

As documented in prior evaluation reports, the VIS tool and dashboard had encountered issues with functionality and buy-in from stakeholders. Specifically, the AY3 report stated, “All six stakeholders interviewed (two MCOs and four ACOs) independently noted hesitation to adopt the VIS metrics, with five stakeholders noting that the VIS was developed to measure privately insured populations and was not suited to the Medicaid population.” Some suggested using a nationally standard tool for Medicaid populations, like HEDIS. In addition, the transition should be relatively undisruptive, since both MCOs reported using national measures (HEDIS) along with the VIS previously. So, this transition of quality measures may garner more support and fortify the potential for sustaining Value-Based contracting beyond the SIM.

At the time of this report, IME reports pursuing a proof of concept designs for enhanced analytics through a Data Lake concept. This includes the concept design of an analytics dashboard that could be used to monitor performance under VBP contracts as well as MCO oversight.

Value Based Purchasing

Value Based Purchasing (VBP) is broadly defined as linking healthcare provider payment and incentives to improved quality of care and performance. This payment methodology is intended to hold healthcare providers accountable for both the cost and quality of care they provide. VBP programs can take on many forms but all attempt to encourage reductions in inappropriate care and identify and reward the best-performing providers.

While the ultimate goal is to encourage VBP participation by all payers in Iowa, throughout the SIM award years, the focus of the VBP initiative continues to be Medicaid, specifically, VBP contracting between the MCOs and the five Medicaid ACOs. As a SIM goal, establishment of VBP is measured by an increase in the number of provider contracts in a VBP arrangement and number of lives covered under VBP contracts.

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During this reporting period, a primary stakeholder in the VBP efforts, namely a Medicaid MCO (UnitedHealthcare), began transitioning out of SIM involvement. In March 2019, the state announced the withdrawal of UnitedHealthcare from Iowa’s Medicaid management, effective June 30, 2019.\textsuperscript{13,14} In response, (and in conjunction with the November 2017 withdrawal of AmeriHealth Caritas Iowa), Iowa DHS announced the addition of an MCO, namely, Iowa Total Care, a Centene subsidiary, to Iowa’s Medicaid management in February 2019. Iowa Total Care is expected to begin Medicaid management in Iowa starting July 1, 2019.\textsuperscript{15}

During this reporting period, the Iowa SIM achieved its goal to increase the prevalence of VBP arrangements across 40% of Medicaid membership (see Figure 6).

\textbf{Figure 6. Value Based Purchasing Enrollment by MCO}

![Figure 6](chart.png)

The SIM goal of aligning payers in quality measurement and contractually requiring thresholds for membership enrolled in VBP was realized during this reporting period. In addition, SIM staff reported in July 2019 that incentive shared savings payments to providers participating in SIM approved VBP programs were dispersed (2% withhold not enacted) to both participating MCOs (Amerigroup and UnitedHealthcare).

The churn of MCO providers in the state may have delayed advancement towards the ultimate SIM VBP goal of developing contract language that advances requirements to achieve level 3B AAPM (APMs with Shared Savings and Downside Risk) models by 2019 across all MCOs. At this time, the MCOs contracts have the same standards of risks withheld as in prior years (see Figure 7).

\textsuperscript{13} https://dhs.iowa.gov/sites/default/files/PressRelease_IAHealthLink_Update_March29_2019.pdf?062520192101
\textsuperscript{14} https://dhs.iowa.gov/sites/default/files/Member_Provider_Town%20Halls.pdf?062520192114
\textsuperscript{15} https://dhs.iowa.gov/sites/default/files/1989-MC-FFS_MCO_Credentialing_0.pdf?062520192120
The most recent contracts available at the end of the SIM funding were from October 2018, when the VIS was still included as a performance measure. Updated contracts with new specifics regarding performance measures and risk models may be available at a later date. The Iowa SIM team reports that the MCOs were notified that the VIS would no longer be used and 2019 through 2020 would be spent collaborating with the MCOs to develop a new aligned approach to VBP for the Medicaid population. The language in the contract reflects ongoing negotiations, as the hard deadline set in 2018 is now replaced by “a date to be determined by the department” (Figure 7). In October 2018, the amendments to contracts with Amerigroup and UnitedHealthcare, and a new contract with Iowa Total Care (effective July 1) were approved and included withhold risk tied to Value Based Purchasing performance, specifically 40% membership coverage (see Figure 7)\ref{16}.

\begin{table}
\centering
\begin{tabular}{|l|p{4cm}|p{10cm}|}
\hline
Performance measure & Required Contractual Standard & Standard Required to Receive Incentive Payment & Amount of Medical Performance Withhold at Risk \\
\hline
Value Based Purchasing & The Contractor must have at least 40% of the population defined by the Agency in a value-based purchasing (VBP) arrangement (use of VIS and TCOC or MLR) with the healthcare delivery system by a date determined by the department [formerly June 30, 2018]. & If the Contractor is able to reach 25% of designated membership covered by value based purchasing contracts by a date determined by the department [formerly June 30, 2018], inclusive of use of the VIS and TCOC or MLR, seventy-five percent (75%) of the amount of the Performance Withhold at risk. & 20% \\
\hline
\end{tabular}
\end{table}

\begin{flushleft}
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Key Takeaways – SIM payment reform efforts

- **VBP population threshold met**: Both participating MCOs were successful in meeting the December 2018 goal of 40% lives covered in VBP.

- **Exit and Addition of Medicaid Payer**: During this reporting period, UnitedHealthcare withdrew from Iowa’s Medicaid management, and Iowa Total Care began (effective July 1). VBP contracts are being negotiated at this time with terms to reflect updates to quality measures and percent of population covered.

- **Transition of quality measures**: During this reporting period, the standard VIS measures were removed from VBP contracts and replaced with HEDIS measures of each MCOs choice.
Technical Assistance Initiatives

Providing technical assistance (TA) to the various stakeholders involved in both primary drivers (payment and delivery system reform) is one of the main activities supported by the SIM. Technical assistance activities are intended to educate stakeholders on the many facets of payment reform and delivery system change, as well as to provide information and data for health systems to use to enact change.

The IHC and subcontractors’ (Topos, IPCA, IPA, IMS, IHA, and AIMM) TA activities included a wide variety of opportunities, strategies, and venues to provide education and training to, along with information sharing among, C3 communities and other interested stakeholders. Table 8 provides a summary of the main TA activities implemented over this reporting period, and the organization responsible.

Table 8. Summary of Technical Assistance (TA) Activities*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Intent/Description</th>
<th>Timeline Implemented</th>
<th>Venue/Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIM Unplugged</td>
<td>Monthly webinar series posted on YouTube and SIMplify website</td>
<td>Began series in November 2017, with monthly editions through April 2019</td>
<td>Online – SIMplify portal</td>
</tr>
<tr>
<td>Learning Community Events</td>
<td>Day-long conferences designed to provide SIM-specific education and training to stakeholders</td>
<td>Held 3 times per year November 2018 March 2019 July 2018</td>
<td>In person – C3 and others</td>
</tr>
<tr>
<td>Targeted TA to C3 Communities – Site Visits</td>
<td>Site visits to C3 communities were conducted to introduce the SIM, provide education and training, and incorporate feedback from C3s into planning for future events.</td>
<td>Quarterly</td>
<td>In person – C3 specific</td>
</tr>
<tr>
<td>Targeted TA to C3 Communities – SIMplify Website</td>
<td>A web-based communication platform which facilitates communication between SIM staff and C3 members</td>
<td>Ongoing</td>
<td>C3 specific</td>
</tr>
<tr>
<td>Iowa Pharmacy Association (IPA) TA</td>
<td>Webinars, conference calls and on-site technical assistance education</td>
<td>Throughout AY4</td>
<td>Pharmacists, Pharmacy techs and Physicians</td>
</tr>
<tr>
<td>The Primary Care Association (IPCA)</td>
<td>PRAPARE staff training and implementation, webinar series training with resources, development of SDOH Toolkit for primary care providers</td>
<td>Throughout AY4</td>
<td>FQHCs and primary care staff</td>
</tr>
<tr>
<td>Alliance for Integrated Medication Management (AIMM) TA</td>
<td>Assessment/consultation conference call, virtual education session, on-site visit, ACH sustainability planning</td>
<td>Throughout AY4</td>
<td>C3 sites</td>
</tr>
<tr>
<td>IA Medical Society (IMS) TA</td>
<td>Regional sessions, opioid summit, webinars</td>
<td>Throughout AY4</td>
<td>Health systems</td>
</tr>
<tr>
<td>Topos TA</td>
<td>In-person Value-Based messaging workshop and webinars</td>
<td>Throughout AY4</td>
<td>C3 sites</td>
</tr>
</tbody>
</table>

* The SIM newsletter, public forums, and feedback email account are ongoing, but not shown above.

SIM Unplugged series

The SIM Unplugged series is a bi-monthly webinar series organized by the IHC. The series produces videos which cover a variety of topics, outlined in Table 9, and each video is available on the IHC website, posted to the SIMplify forum and YouTube channel, and disseminated through a SIM Unplugged newsletter.
Table 9. SIM Unplugged series details

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Presenting Organization</th>
<th>Views*</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 2018</td>
<td>Opioid Standard of Care</td>
<td>Compass PTN</td>
<td>9</td>
</tr>
<tr>
<td>November 2018</td>
<td>SIM Expansion</td>
<td>IHC</td>
<td>48</td>
</tr>
<tr>
<td>December 2018</td>
<td>Medication Management</td>
<td>Towncrest Pharmacy, UIHC</td>
<td>71</td>
</tr>
<tr>
<td>February 2019</td>
<td>Community Paramedic Medication Management</td>
<td>IPCA</td>
<td>49</td>
</tr>
<tr>
<td>February 2019</td>
<td>Responsible Reporting of Healthcare Information and Data</td>
<td>IPCA</td>
<td>29</td>
</tr>
<tr>
<td>April 2019</td>
<td>Health Risk Assessment</td>
<td>Chris Schacherer, PhD</td>
<td>41</td>
</tr>
</tbody>
</table>

* View data collected 6/26/19

Statewide Learning Events

SIM Learning Community events were designed to be day-long in-person conferences to provide education and training for healthcare providers, payers, care coordination teams, hospitals, ACOs, MCOs, and C3s in their respective roles in the SIM Initiative. The conferences featured speakers, panels, and networking breaks. During this evaluation period, IHC held two Statewide Learning Communities.

Table 10. Topics covered in SIM Statewide Learning Events

<table>
<thead>
<tr>
<th>November 6, 2018</th>
<th>March 28, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Partnership for Healthcare Transformation</td>
<td>Value Based Care</td>
</tr>
<tr>
<td>Rural Health</td>
<td>C3 Successes</td>
</tr>
<tr>
<td>Value Based Care</td>
<td>Reflections on Governor’s Round-table</td>
</tr>
<tr>
<td>Trends in Payment Design</td>
<td>Motivation for Sustainment</td>
</tr>
</tbody>
</table>

Attendance at Learning Community Events declined during this reporting period. To gain more understanding of the composition of attendees, registration rosters were examined to assess which stakeholders were still continuing engagement with the SIM Learning Communities. It should be noted that registration does not necessarily reflect the full attendance at Learning Community events. Tables 11 and 12 define the participants in SIM Learning Communities. Figures 8 and 9 show trends in attendance over the SIM award years.

Table 11. Learning Community (LC) Registrants - Position Type Definitions

<table>
<thead>
<tr>
<th>LC Stakeholders</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Leadership</td>
<td>Positions which are responsible for an organization’s strategic direction and overall management</td>
<td>Executive Director, President, CEO, COO, CFO, Director</td>
</tr>
<tr>
<td>Mid-level</td>
<td>Varied positions which are not in the top tiers of organizational leadership, and are not involved in care delivery</td>
<td>Department leadership, management, administration, coordinators, specialists, analysts, consultants, academics</td>
</tr>
<tr>
<td>Direct care providers</td>
<td>Positions which work directly with patients</td>
<td>Nurses, care coordinators, health coaches, clinic managers, pharmacists</td>
</tr>
</tbody>
</table>
Table 12. Learning Community Registrants - Stakeholder Type Definitions

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3 site leadership</td>
<td>All registrants from C3 integrator organizations</td>
<td>Linn County Public Health, Trinity Muscatine Public Health, Great River Medical Center</td>
</tr>
<tr>
<td>SIM team</td>
<td>Formally contracted and subcontracted organizations responsible for the SIM grant administration</td>
<td>Iowa Department of Human Services, Iowa Medicaid Enterprise, Iowa Department of Public Health, Iowa Healthcare Collaborative, IHIN, IPCA, CMMI, CHCS, PPC, CDC</td>
</tr>
<tr>
<td>Medicaid ACOs</td>
<td>Registrants representing one of the five Medicaid ACOs in the state</td>
<td>UnityPoint ACO, Broadlawns Medical Center, Mercy Health Network, Iowa-Health+, University of Iowa Health Alliance</td>
</tr>
<tr>
<td>Payers</td>
<td>Medicaid MCOs and private payers</td>
<td>AmeriHealth Caritas, Amerigroup, UnitedHealthcare, Wellmark, Delta Dental</td>
</tr>
<tr>
<td>C3 Providers</td>
<td>Medical, behavioral, social service providers affiliated with a C3 as a steering committee member or coalition member</td>
<td>Dallas County Hospital, Eastern Iowa Health Center, Knoxville Hospital &amp; Clinics, Hawarden Regional Healthcare</td>
</tr>
<tr>
<td>Non-SIM Care providers</td>
<td>Medical, behavioral, social service providers unaffiliated with a C3</td>
<td>Plains Area Mental Health, Guthrie County Hospital providers, social service agencies, community programs</td>
</tr>
<tr>
<td>Other</td>
<td>Consumer advocacy groups, provider groups, community and statewide programs and boards, private industry, academic institutions, governmental departments not affiliated with SIM, healthcare IT agencies</td>
<td>TAV Health, Drake University, Heritage Area Agency on Aging, Legislative Services Agency, Matura Action Corporation</td>
</tr>
</tbody>
</table>

* Virtual learning community
Figures 8 and 9 depict a drop-off in Learning Community registrants following the first year of the SIM. However, the number of registrants remained stable over award years 3 and 4. There were no notable decreases in registration within any particular subgroup.

