

# RiverStone Health's Incorporation of PRAPARE Data for Risk Stratification and Scoring

Located in Billings, Montana, RiverStone Health Clinic began PRAPARE implementation in November 2016. A multi-disciplinary team-based approach was utilized to plan the implementation of PRAPARE and to test, evaluate, and revise the clinical workflow that would be used by all sites.

To expand the utility of the standardized socioeconomic data collected via PRAPARE, they incorporated PRAPARE data with other clinical outcomes data to create a more holistic patient risk score to use for care management and transformation.



## Multi-Disciplinary Workflow to Respond to Socioeconomic Needs Identified by PRAPARE

At RiverStone Health, patients (age 18 and older) are asked to complete PRAPARE on an annual basis upon check-in. Providers and the clinical staff work together to address positive screening responses to the questions regarding patients who either have high stress level responses, feel physically or emotionally unsafe, or do not have a support system. If the patient screens positive for any social risks, the patient will be connected with the Team Care Manager at the time of their appointment for assistance. All completed PRAPARE forms are entered into the patient's care plan into the Electronic Health Record by the Care Manager. This allows for data tracking and recording of the patients' socioeconomic concerns.

To have a more seamless workflow to respond to needs, RiverStone Health color-coded PRAPARE questions to alert staff implementing PRAPARE as to which staff are most appropriate to respond to certain needs. A positive screen indicated in the yellow section notifies the medical assistant that the Care Coordinator should see the patient after their visit to address those particular needs. A positive screen in the orange section, on the other hand, indicates that a clinical and/or behavioral health team member should be involved to help address risks related to stress, safety, and domestic violence, and social isolation.



**PRAPARE**

*PRAPARE Screen for Support or Potential Health Concerns or Behavioral Health Risks to Help Address the Factors that can affect your well-being and help ensure your health. Please do not feel you must answer any of these questions unless you are able to answer them.*

Name: \_\_\_\_\_ Sex: \_\_\_\_\_ Title: \_\_\_\_\_ Mr. \_\_\_\_\_  
 Today's Date: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

1. When is your occupation? \_\_\_\_\_

2. When is the highest level of school that you have finished?  
 Less than high school diploma  High school diploma or GED  More than high school  I don't read or write like a student

3. In the last year, have you or any family members you live with been unable to get any of the following when it was really needed?  
 Please check all that apply.

	Yes	No	Phone	Yes	No
Utilities	<input type="checkbox"/>	<input type="checkbox"/>	Doctors	<input type="checkbox"/>	<input type="checkbox"/>
Medicine or any health care (doctor, nurse, physical therapist, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	Child Care	<input type="checkbox"/>	<input type="checkbox"/>

Do not wish to answer this question

Would you like someone from RiverStone Health to contact you to help with addressing transportation needs?  
 Yes  No

4. Has lack of transportation ever kept you from medical appointments, meetings, work, or from getting things needed for daily living?  
 Please check all that apply.

Yes I feel that way from medical appointments or from getting my medication.  
 Yes, it has kept me from medical appointments, meetings, work, or from getting things I need.  
 No  I don't wish to answer this question.

Would you like someone from RiverStone Health to contact you to help with addressing transportation needs?  
 Yes  No

4. How often do you see or talk to people that you care about and that come to them? (Involuntary: talking to friends or the phone, visiting friends or family, going to church or club meetings)	
<input type="checkbox"/> Less than once a week	<input type="checkbox"/> 1 or 2 times a week
<input type="checkbox"/> 3 to 5 times a week	<input type="checkbox"/> 5 or more times a week
<input type="checkbox"/> I choose not to answer this question	

8. Stress is when someone feels tense, nervous, anxious or can't sleep at night because their mind is troubled. How stressed are you?	
<input type="checkbox"/> Not at all	<input type="checkbox"/> A little bit
<input type="checkbox"/> Somewhat	<input type="checkbox"/> Quite a bit
<input type="checkbox"/> Very much	
<input type="checkbox"/> I choose not to answer this question	

2. In the past year, have you spent more than 2 nights in a row in jail, prison, a detention center, or juvenile residential facility?	
<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> I choose not to answer this question	

3. What country are you from? United States <input type="checkbox"/> Country other than United States (please write) _____	
Are you a migrant? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> I choose not to answer this question	

5. Do you feel physically and emotionally safe where you currently live?	
<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Unsure	<input type="checkbox"/> I choose not to answer this question

10. In the past year, have you been afraid of your partner or ex partner?	
<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Unsure	<input type="checkbox"/> I choose not to answer this question
<input type="checkbox"/> I have not had a partner in the past year	

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## Responding to Socioeconomic Needs

RiverStone Health has maintained strong partnerships with several community organizations and has worked to identify new community partners available to assist patients with socioeconomic needs.

