Executive Summary

Policy Background

Minnesota has developed and is phasing in a public program risk adjustment system for making capitated payments to participating organizations participating in the Prepaid Medical Assistance Program (PMAP), the Prepaid General Assistance Medical Care Program (PGAMC), and MinnesotaCare (Minnesota Statute 62Q.03) Risk in this context refers to the risk of the enrolled members using health care services. As part of developing the system, MinnesotaCare law also directs that, “The risk adjustment system for public programs must attempt to reflect the special needs related to poverty, cultural, or language barriers and other needs of the public program population” (Minnesota Statute 62Q.03, Subdivision 5a).

Certain groups concern the legislature as to whether clinically based risk assessment is an adequate predictor for health services use given that they have greater socioeconomic vulnerability relative to others. This reflects the practical concern expressed by some participating health plans that several population groups appear to require more non-medical enabling services to access the care system as well as need more time with providers who must
diagnose then prescribe a treatment through an interpreter, thus incurring more costs. Another issue is whether risk adjusted capitation payments give rise to managed care incentives that lead to under use or under provision of services within some member populations.

Policy Questions

Since risk adjustment is a mechanism to better align public program prepayments with the actual service utilization experience of the population served, are there specific social, economic, and/or demographic circumstances in which the cost of care is systematically higher than that predicted by clinically-based health status measures alone for the overall population? If these population groups face additional risk not measured by the current risk evaluation system but health plans are paid only on the basis of average risk of their enrolled population, underpayments may occur, thereby creating a financial incentive to avoid serving the groups with greater socioeconomic risk.

Are there social, economic and/or demographic circumstances that are independent of, or interact with, managed care structures, processes or financial incentives that may result in an underuse of health services by some groups? Do governmental program requirements erect barriers to care access? What role does the structure of the health care delivery system play in relation to access and the use of care services? For example, keeping populations healthy requires the establishment of a long-term relationship (at least 2 years) between the covered patient and the managed care provider network. The requisite periodic eligibility determinations for continued enrollment in Medical Assistance work against this goal. Other factors, such as language, cultural and personal beliefs, can also inhibit people needing medical attention from seeking it. Delivery system structural barriers can impede access through the number, type, concentration, location, and organization of health care providers in a locale or in rural Minnesota. Financial barriers can arise that discourage physicians and hospital from treating
people with limited means or discourage managed care organizations from providing preventive services and screenings.

Research Goals

The general goal of this risk adjustment study is to begin the investigation of these concerns by: identifying the descriptive population composition variables likely to be associated with differences in the risk of using health services; testing whether the risk of using health services within PMAP and MinnesotaCare is heterogeneous and, if so, whether the heterogeneity is related to population compositional factors or characteristics of the care system; ascertaining whether any of the compositional variables identified provide meaningful explanations for the risk heterogeneities, if any; and if heterogeneities are found and meaningful explanations are validly advanced for their influence, exploring how financial incentives might be employed to reduce the dissimilarities.

This paper constitutes Part I of the study. It provides not only the policy and conceptual background for the work but reviews research literature with the objective of identifying factors likely to be associated with heterogeneities in the risk of using health care services. A second document, Part II, describes the quantitative research to be conducted, the hypotheses to be tested, data sets and analytical methods to be employed. Part III, a third document, concludes the project by reporting the results and providing summary conclusions.

General Research Questions

What are the demographic, socioeconomic, and geographic distributions of PMAP and MinnesotaCare members in each of the participating health plans? Does the risk of using health care services vary within and between MCO? Does the difference in risk, if any, vary according to population compositional characteristics? Is there a relationship between risk heterogeneities, if any, and characteristics of the health care delivery system or the financial incentives that
organize it? Does heterogeneity in risk necessarily point to an under use or over use of services by some populations?

Part I Methods

Identification of population composition variables likely to be associated with heterogeneities in health service use risk is facilitated through a consideration of several conceptual frameworks and literature reviews focused upon access to care and the use of health services plus published documentation comparing the characteristics of those enrolled in Medicaid managed care populations with those enrolled in commercial managed. The literature reviews help identify salient variables within populations of color, immigrants, and persons with limited literacy.