Targeted TA to C3 Communities

The IHC is primarily responsible for providing technical assistance (TA) and building capacity within C3 sites to ensure that C3 communities are equipped to accomplish SIM goals. Each C3 site has an assigned TA/Quality Improvement (QI) advisor from IHC who conducts site visits and can provide small group and individual level TA at each site.

ACH Expansion

During this reporting period, IHC onboarded nine new C3 sites (ACH expansion) and continued regular visits with the seven established sites (31 in this period). The IHC had a role in identifying potential sites which had ACH elements in place, then worked with sites to complete a project proposal, logic model, and budget. In addition, IHC collects monthly progress reports, sites visits (24 in this period), and will collect a final report from the new ACH sites at the end of their funding.

Total Cost of Care Pilot

During this reporting period, IHC began a pilot which tracked individuals participating in C3 care coordination. The goal of the pilot is to track the SDOH-related costs of high-utilizing patient referrals, along with examining Medicaid claims data costs. The result of this pilot was not available at the time this report was written. The results of this project were delivered by IHC subcontractor, AIMM (Alliance for Integrated Medication Management). An example of the product delivered to C3 sites is found in Appendix E.
SIMplify Website

The SIMplify website is a web-based communication platform which facilitates communication between SIM staff and C3 members.

The SIMplify website was developed to “share information, resources, and tools and promote interaction and networking.” To evaluate the usage of the discussion forum on the SIMplify website, an interaction rating scale was developed. The rating scale was designed to measure how C3 representatives were interacting with TA partners and other C3 sites (Table 13).

Table 13. SIMplify Website Activity by Types of Posts

<table>
<thead>
<tr>
<th>Classification of Discussion Posts</th>
<th>April 2016 through August 2017</th>
<th>September 2017 through September 2018</th>
<th>October 2018 through April 2019</th>
<th>Total Posts by type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIM TA discussion post</td>
<td>80</td>
<td>44</td>
<td>27</td>
<td>151</td>
</tr>
<tr>
<td>Discussion entry posted by SIM TA personnel or subcontractor (IDPH, IHC, IPCA, IHIN, IPA), with no replies from a C3 representative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standalone discussion post (C3)</td>
<td>7</td>
<td>5</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Discussion entry posted by a C3 representative with no replies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIM TA initiated discussion</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Discussion entry posted by SIM TA personnel with at least 1 reply from a C3 representative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3 initiated discussion</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Discussion entry posted by a C3 representative with a response from SIM TA personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion across C3 sites</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Discussion entry posted by a C3 representative with a response from another C3 site</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total posts</td>
<td>103</td>
<td>57</td>
<td>39</td>
<td>199</td>
</tr>
</tbody>
</table>

Figure 10 shows the changes in SIMplify website activity over time. SIM TA discussion posts (defined in Table 13) were the most frequent type of post and the post defined as the least interactive. There was little change in the frequency of the four other types of posts. It should be noted that the final period of data collection (October 2018-April 2019) was substantially shorter than earlier time periods, which should be considered before interpreting the final period as declining in activity.
Figure 10. SIMplify Website Usage Over Time by Type of Discussion Post Entry

Sustainability Plan

The SIMplify communication portal managed by the HealthDoers Network will convert to the internal web-based IHC iCompass communication platform. Current C3s, expansion communities, key stakeholders and partners will be notified and transferred. In AY4, the SIMplify communication portal allows two-way information flow and maintains a library for electronic documents.

TA to Healthcare Systems

During this reporting period, IHC and several subcontractors (IMS, IPA, and IPCA) provided technical assistance to a variety of healthcare stakeholders (see table 9 for details) The assistance provided was wide-ranging, and included workforce burnout prevention, community and value-based pharmacies, mental health first aid training, the development of an SDOH toolkit for primary care providers, medication management and opioid safety, PRAPARE (SDOH assessment/collection tool) clinic implementation and staff training at 4 CHCs, Accountable Communities of Health (ACH) webinar series training (and resources), and childhood obesity intervention and treatment.

Key Takeaways - Technical Assistance

The Iowa SIM continues to provide technical assistance directly to the C3 sites and health systems, along with strategies to reach statewide audiences, such as Learning Community Events and online platforms.

- **Focus on sustainability**: SIM TA in AY4 included efforts to measure and communicate the value of the SIM work, maintain a community of support for health transformation, and provide tools for ongoing progress towards SIM goals.

- **Addition of TA partner**: Topos was added to the SIM TA team during this reporting period. Topos developed value based messaging with C3 sites to support advocacy and sustainment of ACH work.

- **ACH expansion**: Nine new C3 sites were onboarded during this reporting period. Their proposal requirements were in alignment with the original C3 site requirements (ACH characteristics).
Statewide Survey
October 2019

The Iowa State Innovation Model (SIM)

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Introduction

The State Innovation Model (SIM) is a federal grant program administered by the Centers for Medicare and Medicaid Service’s (CMSs) Center for Medicare and Medicaid Innovation (CMMI). The purpose of this grant program is to provide funding for states to develop innovative ways to address the “triple aim” of healthcare reform; namely, to improve the patient experience of care and population health while simultaneously reducing health system costs. To do this, states are encouraged to use SIM funding to transform their public and private healthcare payment and delivery systems. In 2015, the State of Iowa received a $43 million Model Test award from CMMI to implement and test its State Healthcare Innovation Plan over the course of four years. PPC researchers have evaluated the SIM over the course of the grant period. A piece of the evaluation is a statewide survey of adults in Iowa to get an understanding of their health status, use of health care, and other issues that pertain to SIM-related goals. The following describes the methodology and results of the statewide survey conducted during the third implementation year (AY4) of the SIM in Iowa.
Methods

The 2018 statewide surveys were conducted between September 1, 2018 and April 30, 2019 using a telephone interview methodology. Interviews were administered by Computer Assisted Telephone Interviewing (CATI). A dual-frame random digit dial (DF-RDD) sample design, including landline and cell phones, was used to collect the data, with additional oversamples in C3 and control counties. Samples were provided by Marketing Systems Group (MSG); 30,000 landline and 3,972 cellular telephone numbers were sampled from their respective universe of 1,230,149 and 5,447,000 numbers throughout the entire state of Iowa. Oversampling for the 15 C3 counties included 9,500 landline and 1,420 cellular telephone numbers.

From the phone numbers sampled, 2,472 interviews were completed. Respondents were eligible if they lived in Iowa and were 18 years of age or older at the time of the interview. For the landline samples, interviewers randomly selected an adult member of the household using a modified Kish procedure.17

Interviews were conducted by trained interviewers at the Center for Social & Behavioral Research at the University of Northern Iowa (UNI). Out of the total 2,474 interviews, 1,865 were completed by cell phone while 607 were completed on landline phones. No incentives or compensation were offered for participation. Interviews averaged 20 minutes in length.

Survey Instrument

The survey instrument was designed to obtain information about the health and wellness of Iowans and included items specific to the public health goals of the SIM. The following topic areas were included on the survey:

- Need, utilization, and unmet needs for healthcare services (original items on need and unmet need, derived from NHIS)
- Physical and mental health status, and functional limitations
- Obesity (original items)
- Diabetes (original items, Behavioral Risk Factor Surveillance System (BRFSS)18, Diabetes Distress Scale19, California Health Interview Survey (CHIS20))
- Tobacco use and cessation (original items, BRFSS5, CDC National Adult Tobacco Survey Questionnaire21)
- Nutrition and food security (CHIS4)
- Determinants of health (original items, Ouellette et al., 200422)
- Transportation issues
- Bill pay issues
- Housing issues
- Childcare issues

Demographics (original items)

21 National Adult Tobacco Survey Questionnaire, 2009-2010. Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention.
Analyses

Data were tabulated and simple descriptive statistics (means and percentages) were calculated using SPSS. In this report, we present the overall statewide estimates as well as the estimates for the C3 counties (in aggregate) to provide an indication of how well individuals in the C3 counties represent the state of Iowa.

The data was weighted to produce reliable estimates of the population parameters. Also, weighting may compensate for the practical limitations of a sample survey such as nonresponse and under-coverage.

The oversampling of C3 counties originally included 19 counties in six regions during C3 Award Year 1/SIM Award Year 2. However, In C3 Award Year 2/SIM Award Year 3, the service areas for the six C3 regions dropped to 15 counties. This report presents aggregated data for the 15 C3 counties from C3 Award Year 2/SIM Award Year 3. Figure 1 shows the C3 counties aggregated in this report.

Figure 1. C3 AY2/SIM AY3 C3 Counties

State Innovation Model Community & Clinical Care (C3) Initiative Grantees
SIM Award Year 3: May 1, 2017 - April 30, 2018

Limitations

There are some limitations with survey research that can affect the interpretation of the results. First, those who choose to respond to the survey may be different from those who choose not to respond, which means they may not be representative of the ‘average’ respondent. This can create biased results, although a weighting strategy was used in analyses to account for nonresponse bias. Second, respondents may have difficulty accurately remembering events which may introduce recall bias. This risk of recall bias may not be high for our results, because respondents were asked to recall health-related events for a relatively short period of time (12 months).
Results
Characteristics of the Population

Table 1. Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Iowa*</th>
<th>C3 Counties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N =1,540 (respondents)</td>
<td>N =932 (respondents)</td>
</tr>
<tr>
<td></td>
<td>N =1,817,280 (weighted)</td>
<td>N =497,584 (weighted)</td>
</tr>
<tr>
<td>Age in Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-44</td>
<td>47%</td>
<td>39%</td>
</tr>
<tr>
<td>45-64</td>
<td>32.5%</td>
<td>38%</td>
</tr>
<tr>
<td>65+</td>
<td>20.5%</td>
<td>23%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>Race/Ethnicity*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>88%</td>
<td>90%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Asian</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>American Indian or Pacific Islander</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;= High School Degree</td>
<td>35.5%</td>
<td>38%</td>
</tr>
<tr>
<td>Some College or Technical School</td>
<td>34.5%</td>
<td>33%</td>
</tr>
<tr>
<td>College Graduate or Higher</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed Full or Part-Time</td>
<td>70%</td>
<td>67%</td>
</tr>
<tr>
<td>Retired</td>
<td>16%</td>
<td>21%</td>
</tr>
<tr>
<td>Homemaker or Student</td>
<td>8.5%</td>
<td>7%</td>
</tr>
<tr>
<td>Unable to Work</td>
<td>3.5%</td>
<td>3%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Has Health Insurance Coverage**</td>
<td>92%</td>
<td>94%</td>
</tr>
<tr>
<td>Household Income &lt; $50,000</td>
<td>30%</td>
<td>24%</td>
</tr>
<tr>
<td>Feels Very Financially Secure</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>Number of Adults in Household</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>16%</td>
<td>15%</td>
</tr>
<tr>
<td>2</td>
<td>60%</td>
<td>57%</td>
</tr>
<tr>
<td>3 or more</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>Any Children in Household</td>
<td>27%</td>
<td>26%</td>
</tr>
<tr>
<td>Childcare Hardship***</td>
<td>22%</td>
<td>21%</td>
</tr>
<tr>
<td>Size of Community of Residence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm/Rural not farm/Rural subdivision</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>Small Town &lt; 25,000</td>
<td>41%</td>
<td>38%</td>
</tr>
<tr>
<td>City 25,000 or more</td>
<td>38%</td>
<td>46%</td>
</tr>
</tbody>
</table>

* Does not include the C3 counties
* Race/Ethnicity categories are not mutually exclusive
** Such as health insurance, prepaid plans like HMOs, or government plans like Medicaid or Medicare
629 households with children. Respondents indicated how frequently in the past year cost and availability of childcare had affected their childcare decisions. These percentages reflect the amount of people who indicated at least one interference with childcare based on cost or availability.

Health Status

Participants’ health status was assessed in several ways throughout the survey, including self-reported overall physical and mental health, diagnosis of chronic physical or mental health conditions, and functional limitations due to health conditions. Participants were also asked to report about their weight, tobacco use, and whether they had diabetes. Figure 2 shows the percentage of respondents who reported excellent, very good, good, and fair/poor physical or mental health.

Self-Reported Physical and Mental Health Status

Figure 2. Overall Physical & Mental Health

Participants were asked if they had ever been diagnosed with a chronic physical or mental health condition that lasted or was expected to last for at least 12 months. Figure 3 shows the percentage of respondents who reported experiencing chronic physical or mental health conditions.

Figure 3. Chronic Physical & Mental Health Conditions

Health-Related Functional Limitations

Self-reported functional health was assessed by a series of questions about how participants’ physical health affected daily activities including personal care (i.e. eating, bathing, or dressing) and routine needs (i.e. household chores, shopping, and running errands). Figure 4 shows the percentage of Iowan’s who reported any activity limitations.
Weight, Diabetes, and Smoking

We asked participants if they weighed too much, too little, or the right amount compared to others their age and height. Participants who reported weighing too much were defined as overweight. Obese, was defined by participants asked who had ever been told by a health care professional that they are obese (Figure 5).

To evaluate diabetes prevalence, we asked, “Since you have been an adult, has a doctor, nurse, or other healthcare professional EVER told you that you have diabetes? Those who responded yes were considered to have diabetes, excluding those who reported only having diabetes during pregnancy or that they no longer had diabetes.

We asked participants whether they currently smoked cigarettes or used tobacco every day, some days, or not at all. Participants were considered smokers if they responded that they smoked at least some days (Figure 5).

