Community Health Workers –Bringing 360° of Care and Compassion to the Communities We Serve
Venture Charter

Author: CHW Team (Julius Bogdan, Christopher Dugan, Gretchen Gore, Andrew Koschel, Kevin Kuoni, Michael McMahon, Cindy Ortiz)

Date: 06/04/2018

Venture Definition:

- What we are working on:
    - Utilizing Community Health Workers (CHWs) to increase access to healthcare, improve patient outcomes, improve quality of life, and lower ED usage
    - Prioritize patient population at Saint Vincent Outpatient Rehab Clinic (SVORC) focusing on no-show patients and those identified by clinicians who benefit from CHW intervention
    - Use paper Social Determinants of Health (SDOH) screening to pinpoint where to involve CHW; e.g. PRAPARE screening tool

- The problems we are having:
    - Patients are not able to consistently receive the treatment that has been prescribed for them due to SDOH hurdles
    - SVORC has a 15-20% no-show rate which is predominantly government payors and concentrated in the zip code identified by the Community Health Needs Assessment as underserved

- The impact to the SCL Health community if we don't find a solution to these problems:
    - Quality measures for chronic diseases may stay stagnate as patients do not receive needed healthcare
    - Progression of chronic diseases for patients at high cost to health system for non-reimbursed care
    - Absence of revenue associated with 15-20% no-show rate
    - Underutilization of clinicians associated with 15-20% no-show rate

Clear, Compelling Goal:

- We will utilize CHWs to improve the health outcomes for patients at SVORC by listening to patient stories, helping identify and overcome SDOH conditions preventing patients from receiving care, leveraging community partnerships, and decreasing the no-show rate of patient appoitments.

Metrics:

- Calls made to no-show patients and results from calling efforts; e.g. did the patient start receiving care after the initial no-show appointment

- Intervention made by CHW: e.g. home visists; referrals to external community services
- Survey Patients on SDOH risk factors
- Continued tracking of patient no-shows and overall no-show rate for appointments
- Caseload of CHWs
- ED visits by patients receiving targeted CHW intervention
- Reason for patient no-show rate
- Self-reported quality of life scores before and after intervention

Alignment with Strategic Priorities:

- Person-centered: our aim is to imporove access to care for our patients who are experiencing SDOH conditions which, when allevieated, will allow them to receive healthcare more easily.

Scope:

- In Scope:
    - Patients associated with SVORC
    - Education/training for CHWs
    - Incorporate CHWs into workflow of the SVORC
    - Provide CHW access eSummit while in office
    - Educate office staff on role of CHW
    - CHWs perform field/community work
    - Partnersehips with community-based oragnizations to support CHW efforts

- Out of Scope:
    - Patients associated with clinics outside SVORC community
    - CHW eSummit access outside of the office
    - CHW providing any type of clinical care

- Venture Timing:
    - Anticipated Venture Start Date: 10/1/2018
    - Anticipated Venture End Date: 04/1/2019

Innovation Playbook

- Type
    - Our innovation is primarily encompassed in the Experience grouping, on service (CHWs alongside clinicians), channel (engaging patients outside the care site) and customer engagement (CHWs helping patients engage with resources inside their community).
    - This proposal proactively identifies at-risk populations and allows for targeted community intervention and better-coordinated follow-up care. This approach will consider the socioeconomic conditions of the patient and incorporate these needs into their care follow-up care.
- Shift
    - Customer Experience: Connects, serves, and engages customers in distinctive ways, influencing their interactions with SCL Health and our offerings.
    - The prominent aspect of our proposal is it enhances the customer experience by influencing their interactions with SCLHS and our offerings. The customer experience would be improved by receiving additional care. SCLHS will take an increased leadership role in our communities by facilitating a coalescence of resources for improved care coordination. SCLHS would create operational and technological channels of care coordination to deliver this different model of care to patients. With these resources aligned and capabilities established, SCLHS can better serve our communities connecting them with the service and resource that best serves them, and improving the coordination of care after patients leave the four walls of SCLHS facilities.
- Ambition
    - Adjacent. We are pushing boundries by working to involve more community resources in the traditional delivery of healthcare to a patient seen at SVORC. This approach could be a model of care incorporated into delivering value-based care. Creating a different culture of healthcare delivery for patients, and the required behavior changes from the patients, clinicians, and CHWs, is significantly ambitious.

