Research Projects Addressing the Health Needs of Alaska Native People

Prepared by

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This project was supported by the Center for Alaska Native Health Research funded by the National Center for Research Resources

March 2004

The purpose of this report is to examine a sample of health research projects addressing the needs of Alaska Native people. This examination may show the extent to which the research agenda is consistent with priority health care problems. It can also help Alaska Native leaders develop a health research agenda that meets their needs and desires.

Sources of Research Project Summaries: Over the last ten years, numerous research projects have addressed research concerns of Alaska Native people. To better understand the status of Native health research in Alaska, a review of recent and ongoing research projects and programs was conducted. A number of published and Internet sources were examined, including materials from the following:

- Alaska Native Health Board (ANHB)
- Alaska Native Science Commission (ANSC)
- Alaska Native Tribal Health Consortium (ANTHC)
- Aleutian/Pribilof Islands Association, Inc. (A/PIA)
- Arctic Research Consortium of the United States (ARCUS)
- Biomedical Research Infrastructure Network (BRIN)
- Center for Alaska Native Health Research (CANHR)
- Genetics of Coronary Artery Disease in Alaska Natives (GOCADAN)
- International Congress on Circumpolar Health (ICCH)
- People Awakening project
- U.S. Centers for Disease Control and Prevention (CDC), Arctic Investigations Program (AIP)
- U.S. Environmental Protection Agency (EPA)
- U.S. National Institutes of Health (NIH)
 - o ClinicalTrials.gov database
 - Computer Retrieval of Information on Scientific Projects (CRISP) database
- University of Alaska
 - Improving the Health Status of Alaskans: University of Alaska's Role (Aug 2003)
 - o SJR 44 Health Research Plan (Mar 2004 Draft)
- University of Alaska Anchorage (UAA)
 - o Division of Health Sciences Current Projects (Nov 2003)
 - o Institute for Circumpolar Health Studies (ICHS)
 - o Institute of Social and Economic Research (ISER)
 - National Resource Center for American Indians, Alaska Natives, and Native Hawaiian Elders at UAA (Jan 2004)
 - Research and Programs / Projects Grants Serving Alaska Native Peoples: 1996-2001

The summaries of health and health services research projects addressing the needs of Alaska Native people are taken from a variety of sources and shown as Attachment A. The lack of a centralized inventory of ongoing health research makes a complete and exhaustive list of funded research projects difficult to obtain. Therefore, the projects contained in this summary may not be a complete listing of all projects that have been done in Alaska over the past ten years.

Topics of Health Research: Research projects and programs were categorized by the following broad subject headings. The taxonomy of research projects was developed to highlight some of the high priority health issues identified in "Report on the Health Status of Alaska Natives," a companion piece to this report. The categories and their subcategories are shown in Table 1. Many research projects address a variety of subjects, especially those that are concerned with enhancing the research infrastructure in Alaska. However, the extent of overlap has not been captured in the inventory of research projects that follows. Each project was assigned to only one category.

Table 1 also shows the proportion of all research projects that address the specific project topic areas. This measure was selected because of its simplicity. Other ways of evaluating the research include total project funding, Full Time Equivalent (FTE) researchers supported, or the projects' contributions to the health science literature. Incomplete data was available on these measures. Therefore, the number of projects was considered the only stable and reliable measure of the extent of the research effort.

Table 1. Health Research Projects by Topic Area							
Research Project Category Behavioral Health	Number 26	Percent 24%					
Mental Health Evaluation Substance Abuse Program Evaluation Violence		, •					
Research Infrastructure Development Health Services Needs Assessment Telehealth / Telemedicine	27	25%					
Infrastructure Traditional Research							
Workforce Development Chronic Diseases	13	12%					
Chronic Illness Diabetes Dental Health							
Wellness Maternal and Child Health	12	11%					
Tobacco Health Promotion							
Diet and Nutrition Resilience and Adaptation	7	6%					
Community Strengths	1	0 70					
Arctic Living Conditions Injury Control	2	2%					
Gerontology	4	2 % 4%					
Environmental Health	9	8%					
Infectious Disease	9	8%					
Total	109	100%					

Observations on the Character of Alaska Native Health Research: The following paragraphs describe the characteristics of health research addressing the needs of Alaska Native people. The research topic areas were developed to conform, to the extent practicable, with the threats to the health and welfare of Alaska native people identified in "Report on the Health Status of Native Health Research in Alaska."