### Creation of Windows One Note Program

The Care Management team created a system utilizing Windows One Note program to aggregate all the community resources available to patients to assist with social determinant needs. The Care Manager Coordinator updates the One Note system with any new resources on an on-going basis. The One Note program includes patient educational handouts and maps that can be printed and given to patients to further assist patients with getting connected to needed services.

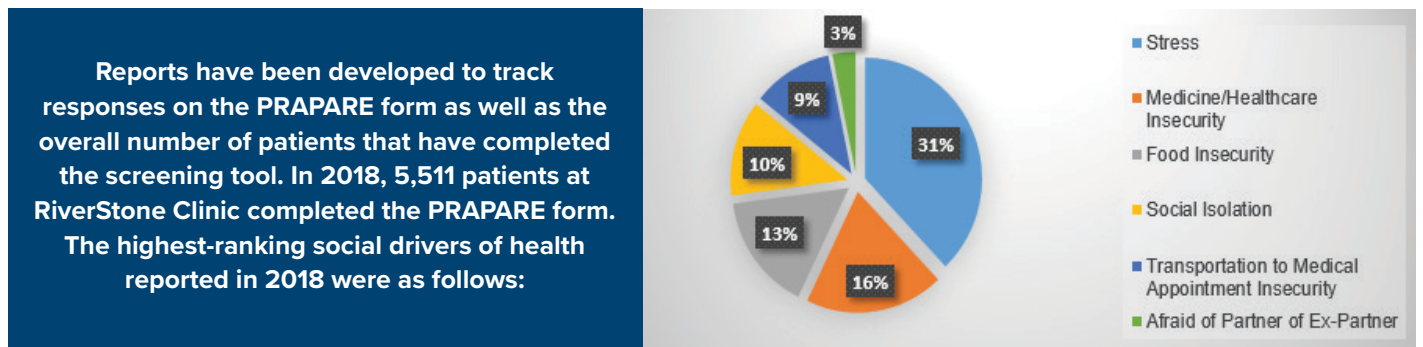
### Staff Educational Opportunities to Learn About Various Community Services

The Care Manager Supervisor coordinated educational opportunities for staff to learn more about the various community services in their area. For example, RiverStone Health invites social service agencies to speak at monthly staff meetings so that staff have the opportunity to learn more about the community assistance programs.

## Development of a Risk Stratification Model that Incorporates PRAPARE Data

Chronic Disease Score	Mental Health Score	PRAPARE Score	Cost Score
<ul style="list-style-type: none"> <li>• Diabetes</li> <li>• Hypertension</li> <li>• Asthma</li> <li>• COPD</li> <li>• IVD</li> </ul>	<ul style="list-style-type: none"> <li>• Mental Disease Diagnosis</li> <li>• Substance Abuse Diagnosis</li> </ul>	<ul style="list-style-type: none"> <li>• PRAPARE Score - 1 point given for each positive answer in the PRAPARE tool</li> </ul>	<ul style="list-style-type: none"> <li>• Frequency of visits (MD, Pharmacist, BH, etc.)</li> <li>• Number of medications</li> <li>• Number of referrals</li> <li>• Number of labs</li> <li>• Number of No Shows</li> <li>• Number of Canceled/Rescheduled Appointments</li> <li>• Number of Medications</li> <li>• Number of Hospital Admissions</li> </ul>

RiverStone Health followed the PRAPARE Risk Tally Score Methodology to assign each risk factor in PRAPARE a 1-point value. They used the PRAPARE risk score to create a distribution across their population to better identify high risk patients and low risk patients. For example, patients with a score of >36 were automatically offered care management services. They then integrated the PRAPARE risk scores into a risk stratification model inclusive of chronic disease scores, mental health scores, and cost scores to have a more comprehensive risk stratification model that focused on both clinical and non-clinical risks. The chronic diseases taken into account in the scoring algorithm were diabetes, hypertension, asthma, COPD and IVD. Mental health diagnoses ranged from depression all the way to schizophrenia. RiverStone's experience incorporating PRAPARE data into a risk stratification model have been considered in a 2019 Learning Collaborative hosted by the PRAPARE team to develop a common national risk stratification model that includes both clinical and non-clinical risk data from PRAPARE.



### Next Steps

RiverStone plans to do further analyses on their PRAPARE data and risk stratification results to better:

- Identify and manage high-risk populations with goal to improve population health measures, such as preventive health screenings and chronic disease management**
- Assess whether community resources have been identified to assist patients in areas of need**
- Update RiverStone's resource library**
- Build and expand more community partnerships to fill the care gaps identified**
- Determine the overall impact of social determinants of health and care management intervention on chronic disease management. RiverStone has already noticed that patients who had documented care plans had improved HbA1C levels compared to high risk patients who did not receive a care plan due to various reasons. RiverStone would like to explore this further.**

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