Point Of View

- We spoke with Johny, a 34 year old with Montana Medicaid who had missed an appointment the week prior to our phone call. Johny was referred to SVORC by Riverstone [another clinic in the area that outsources physical therapy] for chronic

pain that makes it difficult for him to work. Additionally, Johny is currently staying a a pre-release center which requires him to provide documentation of any non-work activities prior to the appointment.

- While Johny said that he was in a lot of pain and recognized that the physical therapy could allevieate his symptoms, he had missed his appointment and did not call to reschedule or follow-up.
- Between re-entry into the community, changing healthcare providers, being refered to a third provider, realizing that he would get in trouble for a PT visit without sufficient notification, and managing a family, it was easier for Johny to deal with the pain than navigate multiple healthcare systems.
- It would be gamechanging if Johny had an ally who could help him navigate the complexity of reintegration into society while receiving the healthcare he needs.

Concept

- CHWs embedded in the SVORC will work in parallel with clinicians to identify patients who are unable to receive care. CHWs will contact patients and determine if SDOH conditions are preventing them from accessing care. CHWs will partner with patient to help them identify the impact of SDOH and access resources in the community that will empower them to receive care.

Alignment Assessment

- Based on outbound calls to patients, there has been a need identified for additional patient intervention to improve care delivery. The CHW program framework presented in this document provides alignment to deliver additional patient intervention.

Venture Tribe

- Venture Sponsor: Peter Kung, Terri Casterton,
- Innovation Partner: Peter Kung, Terri Casterton
- Venture Team: Community Health Workers –Bringing 360° of Care and Compassion to the Communities We Serve

Name	Role
Julius Bogdan	Data analytics
Christopher Dugan	Project manager
Gretchen Gore	Mission guidance
Andrew Koschel	Project manager
Kevin Kuoni	Project manager

Michael McMahon	SVORC Clinician
Cindy Ortiz	Mission guidance

Risks

- CHW not included in clinical workflow
- CHW does not have access to Epic or EMR data
- CHW does not have adequate feedback loop to clinical staff
- Shared understanding of CHW role within the clinical team & office
- Inadequate training given multitude of circumstances that could be encountered and region-specific knowledge
- Inadequate points of contact with local resources
- Resource constraints or difficulty filling position
- HIPAA or IRB concerns – specific to volunteers, staff or students
- Inability to make connection/point-of-contact with patient
- Patient is not receptive to assistance
- Physical safety risk to CHW if visiting a patient home (accidents or intentional harm)
- CHW overstepping scope and giving clinical advise or what patient considers clinical advice

Technical Requirements

- Analytics and Data Innovation Team are in process contracting a SDOH Screening Tool. If this tool becomes available during the innovation timeline our team will utilize this to identify patients as well.
- Tracking mechansims for managing CHW case load; this could be as simple as a spreadsheet, or as complex as a tool like SalesForce. We could potentially leverage best practices and tools used by existing care coordination teams.

Innovation Challenge:
Venture Milestones and Timing

Venture Name	Community Health Workers –Bringing 360° of Care and Compassion to the Communities We Serve	Date	06/04/2018.
Venture Lead	Andrew Koschel, Chris Dugan, Kevin Kuoni, Michael McMahon		

Location: Saint Vincent Outpatient Rehab Center **Venture Timing:**

Region	Montana	Start Date	10/1/2018
Care Site/Department	Montana	Target Completion Date	04/01/2019

Venture Milestones, Accountability & Schedule: Please identify milestones for 3 phases of work

Phase 1: Setup and Prepare for Venture Launch
Things to consider:

- Contract negotiations (if needed)
- Defining scope of work
- Identify stakeholders and decision makers
- Assess current state and gaps to address
- Develop goals and metrics
- Communication strategy
- Training strategy
- Define testing approach

