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Cervical Cancer Prevention Plan

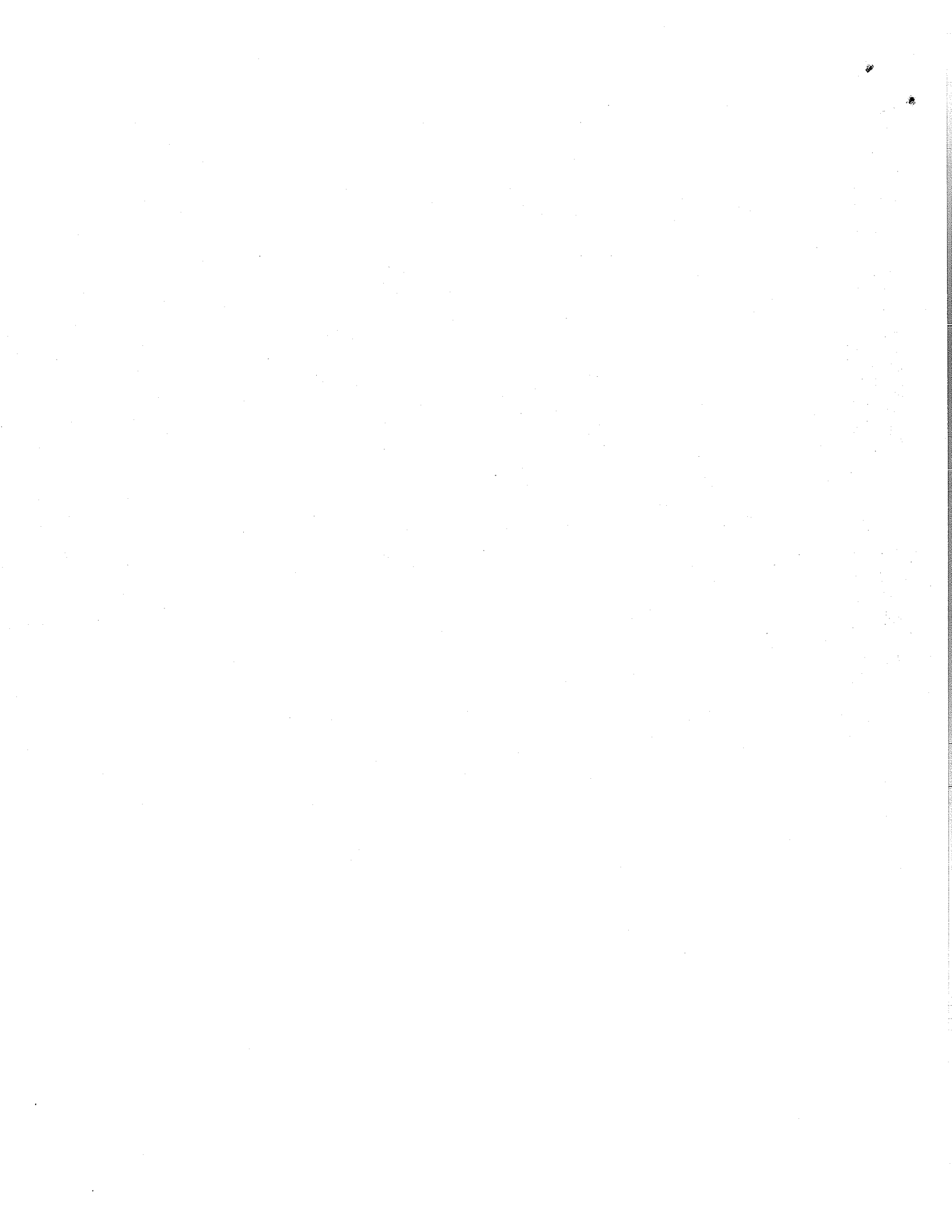
Report to the Minnesota Legislature 2006

