TEMPLATE FOR TRANSFORMATION PROJECT SUGGESTIONS

For projects to be considered for inclusion in the Medicaid Transformation Project List, please provide the information requested in the template. We are looking for summarized information – **2-3 pages maximum per project**.
Please email completed templates by **January 15, 2016,** to MedicaidTransformation@hca.wa.gov with the subject **Medicaid Waiver Project**. Thank you for your interest and support.

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Project Title	North Sound Region Community Resource Paramedic Program

Rationale for the Project

This proposed project provides care coordination and referral services by emergency medical services (EMS) personnel to people who are frequent utilizers or at risk of becoming frequent utilizers of EMS in Snohomish, Skagit and Whatcom counties. The performance of our healthcare systems requires meeting the goals of the Triple Aim as well as those goals explicitly expressed by the Federal government. The Community Resource Paramedic program addresses these by improving the experience of patient care, reducing avoidable use of intensive services and settings, and addressing the underlying social determinants of health. Through these actions, the overall health of the community will improve. While per capita Medicaid cost savings will require time and data to assess and fully understand, it can be extrapolated from the current studies underway of Community Resource Paramedic programs that EMS and Emergency Department (ED) utilization related costs will decrease for those patients involved in this program.

With changes in the current health care system, EMS has been taxed with calls of a non-emergency nature as well as by inappropriate over-utilization by those patients with unstable chronic diseases or avoidable health problems. Decreased use of primary healthcare drives the heavy use of both EMS and the ED as the sole source of urgent and primary care for many citizens. Additionally, there are increases in the prevalence of diabetes, obesity, kidney disease and allergies/asthma; all of which may result in increased call demand. In calendar year 2015, it is estimated that the non-emergency responses provided by the Snohomish County fire/EMS agencies listed in this application exceeded 10,000. The EMS system was initially designed to address the needs of patients with acute emergency conditions. However, more recently, EMS providers are tasked with providing in-home health care, referrals to community health resources, and preventive medicine. EMS responds to all requests for assistance regardless of acuity level or ability to pay. However, the uncoordinated approach to delivering non-emergency care as well as the expenses incurred in resource deployment and overuse of unnecessary emergency department visits calls for a structured response that will alleviate the burden and costs placed on EMS and the emergency departments while increasing the health outcomes of the most vulnerable citizens in our region.

Studies show that diabetics, high blood pressure patients with congestive heart failure, those with increased risk of falls (such as people over 65 years of age), some substance abusers, and children with asthma may all significantly benefit by home visits from medical care providers. Additionally, specific call types have been identified in the US and Europe as being reoccurring and preventable including calls for falls, diabetes, asthma/allergies, congestive heart failure, hypertension, mental health issues and substance abuse. As demonstrated in the December 2013 Health Affairs article, *Giving EMS Flexibility in Transporting Low-Acuity Patients Could Generate Substantial Medicare Savings,* it is possible for the federal government to save $283 to $560 million a year by reimbursing EMS for managing select 9-1-1 calls in ways other than transport to the emergency department. A study of the impacts of San Diego's Resource Access Program showed a decrease in EMS encounters of 38%, EMS charges of 32%, emergency department encounters of 28% and emergency department charges of 12%. A preliminary analysis of Snohomish County Fire District #1's Community Resource Paramedic (CRP) program demonstrated that 50.0% of patients involved in the program decreased their utilization of local emergency departments and 68.1% showed a decrease in their utilization of EMS. The total reimbursed costs for those patients in the CRP program for EMS and ED encounters dropped by ~$100,567 when comparing their costs for the six months pre-program involvement to the six months post-program involvement. An initial analysis of the Bellingham Fire Department's Community Paramedic program showed similar results in that there was a 56.8% reduction in EMS transport to EDs. Additionally, in its 20 March 2014 Report to the Legislature (*ED Utilization: Update on Assumed Savings from*

Best Practices Implementation), the Washington HCA identifies the Prosser Community Based Paramedic program as showing potential in reducing ED visits by frequent utilizers and recommends working with local EMS systems to identify alternative sites of care for patients who access EMS but do not need care in an ED.

Project Description

This proposed project targets frequent utilizers and those at risk of becoming frequent utilizers of EMS in Snohomish, Skagit and Whatcom counties. While "frequent utilizer" has been defined as a citizen accessing 911 and/or the hospital five or more times in a year, many times, paramedics on scene observe patients whose health condition or physical environment may lead to frequent utilization of EMS in the future. These patients will also be considered for inclusion as a preventive measure against subsequent 9-1-1 and EMS utilization. According to the Office of Financial Management's city and fire district protection population estimates, the fire/EMS agencies listed on this project application serve approximately 500,000 citizens. The 24 November 2015 "Enrollees in Medical Programs by County Report" shows that within the three county region of Snohomish, Skagit and Whatcom, there were 79,534 adults enrolled in CN Medicaid Expansion; a total of 115,004 adults were enrolled in Elderly Persons, Medicaid CN Expansion, Partial Duals or Persons with Disabilities. Based on the service coverage area for the listed fire/EMS agencies and the Medicaid-enrolled populations within these areas, we believe that during the first year of implementation, Community Resource Paramedics across the three-county region would be able to serve approximately 500 Medicaid patients. This project meets the goals of reducing avoidable use of intensive services and settings, improving population health and helping to bend the Medicaid cost curve. The direct relationship to these goals is described in more detail above.