Literature Review Findings

Populations of Color – Recent literature reviews document racial/ethnic differences in access to primary care services, prenatal care, screening and preventive care, mental health and various technologically sophisticated diagnostic and therapeutic procedures. Members of racial and ethnic minority groups, in general, appear to use less clinic-based medical care and make more use of hospital emergency departments. Several of the studies with large samples, primarily responses to survey questionnaires, control for possible explanatory or confounding variables such as socioeconomic status, insurance coverage, stage of disease, and self-reported health status, but most smaller studies do not. At best, the findings are mixed and inconsistent primarily due to methodological differences and incomplete conceptualization.

Perhaps the greatest limitation of the literature for the question at hand is that the large majority of this work is not drawn from samples of managed care populations, much less managed Medical Assistance. When public program beneficiaries are studied, samples predominately include fee-for-service Medicare beneficiaries, and to a lesser extent fee-for-
service Medicaid, but by in large, most studies were conducted before managed care rose to prominence and before managed care was incorporated into Medical Assistance.

*Immigrants* – The literature reviews find that having a usual source of care varies by citizenship status. Even when insured, noncitizens and their children have less access to regular ambulatory and emergency care than insured citizens. Foreign-born children living in poor, yet working families had less access and health care use in terms delayed or missed care, number of physician visits and hospital stays in the past year than their US born counterparts. Aside from financial factors, the most important facilitator of immigrant’s use of health services is language access through interpreters, bilingual or multilingual provider staff, and translated written materials. In a study prepared for the Urban Institute, researchers documented than many immigrants are poorly educated and illiterate, even in their native language, so they cannot comprehend written materials.

*Literacy* - Health literacy is directly related to the appropriate use of health services, especially emergency care, and because of the additional time requirements to care for people with limited functional literacy skills, those with low literacy tend to cost more to care for than do others.

*Enabling Services* – Enabling services and other forms of culturally specific assistance are non-medical services assumed to facilitate access to timely and appropriate medical care, especially for populations enrolled in Medical Assistance. These services include: language/sign interpreters, transportation, targeted case management, associations with safety net providers, health education and outreach, preventive care, and training for providers and staff. Currently DHS pays for interpreters, and transportation, requires inclusion of safety net providers in managed care networks, and provides financial incentives for specific preventive services. Several managed care organizations and community-based organizations provide innovative supplemental services to facilitate access to care for numerous ethnic and cultural groups in Minnesota.
Factors Likely Associated with Heterogeneous Risk

When collectively considering the many published resources available, there was a substantial concordance of variables employed in the studies. Measures of patient population characteristics frequently utilized, were:

- Socioeconomic status
  - Income level/federal poverty status
  - Education (children’s measure – mom’s educational attainment)
  - Employment status
- Literacy in own language
- English proficiency
- Race/Ethnicity
- Place of residence, urban, suburban or rural locations
- Marital status (children’s measure - having a single parent)
- Age
- Cultural beliefs and attitudes
- Citizenship status
- Immigrant status, how long in the country
- Health status or disability status
- Health knowledge level
- Transportation availability
- Self reported health status (as a control variable in limited number of studies).

Of these characteristics, the following were most consistently investigated as being related to heterogeneities in health services use:
• Race/ethnicity,
• Socioeconomic status (including income and education)
• Insurance coverage
• Literacy level
• English proficiency
• Place of residence
• Having a regular source of care

General Conclusions

Within the studies reviewed, there were few, if any, attributions made to structural deficiencies or financial incentives within the health care delivery system as the cause of dissimilarities in access and service use. There is a limited literature on the likely role that health care system features play in access and use differences. When heterogeneities in access and use were found, reference was frequently made to a need for specific enabling services, such as improved transportation, interpreter services (language and sign), or the value of culturally sensitive providers to improve access. In a survey of managed care organizations, researchers found that many of the needed enabling services were already being provided in one form or another.

Based upon the literature reviews, there is ample reason to suspect that there are likely racial and/or ethnic heterogeneities in access to primary care services, prenatal care, screening and preventive care, mental health, various technologically sophisticated diagnostic and therapeutic procedures given the sheer volume of studies. But, since the findings were mixed and inconsistent, as well potentially dependent upon the data collection method or reflective of response effects, the causal explanations for the findings needed to guide payment policy formation remain elusive.
Currently, the available research literature is insufficient to explain why heterogeneities occur and whether attributions of cause belong to the health care system, the populations studied, both, or something else. Whether underuse of services will translate into lower or higher risk scores in the work to follow is also unclear. It may be necessary to use other forms of research and compare results from other studies to evaluate whether service underuse is occurring in PMAP and MinnesotaCare.

References