Diabetes

About 12% of participants overall (n = 297) reported being told by a healthcare professional that they had diabetes. These participants were asked several additional questions to assess their diabetes management and the impact of diabetes on their life and healthcare service utilization.
Distress and Burden Due to Diabetes

The Diabetes Distress Scale \(^{23}\) was used to assess the impact of diabetes management on several areas of life. The scale included 17 items (Addendum 1) for which participants were asked to rate the severity of a problem on a scale from one to six, where one was *not a problem at all* and six was *a very serious problem*. The measure included an overall distress scale as well as four subscales:

1. **Emotional Burden** – Evaluates the level of emotional distress caused by diabetes [Questions 9, 11, 16, 19, 22]
2. **Physician-Related Distress** – Evaluates distress due to interactions with one’s physician about diabetes [Questions 10, 12, 17, 23]
3. **Regimen-Related Distress** – Evaluates distress due to keeping up with diabetes management routines [Questions 13, 14, 18, 20, 24]
4. **Interpersonal Distress** – Evaluates the burden of diabetes on interpersonal relationships [Questions 15, 21, 25]

For each scale, a mean score of three or higher is considered a clinical level of distress in need of attention. Figure 6 shows the percentage of people with diabetes who had a score of three or higher, indicating a moderate level of distress in need of clinical attention.

**Figure 6. Percentage Of Iowans With Diabetes Related Stress**

![Graph showing percentages of Iowans with diabetes related stress](image)

*The percentages shown are of the total population with diabetes in Iowa, based on weighted data. The number of actual respondents with diabetes in Iowa and C3 counties was 192 and 103, respectively.*

Impact of Diabetes on the Healthcare System

The survey included two questions designed to evaluate the impact of diabetes on the use of hospital-based healthcare services. Respondents with diabetes were asked to answer two questions about hospital utilization:

1. During the last 12 months, have you had a visit to the hospital emergency room because of your diabetes?
2. During the last 12 months, were you admitted to the hospital overnight or longer because of your diabetes?

Figure 7 shows the percentages of participants with diabetes who responded *yes* to these two questions.

---

Diabetes Management and Support

The American Diabetes Association recommends that self-management be included as a key goal of routine diabetes care in order to improve clinical outcomes, health status, and quality of life for those with diabetes. To assess experiences of diabetes self-management and support, the survey asked four questions to participants with diabetes:

1) How confident are you that you can control and manage your diabetes?
2) Have you ever taken a course or class in how to manage your diabetes yourself?
3) About how many times in the last 12 months have you seen a doctor, nurse, or other healthcare professional for your diabetes?
4) Have your doctors or other healthcare professionals worked with you to develop a plan so that you know how to take care of your diabetes?

Obesity

The survey included several items to assess issues related to being overweight and/or obese. As

reported earlier, we measured self-reported obesity if participants indicated that they thought they weighed *too much* compared to others of similar age and height. About 53% of overall respondents felt that they were overweight, while about 43% felt that they were normal weight and 4% felt that they were underweight. For those who self-reported as either overweight or normal weight, we asked the following questions:

1) Have you ever been told by a healthcare professional that you are obese?
2) In the last 12 months, did a doctor or healthcare professional ever:
   a) Advise that you lose weight?
   a) Recommend that you change your diet, meaning what you eat, to help you lose weight?
   a) Recommend that you increase your physical activity to help you lose weight?

Figure 9 shows healthcare provider obesity diagnoses and professional weight loss advice to Iowans who consider themselves normal weight or overweight.

**Figure 9. Healthcare Providers Recommendations To Overweight Individuals**

![Figure 9](image)

*The percentages shown are of those who are of normal weight or overweight Iowa, based on weighted data. The number of actual respondents who self-reported either normal weight or overweight in Iowa and C3 counties was 1,512 and 829, respectively.

**Nutrition and Food Insecurity**

Access to good nutrition and developing/maintaining a healthy diet are key components to overall health, especially for those who are overweight and/or have diabetes. To assess nutrition, respondents were asked whether they currently eat a healthy diet regularly ($n = 1,218; 50\%$ of total sample), once in a while ($n = 1,099; 45\%$ of total sample), or not at all ($n = 136; 5\%$ of total sample). To assess barriers to food access, the survey included several questions about food insecurity during the past 12 months:

1) How often would you say that the food you bought just didn’t last and you didn’t have money to get more? [*Never, Sometimes, or Often*]
2) How often would you say that you couldn’t afford to eat balanced meals? [*Never, Sometimes, or Often*]
3) How often would you say that you or other adults in your home cut the size of meals or skipped meals because there wasn’t enough money for food? [*Never, Sometimes, or Often*]
4) Did you ever eat less than you felt you should because there wasn’t enough money to buy more food? [*Yes or No*]

Figure 10 shows the percentages of Iowans who experienced economic food insecurity.
Physical Activity

Along with eating a healthy diet, regular physical activity is important for health and wellness. Increased physical activity is often recommended for those diagnosed with diabetes and/or weight issues. Several survey questions addressed physical activity levels along with barriers to physical activities like walking and biking. The survey included five questions to understand how much Iowans are exercising:

1) How many days per week do you do moderate activities for at least 10 minutes at a time, such as brisk walking, vacuuming, gardening, or anything that causes some increased breathing or heart rate?

2) How many days per week do you do vigorous activities for at least 10 minutes at a time, such as running, aerobics, heavy yard work, or anything that causes a large increase in your breathing or heart rate?

3) During the last month, other than during a regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? [Yes or No]

4) In the last 12 months, have you walked for exercise or recreational purposes? [Yes or No]

5) In the last 12 months, have you biked for exercise or recreational purposes? [Yes or No]

Figure 11 shows the percentages of Iowans who reported engaging in physical activities.

Two survey questions focused on walking and biking for transportation to daily activities, which may be a way to increase physical activity levels. Two questions also assessed whether respondents’
communities had barriers to walking or biking for transportation. The following questions assessed walking and biking for daily transportation along with barriers:

1) In the last 12 months, have you walked to stores, businesses, or other public locations? [Yes or No]

2) Does your community have adequate sidewalks and protected crosswalks or trails that could be used to walk to the grocery store, bank, or other public locations? [Yes or No]

3) In the last 12 months, have you biked to stores, businesses, or other public locations? [Yes or No]

4) Does your community have on-street bikeways or trails that could be used to bike to the grocery store, bank, or other public locations? [Yes or No]

**Figure 12. Walking And Biking For Transportation**

<table>
<thead>
<tr>
<th>Uses Walking as Transportation to Daily Activities</th>
<th>Community or Environment Conducive to Walking</th>
<th>Uses Biking as Transportation to Daily Activities</th>
<th>Community or Environment Conducive to Biking</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.5% 49%</td>
<td>79.5% 76%</td>
<td>18% 18%</td>
<td>66.5% 66%</td>
</tr>
</tbody>
</table>

**Tobacco Cessation**

Around 17% of the total sample reported smoking cigarettes or using tobacco (13.5% every day; 4% some days). For those who reported any smoking, the survey also asked three questions to assess healthcare provider recommendations over the past 12 months to quit smoking or tobacco use:

1) How often were you advised to quit smoking by a doctor or other healthcare provider? [Never, Sometimes, Usually, or Always]

2) How often was medication, such as nicotine gum, patch, nasal spray, inhaler, or prescription medicine recommended or discussed by a doctor or healthcare provider to help you quit smoking? [Never, Sometimes, Usually, or Always]

3) How often did your doctor or healthcare provider discuss methods and strategies, such as telephone hotlines, individual or group counseling, or a cessation program to help you quit smoking? [Never, Sometimes, Usually, or Always]

Figure 13 shows the percentages of smokers (n =426) who were advised at least sometimes to quit smoking or to use medication or strategies to help quit smoking.
Figure 13. Healthcare Provider Advice For Tobacco Cessation

* The percentage shown is of those who are smokers, based on weighted data. The number of actual respondents who reported that they are smokers in Iowa and C3 counties was 267 and 156, respectively.

***Other non-medication strategies suggested in the question included telephone hotlines, individual or group counseling, or a cessation program.

Utilization and Access to Healthcare Services

The survey included questions about respondents’ use of and access to a variety of healthcare services in the past 12 months including primary care, specialty care, and hospital-based services.

Use of Primary Care Services

Primary care related services included care at a doctor’s office or clinic for either routine care (i.e. wellness check or preventative care like yearly examinations or immunizations) or urgent care for an illness, injury, or other condition that needed immediate attention.

Figure 14 shows the percentages of respondents who received routine primary care, who felt as though they needed routine primary care, and those who could not access routine primary care in the past 12 months.

Use of Urgent Care Services

Figure 15 shows the percentages of respondents who felt they needed urgent care, received urgent care, and those who could not access urgent care in the past 12 months.
**Figure 15. Urgent Primary Care Service Use, Need, And Unmet Need**

![Graph showing urgent primary care service use, need, and unmet need.](image)

- **Needed Urgent Care for Illness or Injury:**
  - Iowa: 35.5%
  - C3 Counties: 36.5%

- **Urgent Care Received**:
  - Iowa: 92%
  - C3 Counties: 88%

- **Could Not Access Urgent Care**:
  - Iowa: 11%
  - C3 Counties: 11%

*The percentage shown is of those who needed urgent care for an illness or injury at least once in the past 12 months, based on weighted data. The number of actual respondents who self-reported that they needed urgent care in Iowa and C3 counties was 577 and 305, respectively.*

**Specialty Care**

Specialty care in the 12 months prior to the survey interview included any appointments with a specialist, such as a surgeon, cardiologist, allergist, dermatologist, or oncologist (i.e. a doctor who specializes in one area of healthcare). To assess specialty care use, we asked respondents whether in the past 12 months:

1. There was a time when you or a doctor thought you needed care from a specialist?
2. Did you see a specialist?
3. There was any time when you needed care from a specialist but could not get it for any reason?

**Figure 16 shows the percentages of respondents who felt they needed specialty care, received specialty care, and those who could not access specialty care for any reason.**

**Figure 16. Specialty Care Use, Need, And Unmet Need**

![Graph showing specialty care use, need, and unmet need.](image)

- **Needed Specialist Care**:
  - Iowa: 42%
  - C3 Counties: 42%

- **Specialist Care Received**:
  - Iowa: 96%
  - C3 Counties: 96%

- **Could Not Access Specialist Care For Any Reason**:
  - Iowa: 8%
  - C3 Counties: 9%

*The percentage shown is of those who needed specialty care at least once in the past 12 months, based on weighted data. The number of actual respondents who self-reported that they needed specialty care in Iowa and C3 Counties was 698 and 403, respectively.*

**Mental Health Care**

Mental health service use was assessed by asking respondents whether in the past 12 months they...
needed mental health treatment or counseling services, they received mental health treatment or counseling services, or they were not able to access mental health treatment or counseling services for any reason.

Figure 17 shows the percentages of Iowan’s who needed treatment or counseling for a mental health or emotional problem, received treatment or counseling, or could not access treatment or counseling.

**Figure 17. Mental Health Service Use, Need, And Unmet Need**

<table>
<thead>
<tr>
<th>Needed Mental Health Service</th>
<th>Mental Health Service Received</th>
<th>Could Not Access Mental Health Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>C3 Counties</td>
<td></td>
</tr>
<tr>
<td>11%</td>
<td>12%</td>
<td>3%</td>
</tr>
<tr>
<td>13%</td>
<td>15%</td>
<td>3%</td>
</tr>
<tr>
<td>3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dental Care

Dental service use was assessed by asking respondents whether their last dental check-up was: a) within the last year; b) one to two years ago; c) more than two years ago; or d) they had never been to a dentist. They survey also asked whether they needed dental care or whether they were not able to access dental care for any reason in the past 12 months.

Figure 18 shows percentages of Iowan’s who had dental care needs, received dental care within the past year, or could not access dental care.
Figure 18. Dental Care Use, Need, And Unmet Need

*The percentage shown is of those who needed dental care at least once in the past 12 months, based on weighted data. The number of actual respondents who self-reported that they needed dental care in Iowa and C3 Counties was 563 and 359, respectively.

Hospital-Based Services: Emergency Department and Hospitalizations

Several questions were used to assess the use of hospital emergency departments (EDs) for care within the past 12 months and whether those ED visits were “potentially avoidable”. For those with at least one ED visit, a “potentially avoidable” ED visit was defined when they reported that the care at their most recent ED visit could have been provided in a doctor’s office or clinic.

Two questions asked about hospital stays. The first asked how many nights in the past 12 months, if any, the respondent spent in the hospital because of a health problem. The second asked respondents who had reported hospitalization for at least one night whether they had to be re-hospitalized within 30 days of hospital discharge because they were still sick or had the same health issue.

Figure 19. Emergency Department Use And Hospitalizations

*The percentage shown is the number of people with a potentially avoidable ED in the past 12 months, based on weighted data. The number of actual respondents who self-reported that they had a potentially avoidable ED visit in Iowa and C3 Counties was 368 and 216, respectively.

**The percentage shown is the number of people with a hospital readmission in the past 12 months, based on weighted data. The number of actual respondents who self-reported that they had at least one hospital admission and readmission in Iowa and C3 Counties was 164 and 105, respectively.
Access to Healthcare: Transportation Issues

To evaluate healthcare related transportation issues, the survey covered the following topics:

1) Respondent mode of traveling to healthcare appointments
2) Number of vehicles available to the respondents household for transportation purposes
3) Frequency of needed assistance getting to and from healthcare visits in the past 12 months
4) Unmet need for transportation to or from healthcare visits in the past 12 months
5) Concern or worry about costs associated with transportation to healthcare visits

Mode of Transportation to Healthcare Visits

The majority of Iowan’s surveyed are licensed drivers. Participants were asked: “When you need to get healthcare, what is the type of transportation you use most often to get to your visit? [Drives self, family/friend drives, taxi or public transportation, or walk/bike]

Figure 20 shows the percentages of Iowans who report using each type of transportation to get to healthcare visits.

Figure 20. Types Of Transportation To Healthcare Visits

Bars to Transportation for Healthcare

To assess potential barriers to transportation for healthcare, the survey asked in the past 12 months:

1) How often did you need assistance from other sources (such as friends, family, public transportation, etc.) to get to your healthcare visits?
2) Was there any time when you needed transportation to or from a healthcare visit but could not get it for any reason?
3) How much, if at all, have you worried about your ability to pay for the cost of transportation to or from a healthcare visit?

Figure 21 shows the responses to these three questions.
Figure 21. Barriers To Transportation For Healthcare Visits

*Respondents reported “need” or “worry” at least sometime in the past 12 months. **The percentage shown is the number of people who could not access transportation to health care appointments sometime in the past 12 months, based on weighted data. The number of actual respondents who self-reported that they could not access transportation to healthcare in Iowa and C3 Counties was 54 and 31, respectively.

