REQUEST FOR INFORMATION:

**IMPACT ACT Research Study: Provider and health plan approaches
to improve care for Medicare beneficiaries with social risk factors**

Table of Contents

Introduction

Mountain-Pacific Quality Health (Mountain-Pacific) is excited to contribute to this request for information on social determinants of health (SDoH) and share how we have assisted hospitals, health systems and communities. Mountain-Pacific is the Medicare quality innovation network-quality improvement organization (QIN-QIO) serving Montana, Wyoming, Alaska, Hawaii and Guam, American Samoa and the Commonwealth of the Northern Mariana Islands, some of the most rural, frontier and remote areas of America.

Rural and frontier health care has unique challenges to delivering care to high-risk patients, including distance to care, provider shortages (especially around mental health and substance use providers), a lack of a Health Information Exchange, working with disparate populations like Native Americans and Veterans, transportation, affordable housing, and fewer options for specialty services. Over the last four years, Mountain-Pacific has used strategies to address complex care patients with social determinants of health and their medical co-morbidities and the underlying system-level gaps in care.

Working with health care systems and community stakeholders in three communities in Montana, we developed a medical/social model that is adaptable and scalable to different community needs. This project was funded through a Centers for Medicare & Medicaid Services (CMS) Special Innovations Project award and a Robert Wood Johnson Foundation grant.

Three Montana communities of Billings, Kalispell and Helena partnered with Mountain-Pacific to create community outreach care teams who visit patients in their home setting to address clinical needs and issues related to social determinants of health. There are two key aspects of the model: 1) creating the optimal climate for system change, including education across community stakeholders, and 2) creating an effective registered nurse (RN) and community health worker (CHW) ReSource Team to appropriately address patient needs and measure results. The initial pilot of 36 patients yielded nearly $1.8 million in hospital savings by reducing hospital readmissions and avoiding unnecessary emergency department (ED) visits.

The communities wanted:
1. A program that included visits in the home setting, because clinic visits do not provide the whole picture. For example, a patient with breathing issues may fail to mention her thirty (yes, thirty) cats during a clinic visit. Eyes in the home setting better informs the clinic team, resulting in a more complete picture of a patient's barriers the health.
2. A combined medical /social model.
3. Use of a nontraditional workforce and to train and deploy community health workers (CHWs).
4. To use HIPAA-compliant tablet technology as clinic extenders to help nurses operate at the top of their licensure by focusing on clinical needs
5. Create trusted patient relationship with the teams.
6. A patient centered model where the patient identifies goals meaningful to their health goals.

The communities developed a rural/frontier complex care model consisting of an RN, CHW and tablet for video conferencing and education. The model targets patients with two or more inpatient admissions and/or emergency department visits in six months who are not at end-of-life. It focuses on home visits and intensive case management to tackle the social determinants of health.

We explain how Mountain-Pacific is serving Medicare beneficiaries and working to improve their health outcomes, *especially those with social risk factors*, by answering the following questions:

Are social risk data being used to target services or provide outreach? If so, how? How are beneficiaries with social risk factors identified?
Mountain-Pacific assisted each of the three pilot sites in developing community specific approaches to address SDoH. In general, the communities use the following methods to identify SDoH needs:

1. **Reviewing utilization data to identify eligible patients** - Some of the smaller facilities review daily ED and inpatient (IP) admissions for patient patterns. Then, the health system reviews the electronic health record (EHR) for significant factors related to SDoH. In large part, these clues are often in the provider notes and revealed through admission trends.
2. **Using risk-stratification tools to identify high-risk patients** - Then administering a SDoH assessment to better understand their needs.
3. **Testing and developing a variety of SDoH assessment tools** - Initially, there was interest in the LACE tool, which identifies patients who are at-risk for readmission or death within thirty days of discharge based on Length of stay, Acuity of admission, Co-morbidities and emergency room visits, but applying it to the outpatient setting did not meet the needs of the teams. One health system developed its own tool after reviewing tools like, LACE, PREPARE, and generalized forms.
4. **Provider intuition** - Often, a primary care team working with a patient senses an underlying factor, which the patient has not articulated. For example, a congestive heart failure (CHF) patient having trouble managing fluid levels states she is following provider recommendations. However, the CHW sees Costco rotisserie chicken containers on the counter during a home visit. A Costco rotisserie chicken has three days' worth of sodium. The visit creates an opportunity for the ReSource Team to address health literacy and nutrition issues.

Are there especially promising strategies for improving care for patients with social risk?
The ReSource Team model has achieved significant success at the community, provider and patient levels. As the QIN-QIO, Mountain-Pacific played a key role in developing and implementing this model in the three communities.

Community Level
When a coalition has an interest in improving the health of a community, the group can consider what will motivate and drive the various stakeholders and facilitate a process that meets the

needs of competing organizations. Mountain-Pacific convenes stakeholders and shares data to identify the number of shared patients who have multiple IP and/or ED visits in a six-month period. This data is relevant to health systems and nursing homes facing penalties and Star rating concerns. In addition, as multiple agencies get involved, these high-frequency patients are large consumers of resources such as staff time, charity and services. Dialogue and analysis of QIN-QIO data can inform and develop a business case and a shared community vision of how to work with complex care patients.