Behavioral Health: Twenty four percent (24%) of all of the research projects identified address behavioral health issues, including mental health, substance abuse, and violence. These are major threats to the health and the welfare of Alaska Native populations. However, much of the behavioral health research is federally required evaluation research, designed to fulfill grant-funding requirements, particularly the Government Performance and Results Act (GPRA). Few of the projects appear to be investigator initiated research projects intended to produce new knowledge or understanding of the nature or the extent of the behavioral health problems.

<u>Infrastructure:</u> This category addresses health service needs assessments, telehealth and telemedicine, research infrastructure development, traditional ways of knowing and understanding, and workforce development. Twenty five percent (25%) of all the research projects over the past ten years have addressed infrastructure development needs.

The most common topic of these research projects involves the assessment of the need for health services. This parallels the stated desire of Regional Health Corporations to more effectively tailor the array of health services to the needs and desires of their target population. However, extensive research infrastructure development is occurring at the University and ANTHC levels as well. The BRIN, CANHR and NARCH projects are examples of this research infrastructure development initiative.

<u>Chronic Illnesses:</u> Chronic illnesses among the Alaska Native population are beginning to eclipse infectious diseases as a major cause in death and disability. Specific topic areas included in this heading are diabetes and dental health. Twelve percent (12%) of all the research projects identified fall within this category. This is consistent with the notable rise in the attention being paid to chronic illnesses in the Alaska Native population, and reflects the rise in the causes of death and disability among Alaska Natives.

<u>Wellness:</u> Emphasis on wellness is consistent with the values of the Alaska Native people. Being able to remain healthy and contribute to the health and welfare of the community is of high importance. Specific areas within this category include maternal and child health, tobacco use and health promotion, and issues surrounding diet and nutrition. Eleven percent (11%) of all the research projects fall within this category.

Resilience and Adaptation: In recent years, there has been a shift in the way that Alaska Native people view the structure of health services around health deficits. The common practice in health service planning is targeted at reducing the health disparity or deficit. In recent years, however, a more "asset based" notion of resiliency has gained far greater acceptability within the Alaska Native community. This category includes changes in Arctic living conditions, and community strengths in addressing the health needs of a population. Six percent (6%) of all research projects fall into this category. Specific resilience and adaptation projects include the Social Transitions in the North

project and the Survey of Living Conditions in the Arctic, both funded by the National Science Foundation.

<u>Injury Control</u>: Deaths and disabilities from injuries are still a major threat to the health and welfare of Alaska Native people; however, only two percent (2%) of research projects address ways of reducing injuries.

<u>Gerontology:</u> Alaska expects an increase in elderly Alaska Native population. Ways of addressing the health needs of this population, especially those that allow elders to remain within their home communities, are a pressing problem. Four percent (4%) of all of the research projects identified address the needs of Alaska Native elders.

Environmental Health: The safety of the environment and the environmental threats to the health and welfare of the population are of increasing concern among the Alaska Native community. The safety of subsistence foods is one of the major topics currently being investigated. Others include the impact of climate change and environmental contamination on the health and welfare of Alaskans. Eight percent (8%) of all of the research projects identified address this category.

<u>Infectious Disease:</u> Much of the research by the Indian Health Service and the Centers for Disease Control Arctic Investigations Program address infectious diseases within the Alaska Native population. These include hepatitis, *Helicobacter pylori* and other communicable diseases. Eight percent (8%) of all research falls within this area.

Summary

This review is a work in progress. The lack of a complete inventory of Alaska Native research strongly suggests the importance of establishing a central collecting point and coordinating mechanism for health and social welfare research in the state of Alaska. This is one of the objectives of the Arctic Health website (www.arctichealth.org), sponsored by the National Library of Medicine and the University of Alaska Anchorage. A better understanding of the nature and extent of health research, and its contribution to improvement in the health status of Alaska Native people will require additional efforts to identify research, and translate the research results into practical applications to the betterment of the health and welfare of Alaska Natives.