Minnesota Department of Health

January 15, 2006



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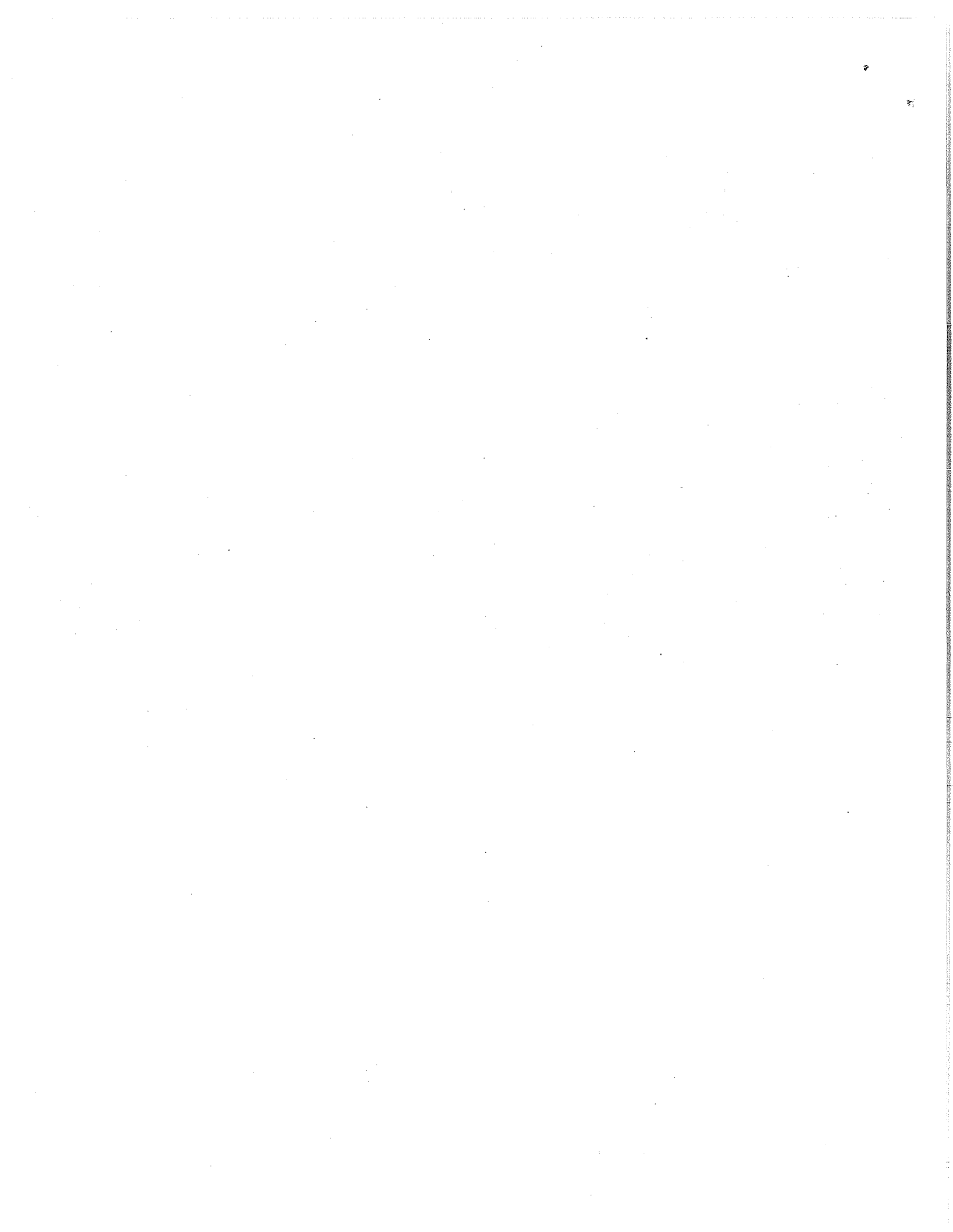
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EXECUTIVE SUMMARY

Laws of Minnesota 2005 First Special Session, Chapter 4, Article 6, Section 52 directs the Commissioner of Health to develop a statewide integrated and comprehensive cervical cancer prevention plan, including:

- (1) identifying and disseminating appropriate screening guidelines;
- (2) increasing screening for patients seen by medical groups and monitoring results of these groups; and
- (3) reducing the number of women who should but have not been screened.