The data collected on complex care patients often represents gaps in care and community deficits such as lack of affordable housing or insufficient transportation: issues beyond health care. Community coalitions work to address these issues. One example of system change involved confusion in making referrals to mental health services. Clinic teams' confusion on mental health referrals, appropriate contacts, paper work and provider-level referrals led to uncoordinated and insufficient care. Coalitions addressed the problems with education sessions and created a behavioral health referral project shared broadly across the community, which resulted in a more connected network of services that could care for patients collaboratively. Another informed example involved the lack of affordable housing. This impacts the ability to discharge patients in a timely and safe manner. The coalition members learned the issues and options through another educational series and applied for a housing grant to work collaboratively on a solution.

Assessing community assets, programs and gaps in care maximizes existing resources allowing the model to adapt to community without duplicating services or overlooking unmet needs. The conversations solicited during assessment also convene the network of care into a common dialogue.

Provider Level

The general make-up of the ReSource Team is an RN and CHW(s). The care model wraps services around patients in their home setting. The team builds a trusted, personal relationship with each patient and identifies additional physical, situational, emotional and social barriers to the success of their health care.[i] Another tenant of the model is the improved communication and care coordination with primary care and specialty care providers. The ReSource Team works to build better communication with the patient through Motivational Interviewing techniques and builds a care plan to communicate more effectively with the team and the providers. The model allows the patient to dictate their goals for improved health rather than imposing goals on the patient.
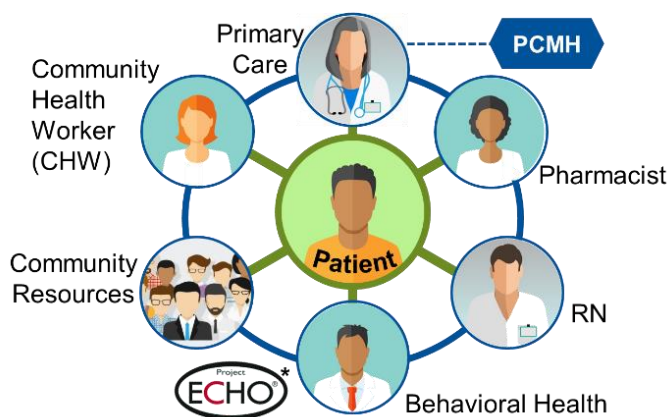
Additionally, best practices support "care going to the patient" rather than "the patient going to the care." Therefore, tablet video capabilities are an effective relationship-builder and healthcare-extender connecting patients to providers.[ii] For example, a patient may live an hour away from the health care provider, and to make the best use of the RN clinical expertise, the CHW travels to the client with the tablet and conducts a video chat back to the nurse. This saves the nurse an hour of drive time to the patient, an hour visit and an hour drive back to the clinic. Instead, the nurse now schedules a 20-minute clinical visit with the patient from her desk, and the CHW addresses the other non-clinical needs for the patient. As we learned and adapted the work, the tablets brought in other services such as pharmacy, nutrition and specialty services (like cardiac care navigators) into the home. This made a more direct and timely point of care for the patient without compromising the patient with traveling to services.

The primary care teams reported greater satisfaction, better communication and time efficiencies. These complex care patients take a lot of time and effort to manage their health conditions and other issues. By assigning the patients to a specific ReSource Team, primary care capacity increased to care for additional lower risk patients. The ReSource Teams created comprehensive care plans and hand-off procedures to keep providers informed and build a better picture of the full scope of patient needs and challenges, including SDoH. Provider teams reported an appreciation for the additional information and helped form strategies to address patients' medical and social challenges.

Providers and care managers identified the following benefits during thirteen random provider/care manager interviews:
- Less stressful
- More productive
- Less time consuming
- Having 'eyes in the home' is beneficial
- Able to connect patients with needed community resources/referrals
- Patient's needed more one-on-one time to accomplish goals
- Provider/patient relationship improved
- Improved communication with patient
- Felt the program was important
- Would like to use CHWs more often
- Felt part of a team
- Improved patient care
- Decreased utilization
- Patient's needs were met
- Patient's felt "cared for"
- Patient has better understanding of diseases/management
- Increased rate of hospital follow-ups
- Improved recovery, more successful transitions of care
- Proactive approach