Evaluation Next Steps

The PPC state-level evaluation team will synthesize the results of all SIM award year evaluations and deliver a summative report of lessons learned for each SIM initiative in December 2019.
# Appendices

## Appendix A. C3 Site Sustainability Plans

<table>
<thead>
<tr>
<th>C3 site</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dallas</td>
<td>Still trying to determine best direction to sustainable funding to support Health Navigation software (HealthLeads REACH database). Post SIM will use United Way funding. Data from the health risk assessments and C3 experiences will be utilized to build the Community Health Needs Assessment to continue sustainability work.</td>
</tr>
<tr>
<td>Des Moines</td>
<td>CHCSEIA has hired an ED Follow-up Liaison at their West Burlington clinic. The primary focus will be on providing direct follow-up with CHCSEIA patients who may over-utilize the ED at GRHS and then to work closely with the Local Case Management program to offer direct in-home support services. The two programs will work together to provide continuity between both health systems. The Local Case Management programs patient-centered focus has built trust among community participants improving outcomes. At GRHS it has also provided medication reconciliation support. The Local Case Management program is a unique service offered to patients with 4 or more ER visits in the last year with difficult physical, cognitive or mental barriers to care. They must also receive services at either GRHS or the CHCSEIA.</td>
</tr>
<tr>
<td>Linn</td>
<td>Over 19 local organizations are utilizing TAVHealth as their platform to share data and improve documented workflows improving collaborative efforts across the county. Growth continues as new organizations are added each quarter. Documented workflows are a requirement to participate. You have to “Pay to Play”. Each organization that donates $5,000 or more per year are automatically a part of the TAV Steering Committee (14 members currently) with decision making authority. Organizations contributing less than $5,000 share their concerns with Steering Committee members. Requiring documented workflows and payment to participate has increased the sustainability of this system. Based on feedback from the New Partner and Strategic Planning TAV workgroup a short training video and system super-users were created to address community care coordination and staff training needs supporting sustained growth.</td>
</tr>
<tr>
<td>Marion</td>
<td>End of grant period has shifted partner focus to project based vs system change. Project director continues to work on this communication and identify areas of strengths in system changes that will last past SIM. Innovative strategies are necessary to create sustainable programs and to adapt established programs to improve their community impact. Currently, Marion Public Health Department is working on a proposal to restructure the Senior Nutrition Program. This proposal could save tax dollars and provide wrap around services by offering in home care coordination with CBCC to seniors on the program.</td>
</tr>
<tr>
<td>Sioux</td>
<td>“Community Health Partners of Sioux County (CHP) administration has been revising budget, agency policies, procedures and strategic plans to sustain SIM efforts. An administrator from all 4 hospitals in Sioux County are part of the CHP Board of Directors. The CHP budget will reflect specific funding to support key strategic plans as outlined below.</td>
</tr>
</tbody>
</table>

- CHP defined as Population Health Strategist (PHS) which is an engaged change leader who identifies and takes initiative on community health promotion efforts in partnership with local health care leaders. The PHS will form and facilitate community-based coalitions collecting data and developing plans to improve community’s health. They will also address SDOH and drive upstream interventions to address them. |

- CHP will continue to serve as cross-sector county wide facilitator of collaborative efforts. The hospital C3 coalitions will continue post grant period. This also includes support of evidence-based strategies to address the combined Community Health Needs Assessment identified and prioritized needs. “ |
<p>| Webster | Activities and conversations with the board of supervisors resulted in streamlining funding to a central intake process. This has created a general assistance fund and increased availability of funding to support sustainment. WCHD continues to work on case studies to show value in our system. The intake process has expanded to include general concerns/barriers and vulnerable population high utilizers. |
| Muscatine | Trinity Muscatine Public Health, UnityPoint, Community Health Centers, and Genesis were involved in updating the Community Health Needs Assessment and Health Improvement plan for the triennium 2019-2021. The collaborative effort by a partnership of community members builds a more sustainable systematic effort to address health problems in the community. |</p>
<table>
<thead>
<tr>
<th>C3 site</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buena Vista</td>
<td>BVRMC is committed to maintaining education and training strategies for staff related to culturally sensitive care and interpretation services that meet the needs of the patients/customers we serve. Ongoing funds are budgeted for staff education as well as STRATUS interpretation services.</td>
</tr>
<tr>
<td>Guttenberg</td>
<td>After we implement these improvements we will not only be more efficient but will have data to make it easier to find grant opportunities and other new sources of funding. GMH is committed to ongoing routine operational funding of the FRC as a department of the hospital.</td>
</tr>
<tr>
<td>IA PCA -Siouxland</td>
<td>Long term sustainable funding already in place. Program data will be utilized to support new sources of funding as well for ongoing operations at expanded levels.</td>
</tr>
<tr>
<td>IA PCA -Peoples</td>
<td>Working with Delta Dental partnership to expand short term program funding ($6,000). Will utilize program data to support new partners and sources of funding for ongoing operations.</td>
</tr>
<tr>
<td>IA Specialty - Belmond</td>
<td>SIM expansion funding will support start-up costs. The program will be self-sustaining as the provider will be a fixed cost and the other costs of the program will be covered by the $35.00 cash pay visit and $15.00 price for testing. SIM expansion funding will also start a voucher program for individuals unable to afford the $35.00 fee. Year 2 will incorporate sports physicals and behavioral health services with a 7% growth prediction. Year 3 growth predication at another 5% with the addition of preventative exams.</td>
</tr>
<tr>
<td>Mary Greeley</td>
<td>Program sustainability is enhanced through expanded clinical-community partnerships. Sustainable funding for more food is still being discussed per recent Steering Committee notes.</td>
</tr>
<tr>
<td>Methodist Jennie Edmundson</td>
<td>We have begun to rethink the framework for CCSWIA. Over the next several months we will engage community organizations and businesses to become “members” of CCSWIA and assist in creating an official Accountable Health Community. As supporting members they will provide financial resources to support the ACH as well as develop innovative financing mechanisms. Resources will be utilized to support community beneficiaries who require assistance with unmet social determinants of health. We will monitor CMS service pilot project understanding this kind of national change takes time so we’ll work on obtaining short-term funding to create long-term change.</td>
</tr>
<tr>
<td>MercyOne ACO</td>
<td>Relationship development and collaborative efforts with community consortiums have increased awareness of available resources to better serve patients. This has strengthened the clinical-community application of population health services.</td>
</tr>
<tr>
<td>UnityPoint Marshall-town</td>
<td>Sustainability of this project will be supported by system changes made through the newly formed partnership, including ensuring that services are not duplicated among project partners. Where allowable, home nursing and other services will be billed to Medicaid. New grant sources will be pursued to continue provision of pack-n-plays and car seats. UPH - Marshalltown will maintain lactation certified and car seat knowledgeable staff going forward.</td>
</tr>
</tbody>
</table>
**Appendix B. Full Award Year 3 C3 Site Report**

### Project Status Report

**Project Name:** Iowa SIM C3  
**May 5, 2019**

---

<table>
<thead>
<tr>
<th>The project is COMPLETE for the third grant year of 5/1/2018 – 4/30/2019.</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Funded work plans were reviewed</td>
</tr>
<tr>
<td>● Evaluation tools were updated, revised or created</td>
</tr>
<tr>
<td>● Site visits and interviews were conducted</td>
</tr>
<tr>
<td>● Strategy matrixes from all C3s completed</td>
</tr>
<tr>
<td>● Final surveys were administered</td>
</tr>
<tr>
<td>● Statewide evaluation and 3-year evaluation findings are being developed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Challenges:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Staff turnover within the statewide SIM management team</td>
</tr>
<tr>
<td>● Iowa SIM program changes</td>
</tr>
<tr>
<td>● C3s that are not developed to the point where they warrant healthcare provider surveys</td>
</tr>
<tr>
<td>● Healthcare provider survey response rates</td>
</tr>
<tr>
<td>● Strategy tactic status is self-reported without evidence of support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Milestones accomplished from 5/1/2018 - 4/30/2019:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Site visits and interviews (7 C3s)</td>
</tr>
<tr>
<td>● Site visit summary reports (7 C3s and one aggregate report)</td>
</tr>
<tr>
<td>● Healthcare provider survey (3 C3)</td>
</tr>
<tr>
<td>● Clinic staff Interviews (2 C3s)</td>
</tr>
<tr>
<td>● Diabetes educator interviews (5 C3s)</td>
</tr>
<tr>
<td>● Steering Committee member survey (7 C3s)</td>
</tr>
<tr>
<td>● Community Coalition member survey (7 C3s)</td>
</tr>
<tr>
<td>● Care Coordination Statewide Strategy Matrix – Year-end/project end status update (7 C3s)</td>
</tr>
<tr>
<td>● Summary Report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Milestones planned:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Final SIM 3-Year Report</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Areas/questions for discussion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Changes in C3 organizational relationships at local, regional, and state levels</td>
</tr>
<tr>
<td>● Changes in diabetic services, patient engagement and care coordination throughout the C3 area</td>
</tr>
<tr>
<td>● Ideas and needs for statewide implementation of the C3 model</td>
</tr>
<tr>
<td>● Sustainable funding for care coordination</td>
</tr>
<tr>
<td>● Key components to implementing and sustaining a community care coordination model</td>
</tr>
<tr>
<td>● Staff turnover and models to minimize disruption to services and care</td>
</tr>
<tr>
<td>● Community, social services, and healthcare provider training to better understand and recognize the impacts of social determinants of health</td>
</tr>
</tbody>
</table>
Iowa SIM C3 Project Findings Annual Summary Report

The third year - Year-3 (May 1, 2018 – April 30, 2019) of the Iowa State Innovation Model (SIM) Community Care Coalition (C3) evaluation is complete. It is the third of three years of evaluation activity for the Iowa SIM C3 initiative. The Iowa SIM C3 evaluation was conducted by Rural Health Solutions in coordination with the University of Iowa, Public Policy Center, as part of a broader Iowa SIM evaluation. The intent of the Iowa SIM C3 evaluation is to look at community and regional health system changes (structural and process related) that can be attributed to the Iowa SIM C3s. Year-3 of the evaluation focused on collecting project-end data for all of the C3 initiatives, including the Des Moines County Living Well C3 (herein referred to as Great River C3), Linn County C3 for Priority Health Needs (herein referred to as Linn County C3), Marion County C3, Webster County C3, Dallas County C3, Community Health Partners Network C3 (herein referred to as Sioux County C3), and UnityPoint Health – Trinity Muscatine (herein referred to as Muscatine C3). Interviews, site visits, steering committee surveys, community coalition surveys, and care coordination strategy matrixes were completed at/for all C3s. A mailed healthcare provider survey was conducted for the Webster County C3, Marion County C3, and Great River C3, a clinic and hospital management survey was conducted for the Dallas County C3, and diabetes educator and/or care coordinator telephone interviews were conducted for all C3s except Webster County C3. The updated year-end care coordination strategy matrix is included as Attachment A. C3 project manager exit interviews and on-site C3 Steering Committee discussions were held for each C3 and were conducted at the end of the grant year.

Care Coordination Statewide Strategy Matrix

In June of 2016, the Iowa Department of Public Health published its “Care Coordination Statewide Strategy” (Source: http://idph.iowa.gov/Portals/1/userfiles/38/Care%20Coord%20State%20Strategy%2C%20Final_06_01_16.pdf). The mission was to, “Establish coordinated patient care as the standard in Iowa” while the vision was, “By 2019, improve patient outcomes and experiences through coordinated delivery of healthcare and community services in the right order, at the right time, and in the right setting.” The strategy included four goals, each with objectives (13 total) and related tactics (41 total) to reach the objectives. Using this strategy document, a strategy matrix was developed to document and track each of the C3’s work on each of the tactics. The matrix included each of the tactics by objective and goal along with columns to report the status for each of the tactics: 1) no activity, 2) planning underway, 3) developing, 4) implementation initiated/underway, 5) complete and/or fully operational or 6) not applicable and/or not intending to implement. September 2016*, April 2017, April 2018, and April 2019 each C3 completed and self-reported the status of each tactic on the matrix (* except for Muscatine C3 who completed their first matrix in April 2017).

Looking just at the status of the 41 tactics at project end in April 2019, we see that the each of the C3s made advances/changes towards completely or fully operatizing most of the strategies. The status of all the tactics, by C3, are summarized as follows:

- **Webster County C3** reported all tactics as “implementation initiated/underway” or “complete and/or fully operational”. Advances were made in two tactics: 3.2c establish processes for referral follow-up between and among community-based services and clinical providers and 1.3a increase recognition and capacity to address social determinants of health through education and incorporation within health risk assessments to identify patient-specific needs which moved from “implementation initiated/underway” to “complete and/or fully operational”.

- **Linn County C3** reported movement in 12 tactics and in some instances, movement was from “activity planning” or “developing” a tactic to “no activity” and/or “no longer planning to implement”. At year end, Linn County C3 had 8 tactics with
A web-based survey was conducted of all seven C3 steering committee members. Each C3 steering committee received a survey for their introductions that reflected the names and geographic areas of each C3. The survey asked questions about the survey respondent’s role in C3 resulting in seven C3 steering committee surveys. This approach allowed the survey instruments to be consistent while including the C3 activities, and satisfaction with C3 initiatives. Most questions in the survey used a Likert scale; survey respondents were asked to rate the C3 and representation on the steering committee, as well as questions about awareness and knowledge of the local C3, participation in C3 activities, and satisfaction with C3 initiatives. Most questions in the survey used a Likert scale; survey respondents were asked to rate their agreement with various statements, using the ratings: “strongly disagree”, “disagree”, “neither agree nor disagree”, “agree”, and “strongly agree”. Thirty-three surveys were completed for an aggregate response rate of 52 percent with varying response rates by C3 (as shown in Table 1 below). Dallas County C3 and Webster County C3 had the highest survey response rates while Muscatine C3 had the lowest.