The legislation also directs the Commissioner to identify and examine limitations and barriers in providing cervical cancer screening, diagnostic tools, and treatment, including, but not limited to, medical care reimbursement, treatment costs, and the availability of insurance coverage.

Effective early detection and treatment of cervical cancer stands out as the most successful effort in the United States in the war on cancer. Since large-scale screening using Papanicolaou (Pap) test began in the early 1950s, cervical cancer

deaths have declined by more than 75 percent nationwide. The burden of cervical cancer death in Minnesota is lower than in the U.S. as a whole, with screening rates approaching 88 percent and 34 deaths from cervical cancer in 2002.

Invasive cervical cancer is due to a failure to screen, a failure of screening to detect an abnormality, or a failure to obtain appropriate follow-up on a detected abnormality. Thus, increased screening and appropriate follow-up will reduce cervical cancer mortality. Data indicate that about 10 percent of the at-risk population is not screened. A number of factors, including the scarcity of

unscreened women, make it difficult to have a measurable effect on screening rates. There is virtually no information about unscreened women: who they are, why they are not screened, or how to reach them. In order to increase screening, a multidimensional approach is necessary, since there are myriad reasons for their being unscreened.

In this report, many activities are suggested that could be used to increase

At A Glance

- 88 percent of Minnesota women are screened for cervical cancer.
- 34 women died from cervical cancer in Minnesota in 2002.
- Cervical cancer screening rates are higher and deaths are lower in Minnesota than in the U.S. as a whole.
- The scarcity of unscreened women makes it difficult to have a measurable effect on screening rates.

screening. Cervical cancer incidence and mortality are very low and widely dispersed and most of the population has already been reached. The cost to achieve measurable improvement may require a significant investment of resources. A limited set of activities would most likely produce measurable results. These are:

- Increase coverage and reimbursement for colposcopies.
- Provide funding for Pap tests for uninsured and underinsured women less than 40 years of age.
- Increase Minnesota's Medicare reimbursement rate for liquid-based Pap tests.
- Expand the Breast and Cervical Cancer Treatment Option under Medical Assistance to cover treatment for more women.
- Promote Continuing Medical Education classes around the role of

human papillomavirus (HPV) in cervical cancer.

- Intensify outreach to women who have rarely or never been screened for cervical cancer by:
 - conducting research to identify women who have not been screened;
 - conducting research among the identified women to better understand reasons for failure to be screened and to develop effective interventions;
 - designing and implementing targeted media campaigns
 - implementing intensive outreach in immigrant and refugee populations;
 - making translation services more widely available;
 - improving information provided to older patients and joint decision-making between providers and older patients; and
 - conducting a follow-back study of Minnesota women diagnosed with cervical cancer.

I. EPIDEMIOLOGY

A. Cervical Cancer in Perspective

1. Trends

Since the Pap test became part of standard medical practice in the U.S. more than 50 years ago, cervical cancer rates have undergone a substantial reduction. In 1950, cervical cancer was the most common cancer diagnosed in women. (MDH 2002) Between 1950 and 1970, cervical cancer rates in the U.S. decreased by more than 70 percent. Rates decreased an additional 40 percent between 1970 and 1999. (Ries 2002) Rates in Minnesota continue to decline.

2. Comparison to Other Diseases, Cancers, and Cancers Affecting Women

Cancer is responsible for approximately 22 percent of deaths among females in the U.S. and in Minnesota (See Figure 1.) Cervical cancer is relatively rare, accounting for 1.5 percent of all female cancer deaths nationally and less than one percent in Minnesota. (See Figure 2.) Breast cancer kills nearly nineteen times as many Minnesota women and lung cancer more than thirty times as many.