- Patients have another professional to reach out to, moving away from "only the provider" allowing for care to occur when its needed
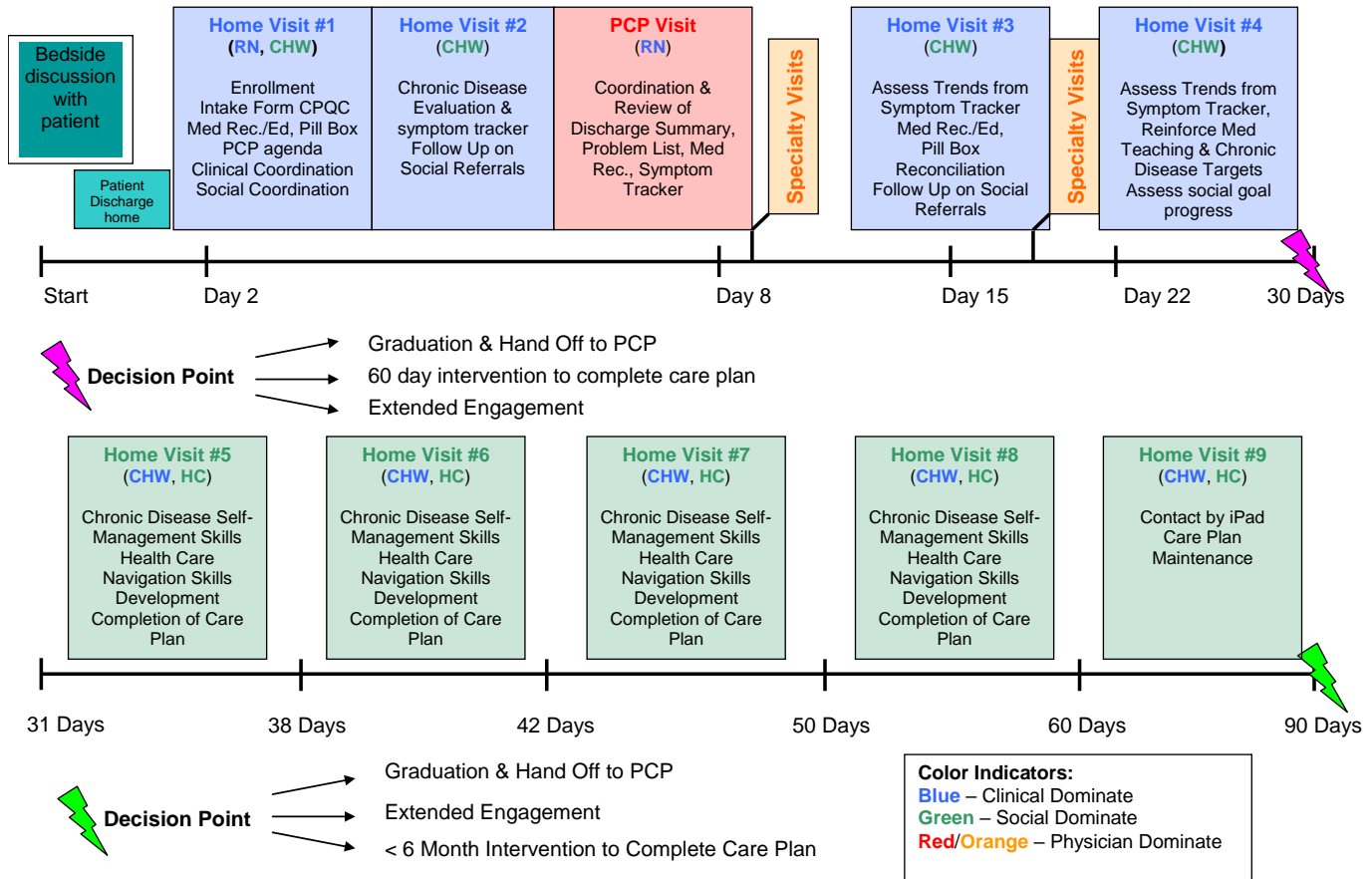- Improved patient engagement

An additional opportunity to educate provider and ReSource Teams comes from virtual, monthly de-identified case conferences. These can occur at a statewide level and/or community level. The QIN-QIO acts as a convener. Case presentations are modeled after Project ECHO collaborative learning sessions, and attendees participate by video or telephone. The purpose is to share best practices and help ReSource Teams working in geographically isolated locations to trouble shoot cases. Over time, the individuals attending the conferences create relationships and actively support each other through this emotionally challenging and complex patient work.

The case conferences have experts and the various participating sites on the call. Communities share cases through a common, formatted/structured document on the screen. The experts are APRNs/PhDs from an educational institution (University of Pennsylvania School of Nursing and /or Montana State University College of Nursing), clinical pharmacists and behavioral health professionals (clinical psychologist and or LCSW). The participating sites are the RNs and the CHWs. One site presents and seeks help with the patient case. The experts weigh in on clinical and medical elements and may present historical successes, tools or resources to help the team work with the patient. Sites can also share successes or new situations that inform the experts and the other sites. The additional participants can offer solutions or support to the presenting site. This transfers knowledge from site to site. According to the sites, they receive valuable information on each monthly call. Participation has remained high throughout the project.

Patient Level

The intervention's focus is to build a relationship between the patient and the ReSource Team. The work starts with establishing rapport with the patient and building a relationship with the patient when they have acute needs and are more receptive to offers of assistance. The ReSource Team member asks open-ended questions to understand the patient's needs and priorities, then customizes the services to the patient's needs.[iii] It is not the beginning of a program's intake checklist, but rather a conversation for getting to know the patient and troubleshooting. Then the ReSource Team begins home visits and finding the support the patient needs to stabilize his/her concurrent medical and social needs. The patient is evaluated for progress and transition to the primary care setting at 30, 60 and 90 days.