List the Key Milestones and Activities *If applicable, include IRB milestones, including target date for IRB approval*	Responsible Lead	Due Date
Complete probes to obtain voice of customer	Michael McMahon	6/8
Approval for project granted	SCLHS	6/18
Review published Community Health Needs Assessment	Michael McMahon, Gretchen Gore, Cindy Ortiz	7/13
Determine initial scope of work for the project	Team	7/13
Finalize project plan	Andrew Koschel, Kevin Kuoni, Chris Dugan	7/20
Communications strategy	Team	7/31
Finalize goals and metrics	Team	7/31
Define testing approach	Team	7/31
Recruit existing associates for staffing	Michael McMahon	8/10
Recruit volunteers for staffing	Michael McMahon	8/10
Create training plan	Team	8/10
Finalize community partnerships for scheduling	Michael McMahon, Gretchen Gore, Cindy Ortiz	8/17
Phase 2: Launch and Testing Things to consider: • Testing your solution • Training those affected by the change • Cutover from old to new processes or tools		

Innovation Challenge:
Venture Milestones and Timing

• Measuring effectiveness of your change • Go-live support		
List the Key Milestones and Activities	Responsible Lead	Due Date
Train associates	Michael McMahon	9/14
Provide SCLHS Mission direction	Gretchen Gore, Cindy Ortiz	9/14
Launch of venture	Team	10/1
Review day 1 results	Team	10/2
Iniital lessons learned debrief	Team	10/4
Lexis Nexis Data Received	Julius Bogdan	11/1
Weekly lessons learned calls	Team + CHWs	Weekly
Review survey results of patients experience issues making appointments	Team + CHWs	Weekly
Review tracking metrics for services provided (e.g. rescheduled appointments as result of outreach, etc…)	Team	Weekly
Monthly statusing of project	Andrew Koschel, Kevin Kuoni, Chris Dugan	Monthly
Phase 3: Report Out • Assemble performance metric data • Summarize findings • Define pivot and/or expansion plan		
List the Key Milestones and Activities	Responsible Lead	Due Date
Summarize lessons learned	Andrew Koschel, Kevin Kuoni, Chris Dugan, CHW	Monthly – start 11/1
Summarize survey results of patient experiences	Andrew Koschel, Kevin Kuoni, Chris Dugan, CHW	Monthly – start 11/1
• If survey results are within Epic, Julius would lead	Julius Bogdan	Monthly – start 11/1
Summarize tracking metrics for services provided (e.g. rescheduled appointments as result of outreach, etc…)	Andrew Koschel, Kevin Kuoni, Chris Dugan, CHW	Monthly – start 11/1
Final compliation of lessons learned	Andrew Koschel, Kevin Kuoni, Chris Dugan	04/6/2019
Final compliation of survey results of patient experiences	Andrew Koschel, Kevin Kuoni, Chris Dugan	04/6/2019
Final compliation of tracking metrics for services provided (e.g. rescheduled appointments as result of outreach, etc…)	Andrew Koschel, Kevin Kuoni, Chris Dugan	04/6/2019

Innovation Venture Metrics

Venture Name	Community Health Workers –Bringing 360° of Care and Compassion to the Communities We Serve	Date	5/29/2018
Venture Lead	Andrew Koschel, Chris Dugan, Michael McMahon, Kevin Kuoni		
Location: Saint Vincent Outpatient Rehab Center		**Venture Timing:**	
Region	Montana	Start Date	10/1/2018
Care Site/Department	Montana	Target Completion Date	4/1/2019

Performance Metric Description

Identify outcome and process measure results that address the health of the individual, the care provided and/or the reduction in cost of care. Identify the target, the quarter the target will be achieved and any baseline measurement currently available

Metric	Process (P) or Outcome (O) Measure	Triple Aim Metrics Improve health (H) Improve care (C) Reduce costs (RC)	Baseline Performance and Measurement Period	Target Performance	Frequency Measured	Goal Date for Achieving Target
# of calls made to no-show patients	Process	C	No calls are made currently	All missed appointments. Roughly 50 per week	weekly	weekly
Results from calls made to no-show patients	Outcome	C	No calls are made currently, hence no results	Recorded for all missed appointments	weekly	weekly
Intervention CHW provided to patient – referral to external service, reschedule apt, home visit, no progress.	Process	C, H	No CHW at the clinic	When patient is amenable and a need is presented	weekly	weekly
Survey Patients on SDOH risk factors	Outcome	C	Not currently performed.	Reduce SDOH barriers to receiving care	Monthly after CHW speaks to patient	4/1/19
Annual ED Visits vs previous year ED visists per patient	Outcome	RC	Not currently performed	Lower ED utilization	Monthly	4/1/19
Track of no-show per patient	Outcome	RC	Current no-show rate. Measurement period is every month.	lower	Monthly	Monthly