In contrast, cervical cancer is the second most common cancer among women worldwide and the most commonly diagnosed cancer among women in many developing countries. (Stewart 2003)

Figure 1. Minnesota Female Leading Causes of Death, 2002

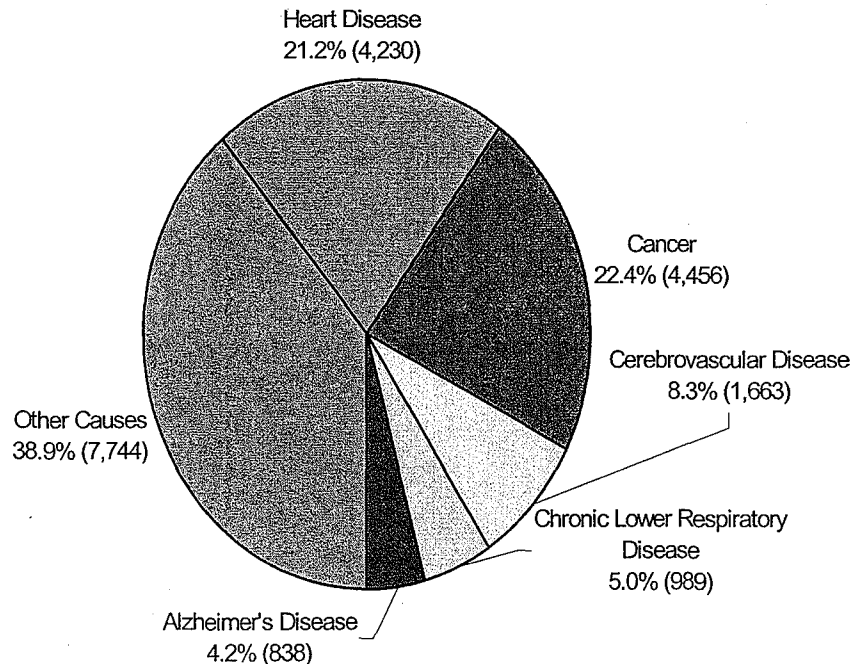
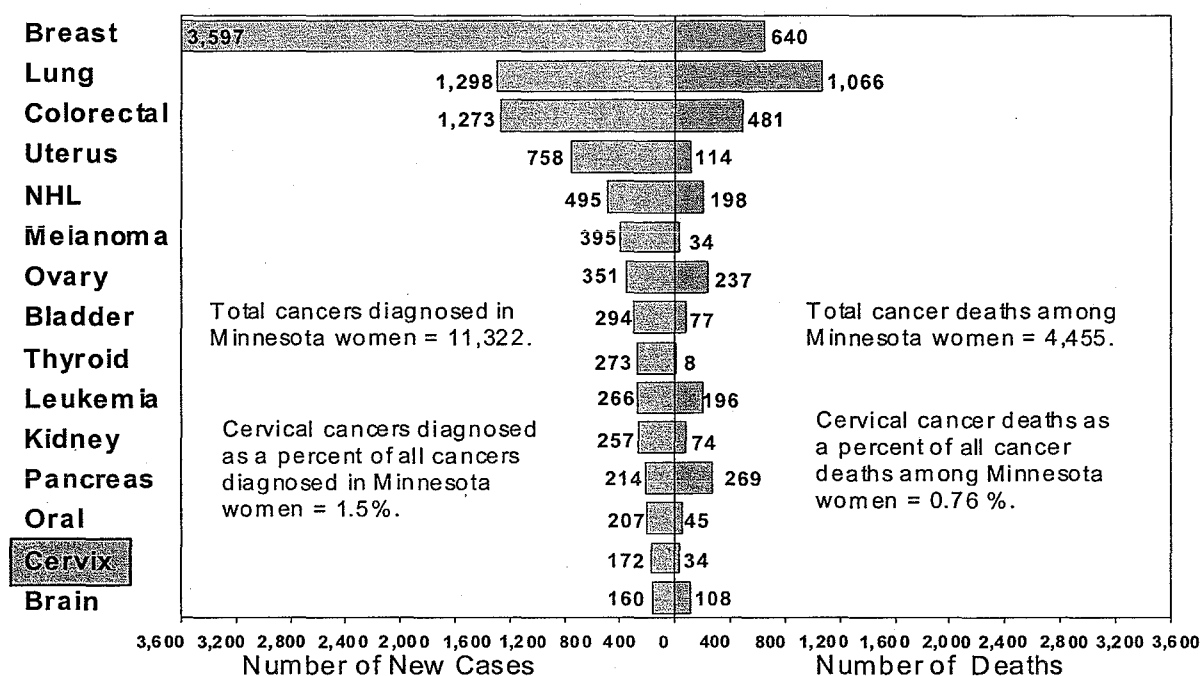