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES

Mountain-Pacific
Quality Health

Request of Information:
IMPACT ACT Research Study

Care Management Intervention Timeline
Beginning at Time Patient is Discharged Home

Quality Improvement Organizations
Sharing Knowledge. Improving Health Care.
CENTERS FOR MEDICARE & MEDICAID SERVICES
Mountain-Pacific
Quality Health

| Bedside discussion with patient | **Home Visit #1** (RN, CHW) Enrollment Intake Form CPQC Med Rec./Ed, Pill Box PCP agenda Clinical Coordination Social Coordination | **Home Visit #2** (CHW) Chronic Disease Evaluation & symptom tracker Follow Up on Social Referrals | **PCP Visit** (RN) Coordination & Review of Discharge Summary, Problem List, Med Rec., Symptom Tracker | Specialty Visits | **Home Visit #3** (CHW) Assess Trends from Symptom Tracker Med Rec./Ed, Pill Box Reconciliation Follow Up on Social Referrals | Specialty Visits | **Home Visit #4** (CHW) Assess Trends from Symptom Tracker, Reinforce Med Teaching & Chronic Disease Targets Assess social goal progress |

Patient Discharge home

Start — Day 2 — Day 8 — Day 15 — Day 22 — 30 Days

Decision Point
→ Graduation & Hand Off to PCP
→ 60 day intervention to complete care plan
→ Extended Engagement

| **Home Visit #5** (CHW, HC) Chronic Disease Self-Management Skills Health Care Navigation Skills Development Completion of Care Plan | **Home Visit #6** (CHW, HC) Chronic Disease Self-Management Skills Health Care Navigation Skills Development Completion of Care Plan | **Home Visit #7** (CHW, HC) Chronic Disease Self-Management Skills Health Care Navigation Skills Development Completion of Care Plan | **Home Visit #8** (CHW, HC) Chronic Disease Self-Management Skills Health Care Navigation Skills Development Completion of Care Plan | **Home Visit #9** (CHW, HC) Contact by iPad Care Plan Maintenance |

31 Days — 38 Days — 42 Days — 50 Days — 60 Days — 90 Days

Decision Point
→ Graduation & Hand Off to PCP
→ Extended Engagement
→ < 6 Month Intervention to Complete Care Plan

Color Indicators:
Blue – Clinical Dominate
Green – Social Dominate
Red/Orange – Physician Dominate

11SOW-MPQHF-MT-C3-15-07

Prior to the start date, the ReSource nurse reviews the ED note, health and physical (H & P), the diagnosis and active problem list, the medication profile and what led to the hospitalization. The ReSourse nurse and CHW start the intervention with a home visit. Most visits occur in the home, but some occur in cars, fast food restaurants and gardens. The first appointment lasts from one to three hours, depending on the patient's engagement level, the number of home distractions and the patient's ability to stay focused. Distance to patient homes can be up to 30 miles one way. Most home visits involve listening to family and/or social dynamics, and it is time-challenging to build the relationship and find key moments to interrupt or redirect without seeming task-oriented or agenda-based. By listening, patient challenges and barriers to care become evident. The ReSource nurse listens for medical and social cues, and the CHW listens for social challenges and opportunities. Both being present prevents miscommunication and gaps going forward. The patient health survey and financial intake (if relevant) happen during the first home visit. Both tools help inform the care plan. After the first visit, the ReSourse nurse and CHW huddle, and the ReSource nurse develops an individualized plan of care that

becomes a working document. The CHW maintains communication with the patient in a manner that is most likely to be successful. For example, some patients prefer text, while others like face-to-face or phone calls.

The frequency and amount of home and telephone visits vary depending on medical and social complexity, patient engagement, patient activation and the availability of community resources. The CHW facilitates nurse-to-patient video conferencing. The CHW is in the patient's home more frequently and sometimes more than once a week. This serves as a time-saving, efficient practice, unless an event demands subsequent ReSource nurse face-to-face visits. The ReSource team has flexibility to manipulate their schedule to accommodate acute patient needs as they arise to better avoid an unnecessary readmission.

How are costs for targeting and providing those services evaluated?

Cost data for targeting and evaluating the ReSource Team model are in the following table. Kalispell implemented the ReSource Team model fully. The results show the better outcome.

Return on Investment (ROI) – Summary of the Three Communities				
NOTE: Each of the three communities tracked clients and costs differently.				
	Billings	**Helena**	**Kalispell**	**Total**
Project Start Date	Dec 2016	Sept 2015	Sept 2015	
Patient Enrollment Start Date	Feb 2017	May 2017	Oct 2016	
Target No. of Patients	50	65	65	180
Year-to-Date No. of Patients	31	**130***	65	**226**
Cost Savings	$2,532[1] Feb – Dec 2017 (9 patients)	$447,024[2] May – Sept 2017 (130 patients)	$1,808,029[3] Oct 2016 – Feb 2018 (36 patients)	$2,257,585
Care Team Costs	$188,944 (through Dec 2017)	$56,894 (through Nov 2017)	$197,698 (through Feb 2018)	$424,483
ROI	**-1.0 to 1**	**Not available[4]**	**8.1 to 1**	

*This community used intensive hospital discharge teaching, targeted post-discharge telephone follow-ups, and extended in-person teaching during clinic visits. These steps were in lieu of home visits.

[1]Used Medicare Paid Claims. This reflects 9 Medicare clients who were 6-months post enrollment by Dec 2017.

[2]Used Medicare estimate of $10,286 per readmission and AHRQ estimate of $1,390 per ED visit. The Comprehensive Primary Care Plus (CPC+) payment model was also implemented during this time frame.