Innovation Venture: Pilot Risks

Venture Name	Community Health Workers –Bringing 360° of Care and Compassion to the Communities We Serve	Date	06/04/2018
Venture Lead	Andrew Koschel, Chris Dugan, Michael McMahon, Kevin Kuoni		
Location: Saint Vincent Outpatient Rehab Center		**Venture Timing:**	
Region	Montana	Start Date	10/1/2018
Care Site/Department	Montana	Target Completion Date	4/1/2019

Risks

Describe Risk	What Would Be the Potential Impact on the Project & SCL Health if the risk became an issue?	Probability of Happening (Low, Med, High)	Mitigation Strategies
CHW not included in clinical workflow	Decreased care coordination. Diminished potential to reach goals of venture.	Medium	Provide education to clinical staff on role of CHW and how to engage them in care coordination.
CHW does not have access to Epic or EMR data	Decreased care coordination. Diminished potential to reach goals of venture.	Medium	Ensure CHW has access and training for eSummit.
CHW does not have adequate feedback loop to clinical staff	Decreased care coordination. Diminished potential to reach goals of venture.	Medium	Ensure CHW has access to eSummit and is trained on how to provide meaningful feedback to clinicians via eSummit.
Shared understanding of CHW role within the clinical team & office	Decreased care coordination. Diminished potential to reach goals of venture.	Medium	Provide education to clinical staff on role of CHW and how to engage them in care coordination.
Inadequate training given multitude of circumstances and regionally specific knowledge. Including standard HIPAA protocols	CHW would not be as effective in their coordination as they could be.	Medium	Understand barriers the CHW is encountering and brainstorm strategies for overcoming barriers.
Inadequate points of contact with local resources	Inability for CHW to coordinate care with external organizations based on patient's unique needs.	Low	Continue to work with local resources to improve partnership.
Resource constraints or difficulty filling position	This would prevent the venture from moving forward.	Low	Expand recruiting beyond internet only postings.
HIPAA or IRB concerns – specific to volunteers, staff or students	Decreased confidence in the CHWs ability to handle sensitive patient data. There could be a	Low	Training program to include standard protocol for handling sensitive patient data.

Innovation Venture: Pilot Risks

	potential legal liability with this risk.		
Inability to make connection/point-of-contact with patient	CHW could not provide potential interventions to patients if unable to contact them.	Low	Could work with other nearby clinics that have no show appointments. Could make multiple calls to no-shows.
Patient is not receptive to assistance	CHW could not provide potential interventions to patients if they are not interested.	Low	Accept risk and call other patients.
Physical safety risk to CHW if visiting a patient home (accidents or intentional harm)	This would discourage CHWs from making home visits. There could be a potential legal liability with this risk.	Low	Provide training to CHW on how to remove themselves from situations where they feel they are at harm. Another strategy is to pair CHWs if they are making home visits to decrease the likelihood of this occurring.
CHW overstepping scope and giving clinical advise or what patient considers clinical advice	Could create conflicts between CHW and existing clinical staff. Could also create a situation for increased patient harm, which would be a liability to SCLHS.	Low	Train the CHW to never provide clinical perspectives; this is outside their scope of practice.

BUDGET TEMPLATE FOR INNOVATION CHALLENGE

Venture Name: Community Health Workers –Bringing 360° of Care and Compassion to the Communities We Serve

Venture Lead: Andrew Koschel, Kevin Kuoni, Chris Dugan, Michael McMahon

Date: 06/04/2018

Detailed Funding Sources and Budget

Identify a detailed budget indicating how funds will be spent each quarter for the grant period.