Figure 2. The 15 Most Commonly Diagnosed Cancers and Corresponding Mortality among Females, Minnesota, 2002



Source: Minnesota Cancer Surveillance System (April 2005) and Minnesota Center for Health Statistics. Analyses performed by MCSS. Lung includes bronchus; uterus includes uterus, NOS; NHL is non-Hodgkin's lymphoma; kidney includes renal pelvis; oral includes pharynx; brain includes other central nervous system.

3. Screening Rates

Cervical cancer screening rates are high in Minnesota. The Behavioral Risk Factor Surveillance System (BRFSS) indicates that 87.8 percent of Minnesota women aged 18 and older surveyed in 2004 reported having a Pap test within the last three years. Nationally, 85.9 percent of women reported having a Pap test within the past three years. While there is some concern about the accuracy of self-reported frequency of screening for cervical cancers, other data sources confirm that cervical cancer screening rates are high. The Minnesota Community Measurement Project, which includes 2003 data from 52 medical groups on Pap tests within the last two years, showed that an average of 78 percent of women were screened in that two-year interval. Hennepin County's 2002 Survey of the Health of Adults, the Population and

the Environment (SHAPE) shows that 87 percent of women in the county aged 18 and over reported having had a Pap test in the last three years.

Cervical cancer screening rates are high compared to most other preventive services. For example, despite the fact that breast cancer is the second leading cause of cancer deaths among women and a very high profile disease, mammography rates are substantially lower than Pap test rates. BRFSS data for 2000 showed that 67.5 percent of women aged 40-49 had received a mammogram in the past year; 73.8 percent of women aged 50-59; 76.4 percent of women aged 60-64; and 68.6 percent of women 65 years and older.

B. Origin, Development and Prevention of Cervical Cancer

1. Overview

Cancer of the cervix is one of the few preventable forms of cancer. Regular screening with the Pap test and appropriate follow-up can prevent more than 90 percent of cervical cancer. (Van Til 2003). Cervical cancer develops slowly. Once low-grade lesions develop, it takes an average of nine years for progression to high-grade lesions. It takes up to two more years for high-grade lesions to progress to invasive cancer. (MDH 2002) Cellular abnormalities are generally easily and readily detected with the Pap test. The lengthy course of development allows abnormal cells to be detected and excised before they become malignant. Even though the Pap test is imperfect, the very slow pace at which cervical cancer cells progress to a cancerous state allows adequate time to detect changes at a subsequent screening and to take appropriate preventive measures. Because it is relatively inexpensive and can be administered in a clinic setting, the Pap test has become a part of standard medical practice in the U.S. since it was introduced nearly 60 years ago and remains the most widely used method to screen for cervical cancer (Balluz 2002).