[3]Used hospital's self-reported, all payer, billed claims.

[4]The full care team's costs are unavailable, so no ROI can be calculated at this time.

From the most mature community program, we were able to calculate the following changes in charges:

Graph 6. Cost Profile for Kalispell All-Payer Patients with 6 Months Post-Enrollment Data (36)
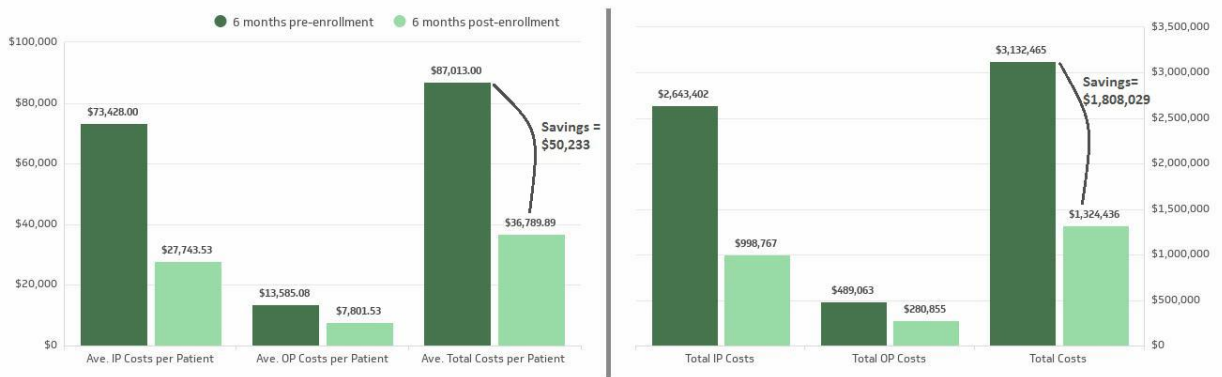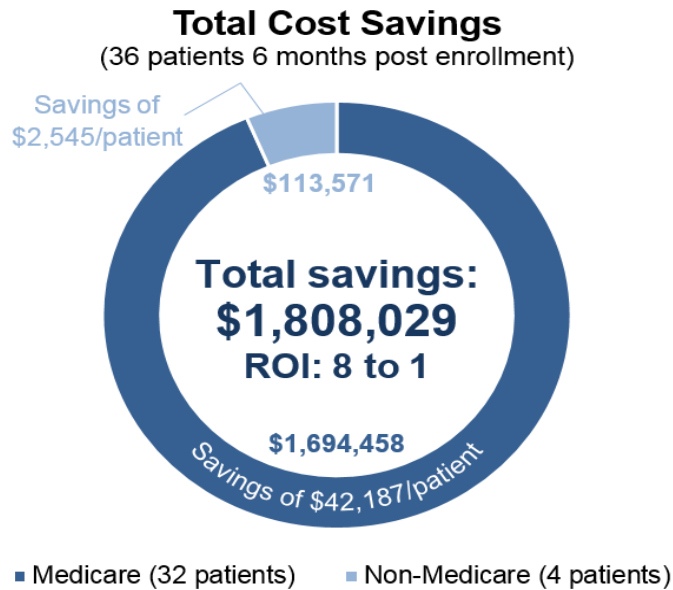

*IP = Inpatient; OP = Outpatient.

*IP and OP costs from actual billed visits within internal Kalispell Regional Healthcare System data.

What is the return on investment in improved outcomes or reduced health care costs?
The following graphic displays the cost savings for the Kalispell community.

Total Cost Savings
(36 patients 6 months post enrollment)

Savings of
$2,545/patient

$113,571

Total savings:
$1,808,029
ROI: 8 to 1

$1,694,458

Savings of $42,187/patient

■ Medicare (32 patients)   ■ Non-Medicare (4 patients)

What are the best practices to refer beneficiaries to social service organizations that can address social risk factors?
A data-driven community coalition and effective and efficient use of care teams, including CHWs is a demonstrated best practice.

A potential best practice is the purposeful hiring of a veteran as a CHW. In Montana, one in ten residents is a veteran. It is likely a patient, spouse, family member or care giver has served our country. Veteran CHWs understand the language and culture of service. They are also familiar with the structure and processes of the Veteran Administration (VA) system and can help patients better navigate the VA and local health systems. Kyle is a CHW and an honorably discharged veteran. His Army Special Forces training taught him to successfully interact in a team setting, quickly assess and troubleshoot a situation and be culturally sensitive. Plus, he has been trained in interviewing skills to understand patient motivations.

The key, suggests Kyle, is to look beyond behavior and listen to what patients have to say. Many chronically ill patients "are irritated with hospitals and systems at large," says Kyle. "They're frustrated. They don't think people are listening to them. But when a person they trust is willing to explain complicated medical jargon or help fill out their paperwork, real change can happen."

From a business perspective, this is a solution where everyone benefits. In Kyle's case, his military experience did not readily transfer to the civilian world, so he enjoys the opportunity to

give back to his fellow service members and help develop a new workforce. The program gets a high-functioning CHW who is working at a living wage, because he is benefiting from both his VA retirement and his CHW salary.