Total funding requested by innovation venture								
	Phase 1 - Secure Materials	**Phase 2 - Live Pilot**					**Phase 3 - Wrap Up and Report**	
		Month 1	**Month 2**	**Month 3**	**Month 4**	**Month 5**	**Month 6**	**Total**
INNOVATION CHALLENGE								
Operating Expenses								
Wages and Benefits		$8,000	$8,000	$8,000	$8,000	$8,000	$8,000	$48,000
Oversight / Management	$5,000	$1,100	$1,100	$1,100	$1,100	$1,100	$1,100	$11,600
Office Supplies	$300	$300	$300	$300	$300	$300	$300	$2,100
Office Expenses	$200	$200	$200	$200	$200	$200	$200	$1,400
Training, Training Materials	$5,000	$200	$200	$200	$200	$200	$200	$6,200
Other (mileage, sponsorships)	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$7,000
Operating Expense Subtotal	**$11,500**	**$10,800**	**$10,800**	**$10,800**	**$10,800**	**$0**	**$0**	**$76,300**
Capital Expenses								
Equipment	$3,000	$0	$0	$0	$0	$0	$0	$3,000

Innovation Challenge Semi-Finalists Submission

Please fill out this submission form and return to Peter Kung (peter.kung@sclhs.net) by end of day on April 7th, 2018. Submissions received after the deadline will not be considered and will not move forward in the challenge.

Innovation Venture Lead(s): Andrew Koschel, Chris Dugan
Team Member Names: Kevin Kuoni, Julius Bogden, Gretchen Gore, Cindy Ortiz, Michael McMahon
Location (Care site, Department): Broomfield/Golden Hill (EPMO); Golden Hill (Data Management), St Mary's (Mission), St. Vincent (Physical Therapy)
Email: Bogdan, Julius <Julius.Bogdan@sclhs.net>; McMahon, Michael C (SVB) <Michael.C.McMahon@sclhs.net>; Dugan, Christopher <Christopher.Dugan@sclhs.net>; Kuoni, Kevin <Kevin.Kuoni@sclhs.net>; Gore, Gretchen <Gretchen.Gore@sclhs.net>; Ortiz, Cindy <Cindy.Ortiz@sclhs.net>; Koschel, Andrew, S (Andrew.Koschel@sclhs.net)

Phone Number: Andrew - 303-403-6784, Chris – 303-272-0705

Innovation Venture Title: Community Health Workers –Bringing 360° of Care and Compassion to the Communities We Serve

Innovation Intent: *This is a concise articulation of your venture's goal. Consider these two questions as you frame your intent:*

1. *How is this innovation different? Assess what others have already focused on and use this to identify types of innovation to focus on those things that are distinctive and create a shift in the patient journey.*
    - This proposal proactively identifies at-risk populations and allows for targeted community intervention and better-coordinated follow-up care, post discharge. This approach will consider the socioeconomic conditions of the patient and incorporate these needs into their care follow-up care.

2. *How ambitious is this venture? How much will you be able to move the needle on your goal?*
    - Significantly ambitious. This approach to care could be a model of care for value-based care. Creating a different culture of healthcare delivery for patients, and the required behavior changes from the patients, is daunting.

Innovation Shift: *What is the primary focus of the change you want to create with your venture? Choose from one of the following three options and provide a short narrative of how your venture fits that option:*

- ***Business Model**: configuring assets, capabilities, and other elements of the value chain to serve our customers and generate revenue differently*
- ***Platform**: Focus on reinventing, recombining, or finding fresh connections across capabilities and offerings to create new value for customers.*
- ***Customer Experience**: Connects, serves, and engages customers in distinctive ways, influencing their interactions with SCL health and our offerings.*
    - The prominent aspect of our proposal is it enhances the customer experience by influencing their interactions with SCLHS and our offerings. The customer experience would be improved by

receiving additional care – both social service information and post-discharge home care -- in the month following a patient's discharge from a hospital. SCLHS will take an increased leadership role in our communities by facilitating a synergistic coalescence of resources for improved care coordination. SCL Health would create operational and technological channels of care coordination to deliver this different model of care to patients. With these resources aligned and capabilities established, SCL Health can better serve our communities connecting them with the service and resource that best serves them, and improving the coordination of care after patients leave the four walls of SCL Health facilities.