### Marion County C3
Marion County C3 reported all tactics as “developing” (1), “implementation initiated/underway” (1), or “complete and/or fully operational” (39) and reported the most amount of movement (25 tactics) to “complete and/or fully operational” of all the C3s. Marion County had the largest number of tactics reported as “not applicable” and/or “not intending to implement”.

### Sioux County C3
Sioux County C3 continued to report 6 tactics with “no activity”, as well as 13 tactics with “implementation initiated/underway” and 22 tactics “complete and/or fully operational”. The 6 tactics with no activity included: 1.1c increase access to needed medical services in locations and at times that meet patients where they are; 2.1a establish designated roles for involvement of pharmacy, behavioral health, and other specialty providers as members of the patient care teams; 2.1c encourage involvement of team member participation in care services in alignment with highest scope of practice; 2.1e promote the use of evidence-based team development and improvement practices, such as TeamSTEPPS, to ensure team execution and efficiency in patient care and safety; 2.2c encourage use of EHR patient access or patient portals to facilitate direct availability and inclusion of information by patients and caregivers; and 2.3a create and maintain policies for patient-centered care practices across team settings, emphasizing inclusive team-based care, shared-decision making, and patient activation strategies. Sioux County was second of the C3s in its number of tactics that moved to “complete and/or fully operational” (17 tactics) during the grant year.

### Dallas County C3
Dallas County C3 reported limited movement in tactics during the grant year with no tactics with “no activity”, 2 tactics with “planning underway”, 12 tactics “developing”, 13 tactics with “implementation initiated/underway”, and 14 tactics “complete and/or fully operational”. Of these, 4 tactics moved status during the grant year, including: 1.1a establish person and family engagement (PFE) as a standard of care through inclusion practices at the direct level of care through leadership/administration; 1.2c designate defined care coordination roles and/or responsibilities with the clinic, practice, or organization; 2.1b develop and maintain protocols and processes to facilitate reciprocal care communication among care teams members, setting expectations for reciprocal communication and closer of referral; and 4.1a encourage full use and optimization of electronic health record capacities to facilitate collection and capture of patient population health status and care coordination processes.

### Great River C3
Great River C3 reported changes in status for 21 of the tactics with no tactic reported as “no activity” or “not applicable and/or not intending to implement”. Most of the changes were from “planning” to “implementation initiated/underway” or “complete and/or fully operational”. Two tactics were reported as “complete and/or fully operational” including: 1.2c increase awareness and capacity to address social determinants of health (SDH), promoting inclusion of SDH as a component of implemented health risk assessments (HRAs) and 3.2a build, enhance and maintain collaborative relationships and functional referral mechanisms between health care systems and community-based services.

### Muscatine C3
Muscatine C3 reported its baseline data for all tactics in 2018 because this was its first year of Iowa SIM C3 funding. In 2019 they reported 1 tactic with “no activity”, no tactics with “planning underway”, 9 tactics “developing”, 17 as “implementation initiated/underway”, and 14 as “complete and/or fully operational”. The three tactics that moved from “no activity” to being addressed as part of the C3 include: 1.3a increase recognition and capacity to address SDH through education and incorporation within RHAs to identify patient-specific needs; 2.1e promote the use of evidence-based team development and improvement practices, such as TeamSTEPPS, to ensure team execution and efficiency in patient care and safety; and 2.3c identify and incorporate non-clinical services that can be used in care coordination practice processes and protocols to support comprehensive patient-centered care.
lowest response rate. The steering committee survey included a brief overview of why the survey was being conducted and for those that needed additional information about the Iowa SIM and C3s, additional information was made available electronically. Two survey respondents, one from Dallas County C3 and one from Webster County C3 requested additional information. This is a strong indication that respondents are aware of the C3s and the SIM. Considering all of the questions asked, no survey respondent reported they “strongly disagree” with any of the survey statements and therefore, this response has been omitted from all of the tables included in the report.

Table 1: Number of C3 Steering Committee Members and Survey Response Rate by C3

<table>
<thead>
<tr>
<th>C3</th>
<th># of Steering Committee Members Surveyed</th>
<th>Survey Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webster County</td>
<td>8</td>
<td>75%</td>
</tr>
<tr>
<td>Great River</td>
<td>8</td>
<td>50%</td>
</tr>
<tr>
<td>Linn County</td>
<td>15</td>
<td>40%</td>
</tr>
<tr>
<td>Marion County</td>
<td>7</td>
<td>57%</td>
</tr>
<tr>
<td>Dallas County</td>
<td>10</td>
<td>80%</td>
</tr>
<tr>
<td>Sioux County</td>
<td>11</td>
<td>45%</td>
</tr>
<tr>
<td>Muscatine</td>
<td>7</td>
<td>14%</td>
</tr>
</tbody>
</table>

When asked to report their role on the C3 steering committee, survey respondents indicated they are public health providers (44%), hospital leaders (17.6%), clinic leaders (14.7%), healthcare providers (11.7%), and others (14.7%). When the survey asked, “I am aware of the C3's role in my community”, survey respondents reported they “strongly agree” (64%), “agree” (33%), or “neither agreed or disagreed” (3%), all indicating a stronger awareness of the role of the C3s when compared to responses at the end of Year-1. When the survey stated, “I am aware of the C3 initiatives underway in my community”, survey respondents reported they “strongly agree” (67%) and “agree” (33%), again indicating an increase in awareness when compared to Year-1 and Year-2. When the survey stated, “I participate in local C3 initiative planning and development”, 52 percent “strongly agree”, 36 percent “agree”, 9 percent “neither agree nor disagree”, and 3 percent “disagree.” These data suggest there may have been a shift away from planning and development when compared to Year-2 activities.

All steering committee members from Linn County C3 “strongly agree” they participate in C3 planning and development, the same as Year-2. This is unique amongst all the C3s. C3 steering committee members were also asked if they participate in local C3 decision-making. Forty-eight percent “strongly agree”, 33 percent “agree”, 12 percent “neither agree nor disagree”, and 6 percent disagree they participate. These responses represent a decline in decision-making when compared to Year-2; however, all steering committee respondents from Linn County C3 and Sioux County C3 report they participate in local C3 decision-making. C3 steering committee members were asked to rate their agreement that the steering committee uses local patient data to drive C3 decision-making. They report they “strongly agree” (36%), “agree” (33%), or “neither agree nor disagree” (30%).

As indicated in Table 2 below, steering committee members were most in agreement with, “I am aware of social determinants of health and their impact on health outcomes”. We also see that 97 percent of steering committee members are aware of the gaps in diabetic services; however, awareness of the intended impact of care coordination appears to have declined. In Table 3 below we see a continued trend of steering committee members reporting they agree community members’ needs related to social determinants of health will be or are being addressed by the local C3 initiatives and they agree community partners/social services have been working more/better together to meet patient needs.

When C3 steering committee members were asked, “It’s important that I participate in the C3 steering committee”, 58 percent “strongly agree”, 36 percent “agree”, and 6 percent “neither agree nor disagree”, a slight decline when compared to Year-2. C3s were also asked about their satisfaction with the C3 and the initiatives underway in their communities, they reported: 44 percent are “very satisfied”, 47 percent are “satisfied”, and 9 percent are “neither satisfied nor dissatisfied”. Comparing this to Year-1 and Year-2, steering committee members appear to be more satisfied with C3 initiatives. A lower percentage of survey respondents were “very satisfied” in Year-2; however, no survey respondents were dissatisfied in Year-2. Linn County C3 steering committee members continue to be the most likely
to be “very satisfied” (83%) with the local C3 and its initiatives. All steering committee members report they are aware that SIM funding for the C3s ends in 2019.

Table 2: Awareness of C3 Activities

<table>
<thead>
<tr>
<th>C3 Activities and Initiatives</th>
<th>Year-2</th>
<th>Year-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware of social determinants of health and their impact on health outcomes.</td>
<td>84%</td>
<td>94%</td>
</tr>
<tr>
<td></td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Aware of the role of care coordination and its intended impact on health outcomes.</td>
<td>69%</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>28%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>9%</td>
</tr>
<tr>
<td>Aware of the gaps in diabetic services in community/region.</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>41%</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 3: Agreement with Activities and Outcomes of All C3 Initiatives Meeting Community Member Needs

<table>
<thead>
<tr>
<th>Activities and Outcomes of the C3 Initiatives</th>
<th>Year-1</th>
<th>Year-2</th>
<th>Year-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community members' needs related to social determinants of health will be or are being addressed by the local C3 initiatives.</td>
<td>42%</td>
<td>48%</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>45%</td>
<td>36%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>11%</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Community members' diabetic needs will be or are being addressed because of the local C3 initiatives.</td>
<td>39%</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>43%</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td></td>
<td>16%</td>
<td>12%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Care coordination needs in my community will be or are being addressed through the local C3 initiative.</td>
<td>40%</td>
<td>52%</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>49%</td>
<td>42%</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>11%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
<td>9%</td>
</tr>
<tr>
<td>Local C3 is implementing care coordination for patients.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the past year, community partners/social services have been working more/better together to meet patient needs.</td>
<td>46%</td>
<td>44%</td>
<td>52%</td>
</tr>
<tr>
<td></td>
<td>43%</td>
<td>44%</td>
<td>39%</td>
</tr>
<tr>
<td></td>
<td>11%</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Community Coalition Member Survey

A web-based survey was also conducted of all seven C3 Community Coalition members. Community coalitions’ inclusion in C3 activities was added to C3 Year-2 requirements and surveys were conducted in Year-2 and Year-3. The role of this group varied from C3 to C3; however, all focused more on programmatic activities, such as those related to diabetes and obesity versus overall C3 planning and development. The survey’s aggregate response rate was 33 percent, as shown in Table 4 below. The Community Coalition survey included a brief overview of why the survey was being conducted and for those that needed additional information about the Iowa SIM and C3s, additional information was made available electronically. Five percent of survey respondents indicated a need for additional information about the SIM. This can be compared to 23 percent of respondents in Year-2. Two survey respondents, one from Great River C3 and one from Linn County C3, indicated they are not members of their C3 Community Coalition. As indicated in Table 4 below, Dallas County C3 had the highest survey response rate while Linn County C3 had the lowest response rate.

The Community Coalition survey asked questions about the survey respondent’s role in the C3 and representation on the community coalition, as well as questions about awareness and knowledge of the local C3, participation in C3 activities, and satisfaction with C3 initiatives. Similar to the steering committee survey, each C3 had a survey that reflected the names and geographic areas of each C3 and most questions on the survey used a Likert scale; survey respondents were asked to rate their agreement with various statements, using the ratings: “strongly disagree”, “disagree”, “neither agree nor disagree”, “agree”, and “strongly agree”.
Table 4: Number of C3 Community Coalition Members and Survey Response Rate by C3

<table>
<thead>
<tr>
<th>C3</th>
<th># of Community Coalition Members Surveyed</th>
<th>Survey Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Webster County</td>
<td>13</td>
<td>38%</td>
</tr>
<tr>
<td>Great River</td>
<td>22</td>
<td>55%</td>
</tr>
<tr>
<td>Linn County</td>
<td>39</td>
<td>18%</td>
</tr>
<tr>
<td>Marion County</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>Dallas County</td>
<td>26</td>
<td>31%</td>
</tr>
<tr>
<td>Sioux County</td>
<td>13</td>
<td>46%</td>
</tr>
<tr>
<td>Muscatine</td>
<td>12</td>
<td>33%</td>
</tr>
</tbody>
</table>

When asked to report their role on the C3 community coalition, survey respondents indicated they are community member (23%), social services provider (23%), public health provider (21%), other (21%), healthcare provider (14%), hospital leader (5%), behavioral health provider (5%), and clinic leader (2%). When asked if the member or organization “provides services that are part of the C3 implementation activities, survey respondents reported 78 percent “strongly agree” or “agree”, 15 percent “neither agree nor disagree”, and 7 percent “disagree” or “strongly disagree.”. When the survey asked, “I am aware of the C3’s role in my community”, survey respondents either “strongly agree” (39%), “agree” (57%), or “neither agree nor disagree” (4%). When the survey stated, “I am aware of the C3 initiatives underway in my community”, survey respondents reported they “strongly agree” (36%) or “agree” (64%), indicating similar awareness to steering committee members. Complementing this, C3 Community Coalition members were asked if they contribute to C3 planning and development and 15 percent “strongly agree”, 48 percent “agree”, 19 percent “neither agree nor disagree”, 11 percent “disagree”, and 7 percent “strongly disagree” indicating a decline when compared to Year-2 survey responses.

C3 community coalition members were asked to rate their agreement that the Community Coalition uses local patient data to drive C3 decision-making. They were most likely to “agree” (59%), followed by “strongly agree” (19%), “neither agree nor disagree” (15%), and “disagree” and “strongly disagree” (both at 4%). As indicated in Table 5 below, community coalition members were most in agreement with, “I am aware of the social determinants of health and their impact on health outcomes”. There was also strong agreement in “I am aware of the role of care coordination and its intended impact on health outcomes”; however, both had a decline when compared to Year-2 survey responses.

When C3 Community Coalitions were asked, “It’s important that I participate in the C3 Community Coalition”, 22 percent “strongly agree”, 59 percent “agree”, 15 percent “neither agree nor disagree” and 4% “strongly disagree” representing a decline when compared to Year-2. As shown in Table 6, C3s were also asked about their satisfaction with the C3 and the initiatives underway in their communities, they reported: 29 percent are “very satisfied”, 58 percent are “satisfied”, 5 percent are “neither satisfied nor dissatisfied” and 8% are dissatisfied, representing an increase in satisfaction when compared to Year-2. Again looking at Table 6 and similar to steering committee survey findings, community coalition survey respondents report an increase in agreement that community members’ diabetic needs are being addressed because of the local C3 initiatives.

Table 5: Community Coalition Awareness of C3 Activities

<table>
<thead>
<tr>
<th>C3 Activities and Initiatives</th>
<th>Year-2</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware of social determinants of health and their impact on health outcomes.</td>
<td>Year-2</td>
<td>46%</td>
<td>54%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Year-3</td>
<td>52%</td>
<td>41%</td>
<td>4%</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>Year-2</td>
<td>44%</td>
<td>52%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Aware of the role of care coordination and its intended impact on health outcomes.