A potential best practice includes mapping community resources as an important part of the referral process. In part, having a local CHW expert is quite effective, since these resources change and update often. One team developed a data base of community resources allowing the team, community and the patient to be more efficient. Here is an example of how it worked for a Native American community: http://blackfeet.mpqhf.com/.

What lessons have been learned about providing care for patients with social risk factors?

Lesson Learned	Significance of the Work (the "Why")
The importance of creating a collaborative environment prior to the implementation of the ReSource Teams	Brings together community stakeholders to address high-risk patients.
The team of a RN and CHW is an efficient and viable way to treat complex care patients in a rural setting	ReSource Teams have adapted from nationally recognized complex care models to smaller scale teams pairing an RN and CHW. This design accounts for the limited workforce, such as APRN and RN shortages.
Home visits are important	They help create trust between the patient and team, allow for "eyes in the home," offer opportunities for safety assessment, nutrition evaluation and identification of other social/economic barriers, including health literacy.
Pharmacy and medication management	These are polypharmacy patients who regularly have multiple providers writing prescriptions for complex medical conditions. The ReSource Nurse facilitated medication reconciliation by having a pharmacist evaluating medications for interactions, duplication and side effects impacting the patient. Additionally, the pharmacist can assess and recommend alternative medications that are more affordable for the patients.

Lesson Learned	Significance of the Work (the "Why")
Behavioral health issues are prevalent	Most patients have diagnosed or undiagnosed mental health and addiction disorders. The most common diagnoses identified are depression and anxiety. In Montana, there is a shortage of psychiatrists, mental health professionals and Licensed Addiction Counselors, often leaving mental health co-morbidities unaddressed. Connecting the patient to behavioral health services is extremely important.
Narcotic pain management is prevalent	A high percentage of patients are prescribed opioids and benzodiazepines. They often need pain management services to address dependency issues while working through other medical complexities. There are not enough pain specialists available to meet the population's need.
Social Determinants of Health (SDoH)	SDoH factors are a key characteristic of many complex care patients. It is important to assist with connecting patients to community resources they may not be aware of, are unable to contact, or they have too low of literacy to complete the application forms for support programs.
Housing and affordable housing is a major factor for many of these patients	Most patients are not home owners and may have alternative living arrangements such as living in a shed or working for a bed and shelter. This is not an ideal environment for chronically ill patients and may contribute to their medical issues.
Health literacy	Health literacy is one of the leading SDoHs contributing to patients' situations. Oftentimes, patients needed education on medications and on how to communicate with providers about their diagnoses, so they can comprehend and participate in their care plan.
Provider Intuition	Providers have an intuitive sense about their patients and when there are additional factors beyond the clinical impacting their care. There is a human factor that cannot be identified through in data analysis or risk stratification.
Transportation	A high percentage of patients have issues regarding transportation. Solution example: A CHW posted on Facebook the need for two tires to make a patient's access to care drivable. The community donated four tires.

Lesson Learned	Significance of the Work (the "Why")
ICD-10 Z codes are a great way to collect SDoH information	A standardized way to collect information related to SDoH is currently not available. There are few ways to share information across several technology platforms. The use of ICD-10 Z-codes 55-74 is a viable means to collect and quantify SDoH information. Montana Medicaid will soon begin implementing Z-codes for billing based on the work and discussions of this project.
Patient labeled for "non-compliance"	The patient is usually labeled "non-compliant" for not following the physician care plan. A 15-minute clinic visit does not allow time to address issues beyond clinical concerns. The home visits allow a more comprehensive understanding of the patient, broader view of the situation and contributing factors to medical complexity. This whole-patient view can debunk the label of "non-compliance."
Tablet technology	HIPAA-compliant tablets and other handheld technologies offer a simple way to connect various disciplines with the patient (e.g., RN, care coordinators, pharmacy, nutrition and behavioral health). They are also effective ways to educate patients with videos, diagrams, websites and, when necessary, completing community resource applications.
Case conferences are critical to collaborative learning	This is a safe learning environment for ReSource Teams to share and review best practices. It is also important for teams in rural environments to connect, because they are isolated in their practices. The case conferences help the teams advance the work.
CHW workforce development	This program successfully shows how CHWs are an important part of connecting patients and providers. The CHWs are essential for wrapping nonmedical community resources around patients, bridging gaps and overcoming barriers to care. Patients frequently let their guard down when they are not around medical providers and nurses. Therefore, the CHWs are better able to garner trust and get to the root of problems while efficiently connecting with patients.
Veteran CHWs	Honorably discharged veteran CHWs can connect with veteran patients, caregivers and family members. During their military service, the veterans learned to work in a team environment, quickly assess their surroundings and make decisions, be culturally sensitive and become versed in the military and VA vernacular and culture. The veteran CHWs receive respect and trust from the patients that other members of the team do not.
Data	QIN-QIOs can provide important data to open discussions, build business cases and analyze communitywide patient data.

Lesson Learned	Significance of the Work (the "Why")
Patients and providers appreciate the ReSource Teams	Through interactions with the ReSource Teams, patients express the feeling of being listened to and respected. Complex patients who have been disenfranchised by the health care system are empowered with innovative solutions and educated to verbalize their needs. Providers gain insight into the patient's life outside of the office that directly affects their ability to care for the patient and patient outcomes. The project provides an innovative approach to eliciting better connections to primary care and managing patient medical and social conditions.