2. HPV Infection

Unlike most other cancers, cervical cancer is caused by an infectious agent, human papillomavirus (HPV). An estimated 95 to 100 percent of cervical cancers result from persistent infection of the cervix with one of the cancer-causing strains of HPV (Bosch 2003), but only a limited number of the 30 or more genital HPV types are thought to have the ability to cause cancer. Genital HPV infections may be the most common

sexually transmitted disease in the U.S. (Cates 1999). The majority of sexually active people have been exposed to HPV. However, most women spontaneously resolve a high-risk HPV infection within two years. (Ho 1998)

3. HPV Vaccine -- An Emerging Issue

Vaccines to prevent infection with cervical cancer-causing HPV are expected to become available in the near future. While such vaccines are promising, they will not eliminate cervical cancer, nor reduce the need to screen for cervical cancer. In the long run, they will likely reduce the number of abnormal Pap tests and the need for follow-up. However, these vaccines have a number of limitations. As mentioned above, the majority of sexually active people have already been exposed to the virus. The first vaccine likely to be approved requires vaccination of adolescents before they become sexually active and are exposed to HPV. Because cervical cancer will take years to develop for those currently persistently infected with cancer causing HPV strains, even if HPV vaccination were widely implemented, vaccination would not have an effect on cervical cancer rates for another 10-15 years. Vaccine formulations under development only protect against the most common strains of cancer-causing HPV; they do not protect against other strains that cause about 20 percent of cervical cancer. Public acceptability of a vaccine to induce immunity against a sexually transmitted infection is uncertain. If HPV vaccine becomes universally recommended for pre-teenagers, some teenagers will delay or never receive the recommended vaccination.

II. SCREENING GUIDELINES

A. General Guidelines

Professional organizations considered authoritative by medical providers have developed cervical cancer screening guidelines. These guidelines include:

- (1) recommendations for the age at which to start performing Pap tests;
- (2) recommendations for the age at which to stop performing Pap tests;
- (3) recommendations for the time interval between Pap tests based on traditional versus liquid cytology; and
- (4) recommendations on whether and when to test for HPV.

Guidelines developed by the American Cancer Society (ACS), the American College of Obstetricians and Gynecologists (ACOG), and the U.S. Preventive Services Task Force (USPSTF), and the Institute for Clinical Systems Integration (ICSI) are included in Appendices A and B, respectively. There are slight variations between guidelines developed by different groups.

B. Older Women

There is no consensus about the appropriateness of ceasing cervical cancer screening for older women. Comparisons of guidelines from various sources reveal contradictions and ambiguities. For example, the American Cancer Society recommends cessation of screening at age 70 if a woman has had three recent consecutive negative tests and no abnormal tests for 10 years. The U.S. Preventive Services Task Force allows cessation once a woman is over 65 if she is not at "high risk."

ICSI recommends resuming screening for a woman over age 65 if she has a new sexual partner. The relatively high cervical cancer mortality rates among older women suggest that doctors are stopping screening among women who are at risk for cervical cancer. Mandelblatt has carefully studied the balance of harm, benefit, and cost of screening for cervical cancer in older women. (Mandelblatt 2004) She concluded that there is no reason to impose an upper-age limit for cervical cancer screening, although cessation of screening at age 75 years is reasonable. A woman's life expectancy, Pap test history, and risk factors must be taken into account in deciding whether to recommend screening.

C. Disseminating Screening Guidelines

- ▶ *Include cervical cancer screening guidelines in the MDH's Disease Control Newsletter.*

The Disease Control Newsletter is sent to all providers in Minnesota. Dissemination of cervical cancer screening guidelines through this global medium would ensure that all Minnesota providers have the guidelines.

III. BARRIERS TO SCREENING

Minnesota's cervical cancer screening rates are higher than the U.S. rates overall. Minnesota also has one of the lowest cervical cancer mortality rates in the nation. Since 1997, Minnesota has exceeded the Healthy People 2010 objective to reduce the rate of cervical cancer mortality to 2.0 deaths per 100,000 females. Nationally, this objective has not yet been achieved. (MDH 2005)

Cervical cancer mortality can be prevented if all women are screened appropriately. Preventing the remaining cases of cervical cancer requires addressing the reasons women fail to get screened for cervical cancer, which are many and varied.