<table>
<thead>
<tr>
<th></th>
<th>Year-3</th>
<th>40%</th>
<th>52%</th>
<th>4%</th>
<th>0%</th>
<th>4%</th>
</tr>
</thead>
</table>

Aware of the gaps in diabetic services in community/region.

<table>
<thead>
<tr>
<th></th>
<th>Year-2</th>
<th>4%</th>
<th>61%</th>
<th>29%</th>
<th>7%</th>
<th>0%</th>
</tr>
</thead>
</table>

|       | Year-3 | 26% | 48% | 18% | 4% | 4% |

Table 6: Community Coalition Agreement with Activities and Outcomes of All C3 Initiatives Meeting Community Member Needs

<table>
<thead>
<tr>
<th>Activities and Outcomes of the C3 Initiatives</th>
<th>Year-2</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Neither Satisfied Nor Dissatisfied</th>
<th>Dissatisfied</th>
<th>Very Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community members’ needs related to social determinants of health will be or are being addressed by the local C3 initiatives.</td>
<td>Year-2</td>
<td>48%</td>
<td>36%</td>
<td>15%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Year-3</td>
<td>30%</td>
<td>59%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Community members’ diabetic needs are being addressed because of the local C3 initiatives.</td>
<td>Year-2</td>
<td>11%</td>
<td>41%</td>
<td>44%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Year-3</td>
<td>14%</td>
<td>61%</td>
<td>18%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>The local C3 is implementing care coordination for patients in my community/region.</td>
<td>Year-2</td>
<td>19%</td>
<td>52%</td>
<td>26%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Year-3</td>
<td>33%</td>
<td>48%</td>
<td>11%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>In the past year, care coordination in my community/region has improved.</td>
<td>Year-2</td>
<td>15%</td>
<td>46%</td>
<td>31%</td>
<td>8%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Year-3</td>
<td>26%</td>
<td>44%</td>
<td>15%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>In the past year, community partners/social services have been working more/better together to meet patient needs.</td>
<td>Year-2</td>
<td>19%</td>
<td>54%</td>
<td>27%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Year-3</td>
<td>30%</td>
<td>52%</td>
<td>4%</td>
<td>7%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Healthcare Provider Survey

A mailed healthcare provider survey was conducted of those healthcare providers participating in the Webster County, Marion County, and Great River C3s. The survey was mailed to 53 nurse practitioners, physicians, physician assistants, psychiatrists, and one registered nurse. The survey response rate was 20 percent, with five respondents reporting they are physicians, one reporting they are either a nurse practitioner, physician assistant, or nurse, and two not stating their profession.

The survey asked questions about C3 awareness, knowledge, and participation in C3 initiatives; C3 satisfaction overall; and background information on the survey respondent. For the awareness, knowledge, and participation questions, the respondents were asked to use a Likert scale ranging from “strongly disagree” to “strongly agree” (the same used in the steering committee and community coalition surveys) to rate the 17 statements provided. When asked about awareness of the SIM initiative, survey respondents either reported they “strongly agree” (50%) or “strongly disagree” (50%) they are aware. When asked about awareness of the local C3’s role in the community and activities underway in the community, healthcare providers were most likely to report they “strongly disagree” (56%) they are aware. When asked about whether they are aware of the local and regional health and social services available to patients, again healthcare providers either report they “agree” (50%) or “strongly disagree” (50%) they are aware. This awareness is considerably lower when compared to Year-2 survey findings when 71 percent “strongly agreed” or “agreed” they are aware.

Although survey respondents didn’t report a strong awareness of the C3’s roles and activities, 44 percent “strongly agree” or “agree” and 44 percent “neither agree nor disagree” that they support their clinic’s collaboration with C3 initiatives and activities. Additionally, 33
percent “agree” and 56 percent “neither agree nor disagree” that they actively encourage the clinic’s collaboration with C3 initiatives and activities. Healthcare providers who “agree” they are aware of the SIM also report more awareness of the C3 as a whole and more support for clinic involvement.

No healthcare provider reports they “strongly agree” or “agree” they use information from the C3’s care coordination database to learn more about their patients. Two healthcare providers report they “agree” they are better able to support patients’ needs related to their social determinants of health because of the local C3 initiatives. These same providers report they “agree” that they are able to support patients’ diabetic needs because of the local C3 initiative. No healthcare provider reports being satisfied with their role in the C3.

Although the survey response rate continues to be low and survey respondents continue to report a lack of awareness of the C3s and their work, C3 staff report C3 activities are being imbedded in care coordination activities and operations of clinics and local public health without attributing the work to the C3 and its goals and/or without direct involvement by healthcare providers. Also, a likely factor is referrals into the C3 are being made by clinic care coordinators or health navigators, limiting the healthcare providers’ contact and exposure to the C3 as whole.

**Diabetes Management and Care Coordination Interviews**

Telephone and on-site interviews were conducted of 12 diabetes educators and 3 care coordinators engaged with their local C3. Care coordinators and diabetes staff agree their operations have not changed solely because of the C3s; however, the C3 has had a direct impact on components and more broadly on their organizations as a whole. For example, they report the C3 work has been an integral part of broader changes where roles, degree of care coordination and integration, patient engagement, and operations are constantly changing due to ACOs, managed care, other insurers, grant funded initiatives (e.g., SIM and National Association of Community Health Centers - NACC), local boards of health/county boards, and health policy in general. Some of the care coordinators noted new care coordinator/health navigator positions have been added to their organizations. All care coordinators and diabetes educators are working to improve access, handoffs between providers/services, patient involvement, and patient outcomes as well as decrease duplication of unnecessary services. Additionally, they report C3s have impacted care coordination and diabetes care by bringing internal stakeholders and community partners together to understand roles, responsibilities, programs and services; educating patients, providers, and community members on care coordination/health navigation, social determinants of health, and diabetes; supporting local initiatives such as public safety programs and diabetes education programs; and providing resources that support care coordinator positions who directly improve patient outcomes.

Care coordinators and diabetes staff agree their participation in the C3 has improved transparency, knowledge of local and regional health and social services resources, local and regional partnerships, and awareness of the need and process to uncover and address patients’ social needs. They agree their organizations are committed to long-term implementation of C3 goals, however, for some organizations, without additional funding extensive care coordination services, including those directed at diabetes patients, will no longer be made available. Instead, where feasible they will integrate care coordination into funded and operating programs and services, such as the First Five Program, congregate dining, home care, and community paramedicine.

**Conclusion**

Year-3 data collection for the seven C3s is complete and indicates stakeholders continue to be on board, aware of, and participating in their planning and development. Additionally, advances have been made towards developing and hardwiring care coordination into the continuum of health and social services; diabetes initiatives are fully operational but will be difficult to sustain without funding for staff training; local and regional relationships have evolved and mechanisms are in place to support their future and development; data sharing is underway but continues to be a challenge; and program sustainability plans have been set and in some instances will be sustained. Each C3 advanced the Iowa Department of Health’s care coordination statewide strategy and all are sustaining some of this work and/or have integrated it into their operations. Healthcare provider involvement in the initiatives is still unclear and appears to be limited, however,
community partners, care coordinators and diabetes educators are aware of and engaged in C3 planning, development, and implementation and are using and advancing C3 data sharing tools towards improving patient outcomes.
Appendix C. Letter from Governor Reynolds

October 22\textsuperscript{nd}, 2018

Director Jerry Foxhoven  
Chair of the Healthcare Innovation and Visioning Roundtable  
1305 E Walnut St.  
Des Moines, IA 50319

Dir. Foxhoven,

I want to thank the members of the Healthcare Innovation and Visioning Roundtable for participating in this important effort and for your hard work and dedication in developing your recommendations. It is clear this Healthcare Innovation and Visioning Roundtable brings together influential business leaders, payer, providers and public agency leaders most immediately accountable for making change that will build an improved and sustainable healthcare system in Iowa. I also appreciate the national experts who helped facilitate conversations and brought national best practices to Iowa for consideration. I applaud this group for work you’ve accomplished.

Our mutual goal is to create a sustainable healthcare system in Iowa which can only be achieved through thoughtful collaboration. Key to that effort is creating healthy communities for all Iowans, establishing effective data sharing that supports health communities and ensuring sustainability of these strategies.

Your recommendations make clear that there is strong consensus on the need to continue the important work of this Healthcare Innovation and Visioning Roundtable which has brought together stakeholders to focus on both rural and urban communities. Together we can ensure the implementation of these recommendations and continue to build and maintain a strong public-private partnership and multi-stakeholder process.

I support the continuation of the Healthcare Innovation and Visioning Roundtable in the effort to refine and develop implementation steps for your recommendations and future actions. This includes the development of a formal governance infrastructure. The healthcare Innovation and Visioning Roundtable should produce periodic progress reports on the implementation of your recommendations and any future actions.
Efforts should include a stakeholder engagement plan, with opportunities for public engagement and interaction of communities, consumers and state legislators. This will allow them to share community successes and encourage replication and adaptation of successful community approaches.

It will also be important to evaluate the impact of the work advanced by the Healthcare Innovation and Visioning Roundtable using measures and milestones of success that are meaningful for stakeholders in communities and reflect what is important to difference constituencies in the community.

Again, I appreciate all of your work and dedication. It is clear you have assembled the right people to truly effectuate the change needed for Iowa’s healthcare delivery system.

[Signature]
Governor of Iowa
What is PatientPing and why is it replacing the old SWAN?
PatientPing is a national care coordination network that connects healthcare providers with real-time clinical event notifications whenever, and wherever, a patient receives their care. As IHIN’s contract with ICA (the legacy health information exchange platform for IHIN) for SWAN services came to an end April 30, 2019, IHIN worked toward advancement of capabilities for an enhanced statewide alerting system. In partnership with PatientPing, which informs providers when their patient is admitted to an unaffiliated facility with real-time notifications (or pings), IHIN transitioned services for advanced alerting.

What services does PatientPing provide?
Patient Ping provides two key services:
• Pings: Receipt of real-time notifications on patient admissions and discharges from hospitals and post-acute facilities
• Stories: Critical patient information regarding a patient’s prior visit histories, care team information and instructions, as well as patient demographic information.

What types of organizations are participating in PatientPing?
Nationwide, PatientPing serves all patients and care teams (Commercial, Medicaid, Medicare, Uninsured) through real-time notifications. PatientPing will also connect post-acute facilities in Iowa.

What does the service area for PatientPing in the United States look like?

What organizations/health systems are using PatientPing in Iowa?
As of April 2019, 94 hospitals, 87 post-acute facilities, and 3 ACOs are using PatientPing in Iowa. This includes participants such as UnityPoint Health, MercyOne, Broadlawns, Genesis, The University of Iowa Hospitals and Clinics, The Iowa Clinic and IowaHealth+.
What is the process for getting PatientPing for my organization?

PatientPing Technical Onboarding to Participant Go-Live Macro Map

Start → Build VPN with IHIN and PatientPing → Test VPN Connection → Compile and Send HL7 Mapping Tables → Test Interface and Data Exchange → Monitor and Test ADT Feed → Lead Participant All Inclusive Patient Roster File → Create User Access Account Profiles and Permissions → Training and Education to Users → “Ping!” Send to Participating Organization for Alerting and Care Coordination → End

What type of information do you want in our admission, discharge and transfer (ADT) messages?
We are asking for real time ADT messages on all of your patient population. Those will be used two ways: to populate the IHIN Electronic Master Patient Index (EMPI) and to forward to PatientPing for advanced alerting and care coordination activities. There is no charge for ADT integration beyond your IHIN participation fee. At PatientPing, these ADT messages become the trigger event to send alert and care coordination information to anyone who has a particular patient in their Roster file. At IHIN, ADTs can also become foundational to query exchange and driving State Registries (services included in your IHIN participation fee should you decide to pursue them).

Do you have a picture of the data process flow illustrating how the data gets from the electronic health record (EHR) to PatientPing?

Inbound HL7 ADT message received via VPN TCP/IP connection → Message filtered by accepted facility and accepted message type → Message passed into common format → Message stored in database for post-analysis → Message is processed → ACK message is sent via VPN TCP/IP connection

PatientPing care system
What is the “All Inclusive Patient Roster” and what does it do?
The all-inclusive patient roster is the file listing an organization’s attributed patients. It is an extract of your patient population that you wish to be alerted on via PatientPing. This file is submitted once per month on a date of your choosing.

Should the Patient Roster follow the technical specifications of the previous SWAN monthly file or should it change to the new PatientPing technical specifications?
The PatientPing community is built on a series of data sources, which first and foremost rely on ADT feeds and patient attribution lists to alert users as to their patients’ movements throughout various care settings. PatientPing leverages ADT data from acute care hospitals to send real-time notifications to care coordinators and other users, enabling coordination of care at the time of admission, pre-discharge planning, or following a patient’s departure from the hospital. In the ADT feed, PatientPing focuses on data elements such as level of care (patient class (PV1.2), hospital service (PV1.10), patient type (PV1.18)) and other encounter-level clinical context to present users with a snapshot of the patient’s encounter at an acute care facility. The roster file should follow the PatientPing specifications, not the traditional SWAN specifications. IHIN will need to ensure your ADT file matches the need to enable the most robust data collection to support the care coordination tools afforded to participants in the PatientPing tool. When you share your organization’s standard ADT format with IHIN, we will work with your technical team to identify gaps and needs going forward. The ADT triggers the event, while the roster file gives the return of the information to drive enhanced care coordination. All data is secured internally at PatientPing.

How will IHIN know the subset of patients the organization would like Pings on?
Through the roster file that you share monthly.

Can you pull just medical patients, or can we see dental patients as well?
PatientPing can identify medical patients through the attribution file (Patient Roster) and may be able to filter dental patients using fields in the ADT messages.

How much does it cost to send our All Inclusive Patient Roster?
Charges are based upon the total number of records in the All Inclusive Patient Roster file. A quotation for services can be obtained by contacting IHIN.

What if we forget or do not update our All Inclusive Patient Roster for the month?
If you were to not able to update a Roster file in a particular month, IHIN and PatientPing will use the most recent roster file available in the system to provide you alerts (and alerts will flow month to month based on the most recent Roster file). Once a new Roster file is loaded, it becomes the basis for billing.