Often citizens use 9-1-1 and EMS because they lack the awareness of alternate health resources in the community or they do not know how to access these resources. Their reliance on EMS and the ED creates inequities as they often do not receive the preventive and ongoing health services provided by primary care physicians. This lack of primary care often results in further degradation of chronic health conditions that may result in ongoing issues with employment, housing and other quality of life indicators. The Community Resource Paramedic seeks to restore balance to those patients who are frequent utilizers of the emergency system by providing them with in-home assessments and correction of current and potential factors that may contribute to future health problems or injury; providing referrals to and coordinating appointments with social service programs and community health resources that may not otherwise have been utilized; providing medication management; working with family members to help mitigate issues that may contribute to future health problems; providing follow-up care coordination and providing community health education. The intended outcomes for this project include a reduction in utilization in both EMS and ED encounters as well as a reduction in utilization of other crisis response systems including the jail, homelessness shelters and crisis triage centers. Patient perceived quality of life will also be assessed using a valid health assessment questionnaire.

The North Sound Community Resource Paramedic program compliments the project recently selected by the North Sound Accountable Community of Health as one of their "early win projects" a pilot project in Snohomish County that partners local fire/EMS agencies, Molina Healthcare and Snohomish County Human Services Research Division. This project identifies frequent utilizers of EMS and connects them with care coordinators at Molina Healthcare who then provides care coordination/disease management as appropriate. This project works closely with the Community Resource Paramedic at Fire District #1 in order to not duplicate services. Currently no other Medicaid MCOs are participating in this project, but as they potentially come on board, careful coordination of services will be necessary. The Community Resource Paramedics are a natural fit to coordinate care of high EMS and ED utilizers among the MCOs.

The pilot Community Resource Paramedic program by Snohomish Fire District #1 demonstrated the ability to form strong collaborative relationships with multiple community partners including Adult Protective Services; the Veterans Administration; NSMHA/RSN; Long Term Care and Aging/Case Management; local mental health, substance use and home health agencies; local emergency departments; local law enforcement agencies; and Snohomish County Human Services. These organizations have indicated a desire to continue partnering as community paramedicine expands within Snohomish County. Additionally, the Research Manager for Snohomish Co. Human Services and the Division Chief of EMS for Everett Fire serve on the governing body of the North Sound Accountable Communities of Health (NSACH.) Through their involvement with this group, they were able to extend this project application to Skagit and Whatcom counties.

Core Investment Components

The proposed activities are described in the intervention strategy above. It is assumed that a 1.0 FTE Community Resource Paramedic costs $135,000 to $150,000 (base salary plus .30 in benefits) for each fire/EMS agency that engages in this project. Additional resources for project/data management can be considered at 1.0 FTE support staff at ~$71,500 (base salary plus .30 benefits.) Regionally, it is expected that at least five Community Resource Paramedic positions will be supported. Infrastructure costs of vehicles, equipment and supplies are not included as to some extent those are already paid for and/or they represent fairly minimal one-time costs that would be depreciated over many years of the program.

Best estimates for the North Sound Region Community Resource Paramedic program indicate that 500 Medicaid patients could be served annually, with a monthly caseload of 150 persons served across the region. Anticipating an annual cost of $746,500.00 (five Community Resource Paramedics @$135,000.00 each and one support staff @$71,500.00) and the intent to serve 500 Medicaid patients, this represents an annual cost per patient of $1,493.00 or a monthly cost of $124.00 per patient. It is predicted that the financial return on investment (ROI) will be almost immediate, as prevention of ambulance transport and ED usage will bring direct cost savings to the Medicaid program. The initial analysis of the Snohomish County Fire District 1's Community Resource Paramedic program suggested a savings of $1,061.65 per patient in EMS transport costs and a savings of $804.00 in ED costs between the six months pre- and post-program participation.

In comparing the costs for those patients served by the Community Resource Paramedic program in Snohomish County Fire District #1 between their six months pre-program involvement and their six months post-program involvement, there was a reduction in EMS transport costs of $76,438.89 (for 72 patients) and a reduction in ED related costs of $24,128.00. It should be noted that actual ED costs were not available to the rate of $1,508.00 per ED visit was determined by the average ED expense for a person in poor health in the Agency for Healthcare Research and Quality (AHRQ) medical Expenditure Panel Survey for 2012. It is believed that this average is a conservative estimate for the ED costs incurred by patients in the CRP program and that the actual ED savings are greater. When considered in the aggregate, there was a decrease of 25% in combined EMS and ED costs for participating patients for a total estimated savings of $100,566.89.

Project Metrics

Recognizing that each fire/EMS agency may have agency-specific measures, the fire/EMS agencies listed on this application have come to agreement in defining region-wide shared outcomes. These outcomes align with the CMS CMMI outcome measures, the relevant outcome measures from the subset of 2016 Medicaid contract common performance metrics, those measures recommended by the 5732/1519 Steering Committee and measures aligned with the national Mobile Integrated Health-Community Paramedicine Process Metric Development Group (a national group that is not federally funded or sanctioned but is the only national group attempting to build measures around this program.)

To assess the impact of the Community Resource Paramedic program, the fire/EMS agencies will examine the following outcomes on the individual patient level for each patient participating in the program: number of EMS transport to local emergency departments, number of emergency department visits, utilization of other crisis systems including the Mental Health Triage Center, homeless services and the Snohomish County Jail, costs associated with transport by EMS providers, and number of EMS contacts which do not result in transport. For all patients enrolled in the program, all above-mentioned outcome measures will be assessed for the 12 months pre-program enrollment and the 12 months post-program discharge. The fire/EMS agencies are also committed to assessing patient experience with the program as well as patient perceived changes to quality of life. These will be assessed utilizing a patient satisfaction survey as well as a standardized health assessment questionnaire (the SF-20.) Agreed upon process measures include number of patients referred to the program, number of patients enrolled in the program, number and type of social service/mental health/community health referrals made, and number and type of interventions provided by the Community Resource Paramedic.