A. Ability to Get Screened

1. *Physical barriers to access to medical providers*

Clinics may be too distant for women to visit as needed. In sparsely-populated regions, this may be a matter of geographical distance between a woman's home and a clinic. Alternatively, women may have no transportation available to access a clinic. Limited numbers of clinics offer colposcopy, making the distance to a clinic a concern for some women who need this essential procedure.

2. *Inability to find or pay for child care*

Women with young children may fail to be screened because they cannot find or pay for anyone to watch their children while they are screened.

3. *Difficulty entering the system*

Women who need and qualify for government-assisted health insurance programs may be unaware of such programs or their eligibility for these programs, or they may be unable to complete the necessary forms or provide necessary documentation to be enrolled in the programs. While Minnesota has a variety of programs, the system is complex. (See, for example, Appendix C, outlining a flow chart for obtaining assistance with medical costs.) Limited literacy, ability to speak English, competence, low self-esteem, and pressing demands from work and family may

effectively prevent these women from entering the system.

4. *Difficulty navigating the system*

Inability to navigate the system can pose a barrier at virtually every level. Once in the system, and faced with an abnormal Pap test result, women may not know what constitutes appropriate follow-up or how to obtain it. They may understand that further care is necessary, but they may not understand the implications and may fail to pursue timely follow-up.

5. *Language*

Non-English speakers face particular barriers when trying to negotiate the medical system. Minnesota is experiencing an influx of refugees and immigrants from non-English speaking countries. Translation services for these populations are expensive for those without insurance and scarce in some areas. This makes it difficult to obtain medical histories and communicate essential information such as the need for follow-up of an abnormal Pap test. Test results sent through the mail and provided only in English do not communicate the necessary information to non-English speakers.

6. *Literacy*

Healthcare workers often rely upon written material to deliver information about health care. Furthermore, typically, Pap test results are provided in writing, through the mail. This poses a problem for people with little or no literacy skills. Non-English speakers with limited literacy in their native languages pose an additional challenge.

7. *Inadequate financial resources*

The uninsured patient is most affected by costs associated with screening and follow-up. Deductibles, co-payments, and costs of associated uncovered services can also be burdensome to women with insurance, including those covered by government-assisted health insurance programs. Many unscreened women have catastrophic health insurance policies that cover a diagnosis of invasive cervical cancer but do not pay for the cost of detection or treatment of precancerous conditions.

State law requires that Pap tests be "covered." However, there are costs associated with the Pap test that may not be covered. A Pap test may generate further charges for an office visit, collection of the Pap test specimen, reading the results and, if results are provided in a separate visit, a second office visit. In addition, if a woman infrequently accesses health care, the provider may use the opportunity to carry out other needed services.

An abnormal Pap test result requires follow-up services, which may include colposcopy, biopsy, and surgical pathology. (See Appendix D for minimal recommended follow-up for abnormal Pap tests). Charges billed for some of these procedures may be hundreds of dollars. For example, a biopsy, endometrial curettage, and associated pathology charges may cost over \$800. (Sage)

Private insurers and Medicare are able to negotiate reduced reimbursement rates. The uninsured patient does not have access to these discounts, so the highest costs for medical care generally fall upon the uninsured. (Blustein 1995) The most common procedures associated with the screening and diagnosis of cervical cancer

and the Medicare reimbursement rates for those procedures are listed in Appendix E.

Private insurance may not cover all medical costs: there are usually co-payments and deductibles, and some services are only partially covered. Additionally, gaps in coverage can make health care unaffordable. In a study by Himmelstein et al., U.S. residents with private coverage, Medicaid, or Medicare cited cost as the primary reason they were unable to obtain necessary health care. (Himmelstein 1995)

Researchers who analyzed national data on the adequacy of cervical cancer screening found that while the uninsured were at greater risk, insured women accounted for more than 85 percent of those inadequately screened. (Himmelstein 1995)