What day are we required to send to IHIN our All Inclusive Patient Roster?
Rosters are submitted monthly. The Roster can be submitted on any day/time of the month at the discretion of the contributing organization.

How is a Patient Roster generated?
A Patient Roster is generated in two ways: (1) the PatientPing Customer provides a list of patients for whom the PatientPing Customer provides care coordination services or (2) PatientPing attributes patients to a PatientPing Customer as result of a treatment relationship between the PatientPing Customer and the patient, as evidenced by the fact that the patient has presented and/or was admitted to a PatientPing Customer’s healthcare facility. Once a match between the ADT feeds and the Patient Roster has been established, then such PatientPing Customer will have access to protected health information (PHI).
What are the SFTP requirements?
There are no customized SFTP port requirements to include. Unlike HL7 messages, SFTP will all utilize one industry standard port (22) regardless of who the participant is and what they are trying to send/receive through SFTP.

The steps for the SFTP for the participant to creates a Roster File are:
Participant SFTP Push to IHIN → IHIN monitors directory and triggers based on new file appearance/modification → SFTP IHIN Push to Patient Ping
Patient Ping → SFTP Push to IHIN (Trigger Undetermined) → Participant SFTP Pull to Participant (Trigger Undetermined)

Is PatientPing Health Insurance Portability and Accountability Act (HIPAA) compliant?
In order for a Customer to receive access to Protected Health Information (PHI) via the PatientPing Services, there needs to be a match, as determined by PatientPing's proprietary matching algorithm, between the real-time ADT feeds, delivered by PatientPing Customers and securely stored in the PatientPing platform, and a PatientPing Customer's Patient Roster. As set forth in 45 C.F.R 164.502(A)(1)(ii), a Covered Entity (or a Business Associate on the Covered Entity's behalf) can disclose PHI for purposes of (a) Treatment, with treatment being defined as the "provision, coordination, or management of health care and related services by one or more health care providers, including the coordination or management of health care by a health care provider with a third party; consultation between health care providers relating to a patient; or the referral of a patient for health care from one health care provider to another"; and (b) Healthcare Operations, which is broadly defined but includes, conducting quality assessments and improvement activities, patient safety activities, population-based activities related to improving health care and reducing health care costs, case management and care coordination, contacting of healthcare providers and patients with information about treatment alternatives, health plan performance, etc. As described above, a PatientPing Customer will only have access to PHI via the PatientPing Services, in the form of a Story or a Ping, if there is a match between the ADT feed and the PatientPing Customer Patient Roster, which such Patient Roster requires that such PatientPing Customer either have a care coordination relationship or a treatment relationship with such patient. Information being disclosed via the PatientPing Services are done solely in furtherance of those relationships, indicating that all disclosures of information via the PatientPing services, including PHI, are being disclosed for purposes that fall within either the Treatment or Healthcare Operations exceptions above.

What are the use cases that PatientPing can assist my organization in accomplishing?
PatientPing is used to power these types of strategic priorities...

<table>
<thead>
<tr>
<th>Influence Post Acute utilization</th>
<th>Drive TCM Activities</th>
<th>Reduce Avoidable Readmissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve collaboration with Community partners</td>
<td>Influence HEDIS and Quality Measures</td>
<td>Improve ED &amp; Hospital Throughput</td>
</tr>
<tr>
<td>Enhance Patient Engagement</td>
<td>Reduce Outmigrations</td>
<td>Increase In-network utilization</td>
</tr>
<tr>
<td>Strengthen Physician Alignment &amp; Referral Patterns</td>
<td>Reduce MSPB</td>
<td>Receive Real-time Insights</td>
</tr>
</tbody>
</table>

...across these patient populations

<table>
<thead>
<tr>
<th>Risk-based lives (MSSP)</th>
<th>Bundles</th>
<th>ED High Utilizers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Episodic Care Management</td>
<td>Palliative Care</td>
<td>Specialty &amp; Medically Complex Patients</td>
</tr>
<tr>
<td>Unfunded / Indigent</td>
<td>Opioid &amp; Drug seeking patients</td>
<td>Medicaid</td>
</tr>
</tbody>
</table>
When will my organization have access to PatientPing?
After the master service agreement has been reviewed and signed/executed by your organization IHIN will work with you to create access rights and permissions for users post technical go-live. We will look to your organization to provide a list of staff you wish to have access to PatientPing.

Is there a certain discipline that can access PatientPing? Can intake coordinators that are not licensed RN’s access and document in this tool?
PatientPing partners will all types of organizations and allow account access to be provisioned at the discretion of each individual customer. Some organizations have intake coordinators, administrative staff, analysts, and others accessing the data for many different purposes - ACO attributions, utilization history, discharge planning, analytics reporting, etc. PatientPing will work with each organization to train and coach all members of the organization on the appropriate use of the PatientPing application.

Is there a Service Level Agreement with PatientPing?
Yes. PatientPing considers the HL7 interface to be mission critical during standard business hours (8am - 6pm ET). However, PatientPing monitors all ADT production data feeds at the interface and internal processing levels on a ten (10) minute interval. It is acceptable for an interface to be down outside of normal business hours and PatientPing will not initiate a support call to the customer outside of the above-stated business hours. Although PatientPing strives to maintain a >99.99% uptime, it is expected that customer interface connections are set to retry every 120 seconds. Also, customer interfaces should be set to queue for up to 48 hours in the event of an unplanned network or interface outage.

Is there a demonstration of the product available for viewing?
For an overview of PatientPing, you may view a Webex recording of IHIN’s initial Patient Ping Demonstration at:

Patient Ping Demonstration - IHIN-20190409 1707-1
Tuesday, April 9, 2019
2:22 pm | Central Daylight Time (Chicago, GMT-05:00)

PLAY RECORDING (54 min)
https://ihin.my.webex.com/ihin.my/ldr.php?RCID=193c7f9bec8ceaf97ee93b99795e4fc2
Recording Password:(This recording does not require a password.)

Will there be any training webinars available for PatientPing subscribers?
IHIN has partnered with PatientPing to identify the Service Level Agreement for ongoing training and support for PatientPing contributors and users. PatientPing will work with each organization to train and coach all members of the organization on the appropriate use of the PatientPing application. We understand that support needs vary by customer, and the customer may contact PatientPing at any time for integration support. For any issues that require PatientPing support, please use the contact information below:

Phone: (617) 356–7147
E-mail: integrationsupport@patientping.com

When might PatientPing reach out to my organization’s support team for more information?
PatientPing will reach out to customer support contacts for the following reasons:
1. Downtime escalations: the interface is down and needs troubleshooting
2. Mapping updates: we’re receiving new codes that are not mapped
3. Customer tickets: missing or unusual events
Community Investments
Ensuring Sustainment

April 2019
Webster County Coalition
Accountable Community of Health

A. Accountable Community of Health (ACH) 3 – 10

B. ACH Sustainment Approach
   1. Population Management 11 – 23
   2. Care Coordination & Service Integration 24 – 35
   3. Financing (Value Based Payment) 36 – 38

C. Four Collaborative Steps to Sustainment 39 - 40
A. Accountable Community For Health

Definition:
Accountable Community for Health (ACH) is a structured, cross-sectoral alliance of healthcare, public health, social services and other organizations that plans and implements strategies to improve population health and health equity for all residents in a geographic area.

ACH Performance Aims And Logic Model

Bring together medical and social services in an integrated delivery system that can be managed for value with a business model that is sustainable.
**Accountable Community For Health – Logic Model**

**Community Coalition** accountable for engaging residents with high risk of health crisis

Patients with coverage but beyond reach of traditional health care delivery systems.

**High Risk Patient Populations In Relationship Based Registry**

Patients are not meeting health guidelines (“not at goal”). Have high utilization of expensive downstream health care. (High avoidable use of ED, hospital, nursing home.)

Community organizations often have access to, and trusted relationships with, these patients

Accountability and assignment is established with a patient registry (list of names)
Accountable Community For Health – Logic Model

Community Coalition accountable for engaging residents with high risk of health crisis

Health care payers identify & assign high risk patients beyond reach of traditional provider networks.

High Risk Patient Populations In Relationship Based Registry

Payers are now open to service packages that can reach named high risk, high cost patients.

Clients’ health status at clinical standard and living situation stable.

Under “value based payment” payers are responsible for securing results.
Accountable Community For Health – Logic Model

**Community Coalition** accountable for engaging residents with high risk of health crisis

**Health care payers** identify & assign high risk patients beyond reach of traditional provider networks.

**High Risk Patient Populations** In Relationship Based Registry

? Complete the health care delivery system

**Clients’** health status at clinical standard and living situation stable.
**Accountable Community For Health – Logic Model**

- **Community Coalition** accountable for engaging residents with high risk of health crisis

- **SDOH**, Social Determinants of Health Referral System

  - **High Risk Patient Populations** In Relationship Based Registry

    - **Advanced Health Care Coordination** Business Unit

      - **Social Service Providers** Deployed

      - **Complete the health care delivery system**

      - **Clients’ health status at clinical standard and living situation stable.**

- **Health care payers** identify & assign high risk patients beyond reach of traditional provider networks.
**Community Coalition** accountable for engaging residents with high risk of health crisis

**SDOH**, Social Determinants of Health Referral System

**High Risk Patient Populations** in Relationship Based Registry

**Advanced Health Care Coordination** Business Unit

**Integrated, population-based care delivery system evolves**

**Social Service Providers Deployed**

**Health Service Providers Deployed**

**Complete the health care delivery system**

**Clients’** health status at clinical standard and living situation stable.

**Organize integrated care to reach and serve high risk populations**
**Accountable Community For Health – Logic Model**

- **Community Coalition** accountable for engaging residents with high risk of health crisis
- **SDOH, Social Determinants of Health Referral System**
- **High Risk Patient Populations** In Relationship Based Registry
- **Advanced Health Care Coordination** Business Unit
- **Integrated, population-based care delivery system evolves**
- **Social Service Providers Deployed**
- **Healthy Community**

**Health care payers** identify & assign high risk patients beyond reach of traditional provider networks.

**Clients’** health status at clinical standard and living situation stable.

**Cost Under Control, Quality Improves**
Accountable Community For Health – Iowa 2019 SIM Performance Commitments

Reduce the **Total Cost of Care** for Wellmark and Medicaid population by 15% below projected targets

Provider participation ... in **value based purchasing** reaches 50%

Reduce rate of preventable **readmissions** by 12%

Increase % of **adult smokers** who have made a quit attempt

Decrease **adult obesity** prevalence rates

Increase % of **adults with diabetes** having two or more A1c tests

Reduce rate of **“Hospital Acquired Conditions”** by 20%

**Healthy Community**

**Clients’** health status at clinical standard and living situation stable.

**Cost Under Control, Quality Improves**

*Integrated, population-based care delivery system evolves*
B. ACH Sustainment

Three On-Going Roles

1. Population Management
2. Care Coordination & Service Integration
3. Financing With Value Based Payment
B. ACH Sustainment

1. Population Management

Total ACH Population

In Care, Not At Goal

In Care, At Goal

In Crisis
## Scale of Care Coordination Needed (Estimates)

### Webster Population = 121,100

<table>
<thead>
<tr>
<th>Hospital Utilization</th>
<th>ED visits</th>
<th>52,800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidable ED visits</td>
<td>8,450</td>
<td></td>
</tr>
<tr>
<td>Cost of avoidable</td>
<td>$11,881,000</td>
<td></td>
</tr>
<tr>
<td>Hospital Admits</td>
<td>12,200</td>
<td></td>
</tr>
<tr>
<td>30 Day Readmissions</td>
<td>1,700</td>
<td></td>
</tr>
<tr>
<td>Avoidable 30 Day</td>
<td>460</td>
<td></td>
</tr>
<tr>
<td>Cost of avoidable</td>
<td>$6,624,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Status</th>
<th>Diabetes</th>
<th>12,290</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM NAG</td>
<td>3,690</td>
<td></td>
</tr>
<tr>
<td>DM Crisis</td>
<td>360</td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>28,680</td>
<td></td>
</tr>
<tr>
<td>Obesity Crisis</td>
<td>2,210</td>
<td></td>
</tr>
<tr>
<td>Tobacco User</td>
<td>14,510</td>
<td></td>
</tr>
<tr>
<td>Tobacco Crisis</td>
<td>1,450</td>
<td></td>
</tr>
<tr>
<td>High Risk, Chronic</td>
<td>26,147</td>
<td></td>
</tr>
<tr>
<td>Conditions (≥ 3)</td>
<td>2,610</td>
<td></td>
</tr>
</tbody>
</table>

### Social Services

| Poverty             | 16,380   |
| Need Social Services| 5,410    |
| Number in Crisis    | 1,790    |
WEBSTER COUNTY HEALTH SYSTEM ADVANCED CARE COORDINATION

HOSPITALS (8)
- Buena Vista Regional Medical Center
- Humboldt County Memorial Hospital
- Iowa Specialty Hospitals & Clinics
- Van Diest Medical Center
- Pocahontas Community Hospital
- Stewart Memorial
- UnityPoint Health Fort Dodge
- Loring Hospital

Other Community Hospital Providers

PRIMARY CARE (56)
- UnityPoint Health
  - Fort Dodge
  - 3 PCP’s
- McFarland Clinic
  - 1 PCP’s
- United Community Health Center
  - 2 PCP’s
- Other Providers
  - 48 Primary Care MDs

PEOPLE
- Population
  - 121,100
WEBSTER COUNTY HEALTH SYSTEM
ADVANCED CARE COORDINATION

HOSPITALS (8)