What are barriers to tailoring services to patients with social risk factors? How can barriers be overcome?

Lack of resources in the community is the biggest barrier. For example, there is a profound shortage of psychiatrists and licensed addiction counselors in Montana. A large portion of this complex care patient population is struggling with pain management and opioid dependency. Unfortunately, health system barriers prevent the patient from getting to more optimal health. Because many community services are funded by grants or donations, resources may change or be eliminated.

In addition, incentives are not aligned to provide services from a community perspective. Financial incentive, even alternative payment models (APMs), aims financial incentives towards health systems and providers without funding going to community services. When housing is an issue, how can this be funded through a health system reimbursement methodology? What is needed is community level incentives and reimbursement where all the players have equal responsibility for patient outcomes and successes. Accountable Care Communities (ACCs) did not work for rural communities because they did not have the beneficiary base to meet the minimum requirements of that APM.

Providing a Rural ACC option would be a potential solution for our less populated states.

Providing a means to combine federal funding across organizations like HUD, Federal Reserve, Medicare, Medicaid, Department of Labor, etc. would allow for creative solutions addressing medical and social concerns while creating greater governmental efficiencies and innovative pilots. Trying this in a rural setting on a smaller scale could show proof of concept which could later be scaled and spread to urban settings. In short, the solution needs to get beyond the medical providers and stretch across multiple agencies and settings.

Current provider reimbursement is a barrier to shifting provider organizations from crisis and episodic care management to prevention and addressing the impact of social determinants health have on a patient's ability to comply.

Felony convictions from long ago are a barrier. Many patients have drug-related felony convictions, which precludes them from supportive housing, jobs with background checks, college admittance and financial aid, professional licensure in many states and generally the

ability to move forward and out of their circumstances. Without a well-paying job, it is also difficult to obtain health insurance.

The solution is multi-fold: Community organizing with a feedback loop, an intervention team, patient/provider engagement and an education model working together to improve care for these high needs, high-cost patients.

For patients with social risk factors, how does patients' disability, functional status, or frailty affect the provision of services?
These conditions greatly affect the patients and providing services to them. Bringing the medical/ social services to go to the patient, in their home setting, mitigates some of effect of these conditions. ReSource Teams order to overcome patient issues like disability functional status or frailty.

Which social risk factors are most important to capture?

Average Age	Males	Females	Don't Own Their Home	Own a Car	Active Drivers
61	30	35	38 (58%)	50 (77%)	38 (58%)

Kalispell ReSource Team Patients ICD-10 Codes to Identify SDoH [n=65]	# of Patients with SDoH	% of Patients with SDoH
Problems related to education and literacy, unspecified	51	78.5%
Problems related to housing and economic circumstances	40	61.5%
Lack of adequate food and safe drinking water	21	32.3%
Insufficient social insurance and welfare support	7	10.8%
Problem related to housing and economic circumstances, unspecified	23	35.4%
Problems related to social environment	39	60.0%
Problems of adjustment to life-cycle transitions	24	36.9%
Problems related to living alone	17	26.2%
Other problems related to primary support group, including family circumstances	37	56.9%
Other stressful life events affecting family and household	23	35.4%
Problem related to primary support group, unspecified	27	41.5%
Problem related to unspecified psychosocial circumstances	51	78.5%

What are the burdens of this data collection on plans, providers, and beneficiaries? · Would standardized data elements for EHRs help you to collect social risk data? If so, how could these data elements be standardized?

ICD-10 zcodes allow SDoH to be captured and recorded in EHRs because they are a common language across different platforms.

These codes quantify SDoHs and measure the prevalence of various social determinants of health in the community. The high-level codes that the Billings team uses are in the following list:

Persons with potential health hazards related to socioeconomic and psychosocial circumstances:

- Z55 Problems related to education and literacy
- Z56 Problems related to employment and unemployment
- Z57 Occupational exposure to risk factors
- Z59 Problems related to housing and economic circumstances
- Z60 Problems related to social environment
- Z62 Problems related to upbringing
- Z63 Other problems related to primary support group, including family circumstances
- Z64 Problems related to certain psychosocial circumstances
- Z65 Problems related to other psychosocial circumstances

Source http://www.icd10data.com/ICD10CM/Codes/Z00-Z99/Z55-Z65

There has been significant regional and national interest in this program:
The project was featured in a 2017 PBS NewsHour story. In this story, one patient reported her Medicare costs went from $100,000 in a six-month period to less than $6,000 in a seven-month period after she found affordable housing. The Super-Utilizer Pilot Project is also a 2017 American Hospital Association (AHA) Case Study.