Category	Project Title	Last Name	First Name	Organization	Funding Source
Behavioral Health	AFN Children's Mental Health / UAF Evaluation				Alaska Federation of Natives
	Alaska Suicide Follow-Back Study	Perkins	Ron	Alaska Injury Prevention Center	Alaska Department of Health and Human Services // Alaska Suicide Prevention Council
	Evaluation of Community Mental Health: API 2000 Project	Johnson	Mark		Mental Health & Developmental Disability/SAMHSA
	Feasibility Study for the Development of a Village Mental Health Program	Maas	David C.	University of Alaska Anchorage	
	Alcohol Treatment Effectiveness Study	Saylor	Brian	University of Alaska Anchorage	Alaska Mental Health Trust Authority
	ANTHC Inhalant Abuse Study	Segal	Bernard	Alaska Native Tribal Health Consortium	
	Copper River Native Association Cultural Treatment Camp	Burgess	Donna	University of Alaska Anchorage	Substance Abuse and Mental Health Services Administration (SAMHSA)
	CRNA Cultural Treatment Camp	Saylor	Brian	Copper River Native Association (CRNA)	Substance Abuse and Mental Health Services Administration (SAMHSA)
	Development Plan for Distance Delivery of FAS/FAE Curricula to Multiple Users in Alaska	DeGross	Denny	University of Alaska Anchorage	National Area Health Educators Centers
	Drug Therapy for Alcohol Dependence in Alaska Natives (naltrexone/sertraline)	Robin	Robert	SouthEast Alaska Regional Health Corporation	National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health
	Effect of the DARE Program	Wood	Darryl	University of Alaska Anchorage	
	Evaluation of a Village-Based Alcohol Treatment Program: CMTRS	Saylor	Brian	University of Alaska Anchorage	
	Evaluation of State Incentives Grant Activity	Saylor	Brian	University of Alaska Anchorage	Alaska Department of Health and Social Services
	Fetal Alcohol Syndrome Surveillance Network (FASSNet)			Centers for Disease Control and Prevention	Centers for Disease Control and Prevention
	Healthy Nations Program Evaluation	Dinges	Norm		Robert Wood Johnson Foundation

Category	Project Title	Last Name	First Name	Organization	Funding Source
	Pathway Home	Segal	Bernard		Southcentral Foundation
	People Awakening Project: Pathways to Alaska Native Sobriety	Mohatt	Gerald V. (Jerry)	University of Alaska Fairbanks	National Institute of Alcohol Abuse and Alcoholism, National Institutes of Health
	Third Party Evaluation of Fetal Alcohol Syndrome (FAS) Project: Y2 Funding	Ward	Karen		Office of Fetal Alcohol Syndrome/SAMHSA
	Village Sobriety Project	Saylor	Brian	University of Alaska Anchorage	Yukon-Kuskokwim Health Corporation
	YKHC Inhalant Intervention and Treatment Expansion Project	Segal	Bernard	Yukon-Kuskokwim Health Corporation	Center for Substance Abuse Treatment, Substance Abuse Mental Health Services Administration
	Evaluation of Gun Owner Compliance with Firearm Cabinet and Trigger Lock Usage			Alaska Department of Health and Social Services // Alaska Native Tribal Health Consortium	Alaska Department of Health and Social Services
	Firearm-Related Deaths in the Alaska Native Population	Perkins	Ron	Alaska Injury Prevention Center	Alaska Injury Prevention Center
	Research into Factors Associated with the Prevalence and Incidence of Violence against Athabascan Women in the Copper River Basin	Magen	Randy	University of Alaska Anchorage	
	Research on Violence Against Alaska Native Women Project			University of Alaska Anchorage (UAA)	National Institute of Justice
	Social Service Provision in Rural Alaska: Exploring the "Fit" between Traditional and Western Approaches to Helping	Burke	T.K.	University of Washington	
	Trauma Experienced by Alaska Native Children in Rural Athabascan Communities			University of Alaska Fairbanks (UAF)	National Institute of Mental Health
Research Infrastructure Development	CATG Community Health Needs Assessment	DeGross	Denny	University of Alaska Anchorage	Council of Athabascan Tribal Governments
	Community Health Services	Berner	James E.	Alaska Native Tribal Health Consortium	