C3 WORKING WITH HOSPITALS AND DOCTORS TO MANAGE UTILIZATION

PEOPLE

Population 121,100

Other Community Hospital Providers

Avoidable ED Use

Avoidable All-Cause 30 Day Readmissions

Stewart Memorial

UnityPoint Health Fort Dodge

Pocahontas Community Hospital

Buena Vista

HUMBOLDT COUNTY MEMORIAL HOSPITAL

Iowa Specialty Hospitals & Clinics

Van Diest Medical Center

Loring Hospital
WEBSTER COUNTY HEALTH SYSTEM ADVANCED CARE COORDINATION

C3 WORKING WITH PRIMARY CARE AND OTHERS TO MANAGE CHRONIC CONDITIONS

- **UnityPoint Health Fort Dodge**
  - 3 PCP’s

- **Mcfarland Clinic**
  - 1 PCP’s

- **United Community Health Center**
  - 2 PCP’s

- Other Providers
  - 50 Primary Care MDs

- Diabetes Patients Not At A1c Goal
- Patients Who Are Obese
- Patients Using Tobacco
C3 COMMUNITY WORKING TOGETHER TO INSTALL AND ADVANCED CARE COORDINATION SYSTEM THAT:

• IMPROVES HEALTH
• REDUCE COST OF CARE
• REDUCES UNNECESSARY HOSPITAL UTILIZATION
WEBSTER COUNTY HEALTH SYSTEM
ADVANCED CARE COORDINATION

Potential Savings in Avoidable ED Visits = $11.8 Million

<table>
<thead>
<tr>
<th>ED Visits</th>
<th>% Avoidable</th>
<th># Avoidable</th>
</tr>
</thead>
<tbody>
<tr>
<td>48,361</td>
<td>16.0%</td>
<td>7,740</td>
</tr>
</tbody>
</table>

92% of Total

<table>
<thead>
<tr>
<th>ED Visits</th>
<th>% Avoidable</th>
<th># Avoidable</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,439</td>
<td>16.0%</td>
<td>710</td>
</tr>
</tbody>
</table>

8% of Total

<table>
<thead>
<tr>
<th>ED Visits</th>
<th>% Avoidable</th>
<th># Avoidable</th>
</tr>
</thead>
<tbody>
<tr>
<td>52,800</td>
<td>16%</td>
<td>8,450</td>
</tr>
</tbody>
</table>

100% of Total

Average Cost of ED Visit = $1,406

Avoidable Calculation: 8,450 avoidable ED Visit x $1,406 cost per visit = $11.8 Million
WEBSTER COUNTY HEALTH SYSTEM
ADVANCED CARE COORDINATION

Potential Savings in Avoidable Readmissions = $6.6 Million

<table>
<thead>
<tr>
<th>Admissions</th>
<th>% 30 Day Readmits</th>
<th># Readmits</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,146</td>
<td>13.9%</td>
<td>1,137</td>
</tr>
<tr>
<td>4,054</td>
<td>13.9%</td>
<td>563</td>
</tr>
<tr>
<td>12,200</td>
<td>13.9%</td>
<td>1,700</td>
</tr>
</tbody>
</table>

67% of Total

33% of Total

100% of Total

Other Community Providers

- Average Cost of Hospital Readmission = $14,400;
- Estimated % of Readmissions that are avoidable = 26.9%

Population-Based Estimate

Avoidable Calculation: 1,700 x 26.9% avoidable x $14,400 = $6.6 Million

Potential Savings in Avoidable Readmissions = $6.6 Million
Reducing unnecessary ED visits ($11.8 Million) and Avoidable Readmissions ($6.6 Million) can generate up to $18.4 Million in potential savings to the Webster County Community.
4,830 People are at risk to incur either an avoidable ED visit or an avoidable readmission.

<table>
<thead>
<tr>
<th>Item</th>
<th>8 Hospitals</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidable ED Visits</td>
<td>7,740</td>
<td>710</td>
<td>8,450</td>
</tr>
<tr>
<td>Average Visits/Person *</td>
<td>1.50</td>
<td>1.40</td>
<td>1.49</td>
</tr>
<tr>
<td><strong>Total People</strong></td>
<td><strong>5,160</strong></td>
<td><strong>507</strong></td>
<td><strong>5,667</strong></td>
</tr>
<tr>
<td>Avoidable Readmits</td>
<td>305</td>
<td>155</td>
<td>460</td>
</tr>
<tr>
<td>Average Readmits/Person *</td>
<td>1.15</td>
<td>1.20</td>
<td>1.17</td>
</tr>
<tr>
<td><strong>Total People</strong></td>
<td><strong>265</strong></td>
<td><strong>129</strong></td>
<td><strong>394</strong></td>
</tr>
<tr>
<td>Duplication Factor (On Both List) *</td>
<td>20%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td><strong>Total People at Risk</strong></td>
<td><strong>4,340</strong></td>
<td><strong>490</strong></td>
<td><strong>4,830</strong></td>
</tr>
</tbody>
</table>

* For illustration only
3,350 People are estimated to be in crisis as a result of their chronic condition.

<table>
<thead>
<tr>
<th>Item</th>
<th>Diabetes NAG</th>
<th>Obesity</th>
<th>Tobacco</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Patients with Condition</td>
<td>3,690</td>
<td>28,680</td>
<td>14,510</td>
</tr>
<tr>
<td>Estimated Percent in Crisis *</td>
<td>9.7%</td>
<td>7.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td><strong>Total People</strong></td>
<td><strong>347</strong></td>
<td><strong>2,208</strong></td>
<td><strong>1,451</strong></td>
</tr>
<tr>
<td>Duplication Factor (on all 3 Lists) *</td>
<td>10%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total People at Risk for Condition</strong></td>
<td><strong>312</strong></td>
<td><strong>1,877</strong></td>
<td><strong>1,161</strong></td>
</tr>
<tr>
<td><strong>Total People in Crisis</strong></td>
<td></td>
<td></td>
<td><strong>3,350</strong></td>
</tr>
</tbody>
</table>

* For illustration only

It is a good bet that most of these people are using the emergency department and being admitted unnecessarily to the hospital.
Creating an Advanced Care Coordination System enables Webster County to assemble its collective resources to eliminate unnecessary utilization of high-cost services for over 4,830 of its citizens at risk and help improve the health status of 3,350 in immediate crisis.

Care Coordination can reduce their unnecessary use of high-cost health services and reduce the overall cost of care in the County on the order of $18.4 million.
B. ACH Sustainment

2. Care Coordination and Service Integration

- Community Services Referral System (SDoH)
- Advanced Health Care Coordination

- Medical Care Driven (Sub-Cohort Pilots)

- Social Need Driven (C3 Coalition Built System)
## Comparing The Two Coordination Systems

<table>
<thead>
<tr>
<th>System</th>
<th>Accountability</th>
<th>Activities</th>
<th>Duration</th>
</tr>
</thead>
</table>
| Health Care Coordination      | High risk patients meet health outcome and service utilization targets | • Assessment  
• Health Action Plan  
• Home Based  
• Med Management  
• SC Referral  
• Patient Activation  
• Counseling | From several sessions to regular monthly engagement long term |
| Social Service Referral System | Connect client to community services needed.        | • Assessment, client goals  
• Referral to needed service  
• Follow through | One to five days |
### Overview of C3 Communities (11/18 - 2/19)

<table>
<thead>
<tr>
<th>Community Service Referral System (Social Services)</th>
<th>Advance Clinical Care Coordination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organization of Referral Process</strong></td>
<td><strong>Location</strong></td>
</tr>
<tr>
<td>Marion</td>
<td>Central Community Referral System</td>
</tr>
<tr>
<td>Webster</td>
<td>Central, Integrated Into PHD Ops.</td>
</tr>
<tr>
<td>Linn</td>
<td>Networked Referral System</td>
</tr>
<tr>
<td>Sioux</td>
<td>Hospital Based, Across Several</td>
</tr>
<tr>
<td>Great River</td>
<td>Central Hospital Based</td>
</tr>
<tr>
<td>Dallas</td>
<td>Central Referral System (navigation)</td>
</tr>
<tr>
<td>Trinity Musct.</td>
<td>Hospital Based</td>
</tr>
</tbody>
</table>

SDoH = Social Determinants  
ED = Emergency Dept  
PHD = Public Health Dept.  
CC = Care Coordinator
Advanced Care Coordination Program Model
(Integrated Services Tailored To the Population of Focus)

- Comprehensive Medication Management (CMM)
- Community Based Services
- SDoH Referral System
- Pop. of Focus (Registry)
- Infrastructure
- Behavioral Health Services
- Primary Care (Medical Home)
- Specialty Care
- Population Performance on Value Based Agreements
PoF Registry: ACH Coalition’s Major, High Value Asset

Patient Assignment
- PC provider
- Health plan (payer)
- Health action plan
- Health Improvement Tracking

Payer
1. Verifies Patient Are High Cost, High Risk.
2. Offers Selected Patients (Assignment of Patients)

ACH Coalition Members (CBOs)
Identify Patients in High Risk PoF Group

Coalition Compares

ACH Population Management:
estimated scale of the performance challenge.
WEBSTER COUNTY HEALTH SYSTEM
ADVANCED CARE COORDINATION

Registry: Avoidable ED & Hospitalization

Patients (TBD)

Avoidable ED
Readmission

WCHD Service Units

Social Services

Webster County Health Department
SDOH Central Intake, Assessment (5 targets), Referral

Referral
Community Sources

SIM $
PILOT (Sub Cohort)

NEXT STEPS: Take it to scale; make it fundable
• Identify business champion (organization)
• Design delivery system and business model
• Grow PoF to scale (registry)
• Accountable payers engaged
WEBSTER COUNTY HEALTH SYSTEM
ADVANCED CARE COORDINATION

Health Care Coordinators
-----------------
High Touch Care (home visits, weekly contact)

500 Patients

Registry: Avoidable ED & Hospitalization

Avoidable ED
Readmission

Webster County Health Department
--------------
SDOH Central Intake, Assessment (5 targets), Referral

WCHD Service Units

Social Services

Referral
Community Sources

VBP Agreement With ______

Address a serious challenge that a named payer is facing.
Use “best practice” cases to guide program design and financing
Advanced Care Coordination
“Best Practice” Model Example: Health Home

On going care coordination to improve health outcomes and eliminate avoidable costs for high cost, high risk patients

• Assign high cost, high clinical risk patients to lead community based organization.

• Organization recruits and enrolls patient into program.

• Initiates care with full assessment home visit to develop Health Action Plan

• Monthly follow up encounters in the home or by phone to assure plan’s goals are met.

• Incentives for success in enrollment and for reductions in total cost of care.
The Health Home program provides services beyond the clinical services offered by a primary care provider.

• Clinical and Social Assessments
• Comprehensive care management
• Patient activation
• Care coordination with providers
• Health promotion
• Transitional planning and follow-up
• Individual & family support
• Referral to relevant community and social support services

### Activity and Costs

<table>
<thead>
<tr>
<th>Monthly Engagements</th>
<th>Per person per month charge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>With Client</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Tier One Encounter</strong></td>
<td></td>
</tr>
<tr>
<td>One time. Outreach and assessment.</td>
<td>In home. Produce Health Action Plan.</td>
</tr>
<tr>
<td><strong>Tier Two Encounter</strong></td>
<td></td>
</tr>
<tr>
<td>Intensive care coordination.</td>
<td>Follow through on HAP. In home or office.</td>
</tr>
<tr>
<td><strong>Tier Three Encounter</strong></td>
<td></td>
</tr>
<tr>
<td>Low level care coordination.</td>
<td>By phone or office.</td>
</tr>
</tbody>
</table>
Advanced Care Coordination
“Best Practice” Model: Health Home

Plan of Action: High risk patients are likely to need services from multiple delivery systems.

Coordinated Care Assessment Options to Develop Health Action Plan:

- Medication Management Readiness
- Patient Activation (PAM Score)
- Health Care Service Utilization
- Quality of Life
- Depression
- Health Literacy

Supported by
- Depression treatment
- Alcohol/drug treatment services
- Developmental disability services
- Long term care
- Social services
- Home care
B. ACH Sustainment

3. Financing

Value Based Payment Agreement
- Population of Focus
- Program Model
- Financial Model

Health Plan, or ACO

Health Care Providers

SDOH Referral Organization

Health Care Coordinator Organization

Social Service Providers

Involved Providers With Payment Outside the VBP Agreement

Health Care Providers

Social Service Providers
Address a serious challenge that a named payer is facing.
# 1. PROGRAM VOLUME

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Annual Patients Screened</td>
<td>500</td>
</tr>
<tr>
<td>Total Number of Annual Patients Enrolled</td>
<td>252</td>
</tr>
<tr>
<td>Total Number of Annual Patient Encounters</td>
<td>2,699</td>
</tr>
</tbody>
</table>

## 2. PROGRAM COSTS

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Pharmacists</td>
<td>$74,462</td>
</tr>
<tr>
<td>Advanced Care Coordination</td>
<td>$16,157</td>
</tr>
<tr>
<td>Social Services</td>
<td>$11,985</td>
</tr>
<tr>
<td>Other Overhead Costs</td>
<td>$25,651</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>$128,255</strong></td>
</tr>
</tbody>
</table>

## 3. PROGRAM REVENUES

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Billed</td>
<td>$143,723</td>
</tr>
<tr>
<td>Less: Allowance for Uncollectible</td>
<td>($5,031)</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>$138,692</strong></td>
</tr>
</tbody>
</table>

## 4. Net Revenue over Expense $10,437

## 5. VALUE PROPOSITION

<table>
<thead>
<tr>
<th>Rate of Cost Reduction</th>
<th>Expected Costs Cut</th>
<th>Equivalent # of Admits</th>
<th>Equivalent # of ED Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0%</td>
<td>$84,534</td>
<td>4</td>
<td>60</td>
</tr>
<tr>
<td>8.2%</td>
<td>$138,692</td>
<td>6</td>
<td>99</td>
</tr>
<tr>
<td>10.0%</td>
<td>$253,603</td>
<td>8</td>
<td>120</td>
</tr>
</tbody>
</table>

*Expected Cost of ED & IP Services for Population = $1,690,000*

*Payer Break Even in Costs Reductions = 8.2%*
C. Four Collaborative Steps to Sustainment

1. Identify and charter the community organization accountable for health care coordination

2. Create patient population of focus: community registry with named patient list, responsible payer, primary care assignment

3. Set the service delivery package, supported by a “best practice” site

4. Arrange the community coalition financing package (community investment, offer to “responsible payer”)