Background: *Identify if and how a similar solution has been tested or implemented before in either another healthcare organization or another industry. If so, identify when, where and the results that were achieved.*

- Other healthcare systems have recently been trying similar models, though the level of clinician involved can vary. For example, Chris Dugan conducted a similar program that was focused on providing in-home follow-up to patients post-discharge as part of a CMS Innovation Grant that made use of paramedics for the follow-up piece. The results have been published in multiple journals but a nice summary was done by Kaiser Health News; "an early evaluation by the University of Nevada, Reno, which was based on insurance claims and hospital data, shows that the projects saved $5.5 million in 2013 and 2014. They helped avoid 3,483 emergency department visits, 674 ambulance transports and 59 hospital re-admissions, according to the preliminary data." The full article can be found at this link https://khn.org/news/paramedics-steer-non-emergency-patients-away-from-ers-2/ . In addition to the financial results shown above, this program was successful at lowering 30-day readmission rates for patients post-discharge and improving quality of life as measured by a before and after survey. Similar results were found by using nurses for follow-up care in this study http://www.grand-aides.com/news/effect-of-grand-aides-nurse-extenders-on-readmissions-and-emergency-department-visits-in-medicare-patients-with-heart-failure.

Benefits: *Identify potential patient experience, health, or financial benefits associated with the solution. Include the benefits to the patients, care givers and providers within and outside our four walls. How can those benefits be measured? Are you already measuring those benefits?*

Patient benefit

- Patient experiences improved health outcomes based on similar project efforts.
- More follow-up, in-home care for patients after discharge.
- Patient receives a community resource guide provided to them as part of the process.
- Assuming a lower readmission for patient based on background findings above.

Business benefit

- Can measure the financial impact of fewer Medicare patients being readmitted into the hospital within 30 days of discharge.
- Can measure how often a patient was readmitted to the hospital after discharge.
- Could be a model of care for other business cases.

Technology: *Describe the technology that will be needed to implement the solution. Identify if the technology already exists or needs to be created. If the technology already exists describe what will be tested that is unique to this solution. Explain how the new technology will enable providers or patients to create or enhance services.*

- We need to build a risk scoring model to identify the patient population that we want to target for additional modes of care. We could start with a Readmission Risk predictive model, which we are currently building in Epic, to define the population we want to address. We could then use a risk scoring framework from an information vendor like LexisNexis to augment our data with socioeconomic profiles that would augment the clinical data to give us targeted variables we can address. Leveraging a platform like DataRobot we can build predictive models based on the readmission risk and socioeconomic profiles that we can train, validate and implement back in Epic.
- We also need a care coordination platform, Salesforce, to define and manage the care pathways and document care delivered outside of our facilities. We would need a partner to build out the Salesforce applications but we could provide the data and interconnectivity between our systems and Salesforce.

Funding/Resources:

- *Describe the time required to secure resources and launch the venture.*
  - Approximately 3 months to secure resources and launch venture.
  - Need to understand compliance impacts of community health workers and their ability to utilize eSummit.
    - May need to secure & configure other technology for care coordination; one solution could be SalesForce.
  - Need to understand what training curriculum needs to include.

- *Describe the investment needed for this solution (people, roles, technology).*

  - ***People/Role:***
  - 1 director / project manager
    - Presumably someone from the Innovation team. Need a person to coordinate the various operational and technical components.
  - 1-2 care coordinator(s) – utilized pre-surgery
    - May be able to utilize existing pre-surgery staff, but would need to develop a different workflow for if using new staff.
  - 1 – 2 social worker(s) – to monitor/update social services in various geographic areas
    - This person would also perform socioeconomic interviews with patients, either in their home, or at a facility several days before surgery. They would also provide social services literature to patients.
    - This person-to-person assistance allows the social worker to follow through on the spot either by making the appropriate appointment for referrals or contacting a specific organization with/for the individual making the process less threatening and removing much of the unknown that can cause people not to take action.
  - 2 – 4 community health worker(s) – utilized after surgery.
    - Preferably clinical (paramedic, RN), but may be able to utilize non-clinical workers.
    - Potentially utilize interns/volunteers from local universities.
      - If we utilize volunteers or interns, then we could increase the # of community health workers team members recruited.
    - Existing volunteers could call and check-in on patients after discharge.
  - Training
    - Potentially Grand-Aides
    - Training for the operational process of care coordination among teams.

- **Technology:**
    - eSummit
    - Potentially a CRM tool (e.g. SalesForce)
    - Potentially external socioeconomic databases

- *Lastly, 'guessimate' and circle budget needed (the innovation project funding will not exceed a 6 month period pilot).*
  A) $10,000-$25,000
  B) $25,000-$50,000
  C) $50,000-$75,000
  D) $75,000-$100,000
  E) $100,000-$150,000