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	Copper River Area Community Needs Assessment	Saylor	Brian		Copper River Native Association // Denali Commission
	Dental Needs Assessment			Alaska Native Tribal Health Consortium	Alaska Native Tribal Health Consortium
	Kodiak Area Native Association Community Health Survey	DeGross	Denny	University of Alaska Anchorage	Kodiak Area Native Association
	Maniilaq Community Health Survey	DeGross	Denny	University of Alaska Anchorage	Maniilaq Association
	Petersburg Community Hospital Needs Assessment	DeGross	Denny	University of Alaska Anchorage	City of Petersburg
	Regional Community Health Needs Assessment	Booker	John	University of Alaska Anchorage	Tanana Chiefs Conference
	Rural Hospital Flexibility Program Evaluation Plan	DeGross	Denny	University of Alaska Anchorage	Alaska Division of Public Health
	Statewide Health Profile for Alaska Natives	Wells	Rebecca	Alaska Native Health Board	
	TCC Fairbanks Community Health Needs Assessment	DeGross	Denny	University of Alaska Anchorage	Tanana Chiefs Conference
	Wrangell Community Hospital Needs Assessment	DeGross	Denny	University of Alaska Anchorage	Wrangell General Hospital
	AFHCAN Telehealth Project: SEARHC Needs Assessment	DeGross	Denny	University of Alaska Anchorage	Alaska Federal Health Care Access Network
	Alaska Medical Informatics Initiative (AMII)	Pearce	Fred	University of Alaska Anchorage	U.S. Army Medical Research Acquisition Activity (USAMRAA)
	Arctic Telehealth: North to the Future!	Hild	Carl	University of Alaska Anchorage	
	Comparison of Telemedicine Versus Standard Care in the Treatment of Ear Infections			Alaska Native Tribal Health Consortium	Native American Research Center for Health (NARCH)
	Telepsychiatry Evaluation Project	DeGross	Denny	University of Alaska Anchorage	Alaska Telehealth Advisory Commission // Alaska Science and Technology Foundation

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	BRIN (Biomedical Research Infrastructure Network) Western Region InfoNet	Jacobs	Gwen A.	Montana State University (Bozeman)	NIH, National Center for Research Resources
	Creating Partnerships in Science and Research	Cochran	Patricia	University of Alaska Anchorage	National Science Foundation
	New Research Opportunities through the National Library of Medicine's Arctic Health Website	Murray	Kathy	University of Alaska Anchorage	Specialized Information Services, National Library of Medicine // Center for Alaska Native Health Research // University of Alaska Anchorage
	Office of Alaska Native Health Research	Lanier	Anne P.	Alaska Native Tribal Health Consortium	
	Alaska Native Traditional Healing Project	Saylor	Brian	University of Alaska Anchorage	Southcentral Foundation
	Alaska Native Traditional Medicine Plant Use	Garibaldi	Ann	University of Alaska Anchorage	
	How Traditional Knowledge Can and May be Used in Research	Hild	Carl	University of Alaska Anchorage	Arctic Research Commission
	Alaska Native Science Research Partnerships for Health (ANSRPH)	Weiss	Lawrence	University of Alaska Anchorage	NIH, National Center on Minority Health and Health Disparities
	Alaska Physician Workforce Study	DeGross	Denny	University of Alaska Anchorage	Alaska Center for Rural Health // Institute for Circumpolar Health Studies
	Alaska's Allied Health Workforce: A Statewide Assessment	Saylor	Brian	University of Alaska Anchorage	Office of the President, University of Alaska
	National Alaska Native / American Indian Nurses Association Summit IX	Tom-Orme	Lillian	University of Utah	NIH, National Institute of Diabetes & Digestive & Kidney Diseases
Chronic Diseases	Arctic Ground Squirrel and Neuroprotective Adaptations	Barnes	Brian	University of Alaska Fairbanks	National Center for Research Resources (NCRR), National Institutes of Health (NIH) // National Science Foundation (NSF) // U.S. Department of Defense (DOD)
	American Indian /Alaska Native Initiative on Cancer	Kaur	Judith S.	Mayo Clinic Rochester	National Cancer Institute