Articles
• Olp, S. "Patients who use hospital services frequently can find more appropriate care through this Billings project." *Billings Gazette.* In press November 2017. Available at http://billingsgazette.com/news/local/article_7136dbea-2225-55b3-af4d-380d1117072c.html

• Supplitt, J. "Case Study: How Kalispell Regional Healthcare Manages the Needs of Complex Patients." *Hospitals and Health Networks Magazine.* In press September 27, 2017. Available at https://www.hhnmag.com/articles/8562-kalispell-regional-healthcare-manages-the-needs-of-complex-patients

Forthcoming: American Journal of Medical Quality (article)

Communications, Promotions and Official Correspondence
Blogs
• Advisory Board. "How one rural hospital offers care for their most vulnerable patients." Posted January 16, 2018. https://www.advisory.com/research/care-transformation-center/care-transformation-center-blog/2018/01/high-risk-patient-care?WT.mc_id=Email|Balert|x|CTC|2018Jan16|&elq_cid=2417687&x_id=003C0000024s7xNIAQ

• Center for Health Care Strategies, Inc. "Mountain-Pacific Quality Health Pilot: Closing the Gaps in Rural Complex Care." Posted October 2017. https://www.chcs.org/resource/mountain-pacific-quality-health-pilot-closing-gaps-rural-complex-care/?utm_campaign=shareaholic&utm_medium=email_this&utm_source=email

• MEDITECH. "Grocery store walkthroughs: On step towards improving health literacy." Posted March 13, 2018. https://blog.meditech.com/grocery-store-walkthroughs-one-step-toward-improving-health-literacy

Official Correspondence
• Medley, S, Shadwick, L, Weisner, M. Contributed to the Governor's Council on Healthcare Innovation Final Report. Recommended: Community Resource Teams, pg. 51-55. Sent to MPHHS. June 2016. Available at:
https://dphhs.mt.gov/Portals/85/Documents/SIM/GovernorsCouncilonHealthcareInnovationPlan160630.pdf

Grantee Profiles
• *Bridging Gaps to Better Health in Montana.* Created by ABIM Foundation. Date added to website November 27, 2017. http://abimfoundation.org/profile/bridging-gaps-better-health-montana

• *Super-Utilizer Pilot Project.* Created by Rural Health Information Hub. Date added to website November 6, 2017. https://www.ruralhealthinfo.org/project-examples/985

Media
• "PBS NewsHour full episode, June 20, 2017." PBS,
https://www.youtube.com/watch?v=TuQV9Oa9iaE
, 28,371 views as of July 20, 2018.

Presentations, Proceedings and Testimony
- Montana Case Studies. Montana State Innovation Model Design, Governor's Council Meeting. March 8, 2016.
  https://dphhs.mt.gov/Portals/85/Documents/SIM/AgendaGovCouncilHealthcareInnovation160119.pdf

- Montana State Innovation Model Design, Governor's Council Meeting. March 8, 2016.
  https://dphhs.mt.gov/Portals/85/Documents/SIM/160308GovernorsCouncilSlides.pdf

- Shadwick, L, Emmert, J. "CHCS workforce development presentation." Presented as part of the Workforce Innovation in Complex Care Series by CHCS. April 18, 2017. Online. Presentation available at http://www.chcs.org/resource/using-community-health-workers-volunteers-reach-complex-needs-populations/

- Starling, L, Spring, J. "Care Coordination for Adults and Children." American Hospital Association webinar. November 7, 2017. Available at https://event.on24.com/pm2/index.html?cb=pgimeet&eventid=1481983&sessionid=1&key=DB3EA68AA74569FC010048B36E839944&mode=mode1

- Starling, Lesly. Meditech CIO and Physicians Conference (speaker). Presented at Meditech conference. October 18-19, 2017. Foxboro, MA.

- Shadwick, Lara. Association of Health Quality Association Quality Summit, "Improving Care Coordination & Saving Money by Working with Super-utilizer Patients". Presented as a best practice. July 9-10, 2018. Baltimore, Maryland.

- Shadwick, Lara. Transitions of Care Summit. July 18, 2018, Kalispell, MT.

- Shadwick, Lara, Starling, Lesly. Vizient Quality Connections Summit. "Improving Care Coordination and Saving Money by Working with Super-utilizer Patients". Chosen out of 500 abstracts. Oct 2-4, 2018. Las Vega, NV.

- Lake, Britt. Montana Nurses Association Summit. "Improving Care Coordination and Saving Money by Working with Super-utilizer Patients". October 3, 2018. Helena, MT.

- Upcoming presentations: CHCS Small Group Forums (invitation). Nov 16, 2018.

- Upcoming presentation: IHI National Forum, Orlando, FL. Dec 10-12, 2018

Reports
Shadwick, L, Lake, B, Starling, L, Hough, J, Emmert, A, Elliot, S, McClure, K, Doll, S, Norby, J, Kuntzweiler, D. *CMS Special Innovation Project Final Report Interventions Ready for Spread and Scalability (IRSS-2): Rural Frontier Super-utilizers.* Submitted to the Centers for Medicare & Medicaid Services. April 30, 2018. Baltimore.

Future publication with Rutgers forthcoming.

---

[i] Conversation with Victoria DeFiglio, Camden Coalition of Healthcare Providers.
[ii] Kvedar J, Coye MJ, Everett W. Connected health: a review of technologies and strategies to improve patient care with telemedicine and telehealth. Health Aff (Millwood). 2014;33(2):194-9.
[iii] Hong C, Seigel A, Ferris T. Caring for High-Need, High-Cost Patients: What Makes for a Successful Care Management Program? The Commonwealth Fund Issue Brief. August 2014.