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	Center for Alaska Native Health Research (CANHR)	Mohatt	Gerald V. (Jerry)	University of Alaska Fairbanks	National Center of Research Resources, National Institutes of Health
	Diabetes and Heart Disease in Alaska Natives	Ebbesson	Sven	University of Alaska Anchorage	
	Genetics of Coronary Artery Disease in Alaska Natives (GOCADAN)	Robbins	David C.	MedStar Research Institute	National Heart, Lung, and Blood Institute, National Institutes of Health
	North Central Cancer Treatment Group	Buckner	Jan C.	Mayo Clinic Rochester	National Cancer Institute
	Prospective Study of Alaska Natives & American Indians	Henderson	Jeffrey A.	Black Hills Center, American Indian Health	National Cancer Institute
	Prospective Study of Alaska Natives & American Indians	Slattery	Martha L.	University of Utah	National Cancer Institute
	Retrospective Epidemiological Study of the Prevalence of Disabilities among Alaska Native Children in the Years 1984-89			Alaska Native Tribal Health Consortium	Native American Research Center for Health (NARCH)
	Cancer Control - Capacity Building for Native Researchers	Becker	Thomas M.	Oregon Health & Science University	National Cancer Institute
	Development of a High-Risk Foot Program for Alaska Natives: The Alaska Diabetes Program	Weaver	D.C.	Alaska Native Medical Center	
	Theory Into Action: Applying Bloom's Taxonomy in Diabetes and Science Education in Tribal Classrooms	Nichols	Marilyn M.	Haskell Indian Nations University	NIH, National Institute of Diabetes & Digestive & Kidney Diseases
	Oral Health of Alaska Natives			Indian Health Service	Indian Health Service
Wellness	Child Welfare and Alaska Native Tribal Governance	Rieger	Lisa	University of Alaska Anchorage	National Science Foundation
	Influence of Maternal Nutrition on Pregnancy and Infant Outcomes in Alaska Native Populations	Berner	Jim	Alaska Native Tribal Health Consortium	Native American Research Centers for Health // National Institute of General Medical
	Maternal and Umbilical Cord Blood Monitoring Study	Berner	Jim	Alaska Native Tribal Health Consortium	Environmental Protection Agency

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	Racial, Ethnic, and Geographic Disparities in Maternal and Child Health Outcomes			Alaska Department of Health and Social Services	Alaska Department of Health and Social Services
	Yukon-Kuskokwim Delta Anemia Study			Yukon-Kuskokwim Health Corporation	Alaska Department of Health and Social Services
	Reducing Tobacco Use Among Alaska Natives of the Yukon-Kuskokwim Delta	Enoch	Carrie	Yukon-Kuskokwim Health Corporation	
	YKHC Nicotine Dependence and Research			Yukon-Kuskokwim Health Corporation	National Institutes of Health
	Education and Research Toward Health (EARTH) - AIAN Cohort Physical Activity Questionnaire Validation	Murtaugh	Maureen A.	University of Utah	National Cancer Institute
	Prospective Study of Alaska Natives & American Indians	Lanier	Anne	Alaska Native Tribal Health Consortium	National Cancer Institute
	Alaska Native Dietary and Subsistence Food Assessment Project	Lanier	Anne	Alaska Native Tribal Health Consortium	Native American Research Center for Health (NARCH), Indian Health Service with National Institute of General Medical Sciences
	Alaska Traditional Diet Project	Bradley	Mike	Alaska Native Health Board	Agency for Toxic Substances and Disease Registry
	Biomonitoring Study of Mothers and Infants in Rural Alaska	Rubin	C.	Centers for Disease Control and Prevention	Centers for Disease Control and Prevention
Resilience and Adaptation	Alaskan Voices	Saylor	Brian	University of Alaska Anchorage	Health Resources and Services Administration, Department of Health and Human Services
	Methods for Measuring and Comparing Living Conditions among Indigenous Peoples Around the Arctic	Kruse	Jack	University of Alaska Anchorage	National Science Foundation
	Sustainability of Arctic Communities	Kruse	Jack	University of Alaska Anchorage	National Science Foundation
	Workshop of the Social Transition in the North Project	Cochran	Patricia	Alaska Federation of Natives (AFN)	Arctic Social Sciences, National Science Foundation
	Arctic Living Conditions	Langdon	Steve	University of Alaska Anchorage	National Science Foundation

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	Comparative Study of Social Transition in the North: Alaska and Russian Far East (STN)	McNabb	Steven L.	Social Research Institute	Office of Polar Programs, National Science Foundation
	Social Transition in the North: A Workshop in Conjunction with the 1999 AAS Arctic Science	Cochran	Patricia	University of Alaska Anchorage	Arctic Social Sciences, National Science Foundation
Injury Control	ATV Helmet Use Program Evaluation			Alaska Native Tribal Health Consortium	Alaska Native Tribal Health Consortium
	ATV Rider Safety Program Evaluation				Bristol Bay Area Health Corporation
Gerontology	National Resource Center for American Indians, Alaska Natives and Native Hawaiian Elders (NRC)	Charles	George P. (Kanaqlak)	University of Alaska Anchorage	Administration on Aging, U.S. Department of Health and Human Services
	Rural Long Term Care Health Workforce Workshop	DeGross	Denny	University of Alaska Anchorage	Alaska Division of Senior Services
	Wesley Rehabilitation and Long Term Care Center Community Need Assessment	DeGross	Denny		Wesley Rehabilitation and Long Term Care Center, State of
	Wrangell Community Long Term Care Needs Assessment	DeGross	Denny	University of Alaska Anchorage	City of Wrangell
Environmental Health	Alaska Biomedical Research Infrastructure Network (BRIN)	Нарр	George A.	University of Alaska Fairbanks	National Center for Research Resources, National Institutes of Health
	Arctic Climate Impact Assessment: Health Perspectives	Berner	James		Arctic Council // International Arctic Science Committee (IASC)
	Conduct Monitoring of Northeast Cape of St. Lawrence Island	Major	Elaine	University of Alaska Anchorage	
	Dietary Benefits and Risks in Alaskan Villages	Brubaker	Mike	Aleutian/Pribilof Islands Association, Inc.	National Institute of Environmental Health Sciences, National Institutes of Health
	Explore How Rural Communities View Contaminants in Relation to Human Health and the Environment at Federal Facilities and Formerly Used Defense Sites	King	Margaret	University of Alaska Anchorage	
	Relationship between Exposure to Environmental Organochlorines and Development of Breast Cancer			Centers for Disease Control and Prevention	Centers for Disease Control and Prevention

Category	Project Title	Last Name	First Name	Organization	Funding Source
	Solution to "the Arctic Dilemma"	Hild	Carl	University of Alaska Anchorage	
	Toxicological Effects of Bioaccumulated and Biomagnification of Pollutants in the Arctic Environment	Williams	Kandace	University of Alaska Anchorage	
	Traditional Knowledge and Contaminants / Traditional Knowledge and Radionuclides Project	Cochran	Patricia	Alaska Native Science Commission (ANSC)	Environmental Protection Agency
Infectious Disease	Arctic Investigations Program (AIP)	Butler	Jay C.	Centers for Disease Control and Prevention	
	Chugachmiut Infectious Disease Focus Group Training and Assistance	Saylor	Brian	University of Alaska Anchorage	Southcentral Foundation
	Epidemiology and Control of Viral Hepatitis in the Arctic	McMahon	Brian J.	Alaska Native Medical Center	
	H. pylori Genetics and Gastroduodenal Disease in Alaska	Parkinson	Alan		Washington University
	HCV Molecular Epidemiology in Alaska	Williams	Kandace	University of Alaska Anchorage	
	Hepatitis C Virus Epidemiology and Research in Alaska				Native Tribal Health Consortium
	Hepatitis Research Program	McMahon	Brian	Alaska Native Tribal Health Consortium	
	High Prevalence of <i>Helicobacter pylori</i> infection in Alaska Natives	Bruce	Michael G.	National Center for Infectious Diseases, Centers for Disease Control and Prevention	Native American Research Center for Health (NARCH) // Centers for Disease Control and Prevention // Alaska Native Medical Center
	Research in Viral Hepatitis and Liver Disease in Alaska Natives	McMahon	Brian J.	Alaska Native Medical Center	
	Implementation and Yield of Photoscreening in Bristol Bay, Alaska: High Penetration Pediatric Vision Screening in the Alaska Bush	Pletnikoff	Lorna		