While Minnesota has a variety of programs that provide medical insurance for the lowest income residents, many women do not qualify for these programs, yet find it difficult to pay for health care. Women who have not been Minnesota residents for a certain period of time are excluded from coverage under some programs. No program covers women who are illegal immigrants. (See Appendix C for a flow chart of non-citizen eligibility for government-funded assistance with medical care.) Women lapse in and out of eligibility, due to changes in employment, income, and residential status. The premise that substantial barriers exist in spite of all government-funded health insurance programs is supported by a study of preventive care that found that, with respect to access to care, Medicaid recipients fared no better than the uninsured. (Himmelstein 1995)

8. *Lost compensation*

Working women without sick leave may not be able to afford to lose the income they would have earned during the time it takes to travel to and from a clinic and be screened. Women in rural areas and women without cars who rely on public transportation are most heavily affected due to greater time in transit.

9. *Level of provider compensation*

Medicare reimbursement rates are the standard for government-assisted health insurance programs. These rates are legislated at the federal level and are established separately for different states. Reimbursement rates may not cover a provider's costs for the procedure. For example, some providers only offer liquid-based Pap tests. In Minnesota, the Medicare reimbursement rate for liquid-based Pap tests, which allow detection of HPV as well as abnormal cervical cells, is \$14.76; in contrast, the actual cost for liquid-based Pap tests may exceed \$200. (Wisconsin Physician's Service 2005; MDH TFU 2005) Minnesota's reimbursement rate for liquid-based Pap tests is roughly 50 percent of rates of other states with the same Medicare carrier.

B. Willingness to Get Screened

1. *Patients' lack of information*

Lack of information or information that is incomplete or inaccurate may contribute to the failure of women to be screened for cervical cancer. Women may not know about cervical cancer or may not understand the importance of early screening as a strategy to prevent cervical cancer; they may not understand their risk of developing cervical cancer; or they may not know

HPV's role in cervical cancer. The decline in incidence of cervical cancer in the U.S. since the advent of the Pap test has contributed to a lack of awareness of how deadly a disease it is. Conversely, women may not realize that cervical cancer can be treated. Lack of information, or incomplete or inaccurate information may affect both women who receive medical care and women who rarely or never see a medical provider.

2. *Providers' understanding of risk factors*

Providers may not be familiar with the natural history and prevalence of HPV. This may especially be true of providers who do not practice primary care or women's health care. Providers may need to be reminded about the relatively high cervical cancer mortality rates among older women, the importance of considering a woman's life expectancy, and the need for continued monitoring for risk factors in the decision to continue screening.

3. *Fear, anxiety, and embarrassment*

Fear, anxiety, and embarrassment are frequently cited as reasons for failure to be screened. The invasive nature of cervical cancer screening places women in a vulnerable situation that is likely to exacerbate these reactions. Physical or psychological discomfort experienced at earlier Pap tests may prevent some women from being re-screened. Environmental factors such as a cold room or physical accommodations inadequate for a woman's physical limitations can exacerbate the physical discomfort associated with the test. Having the test performed by a male doctor; insensitivity by staff, whether actual or merely perceived; having to ask for help in preparing for the test; poor body image; or

an environment that seems too sterile may all contribute to feelings of psychological discomfort. One study found that obese women were less likely to be screened. (Wee 2000) A history of rape or molestation may make this procedure traumatic.

4. Lack of referral

Women who are not proactive about their health may need encouragement to undergo what may be considered an invasive and unpleasant procedure. Women in one study commented that it was “too embarrassing” to request a test. (Van Til 2003) Thus, a provider’s failure to offer or recommend a Pap test may translate into a failure to be screened.

5. Arriving cultures

Minnesota’s new immigrants often come from very different cultures and often have very different health practices than those considered mainstream in Minnesota today. Difficulty in delivering appropriate medical services to these groups is exacerbated by cultural beliefs and practices and differences between healthcare practices in the U.S. and their countries of origin. Pap tests and pelvic exams may be outside the experience of many women. More information about health practices and barriers to screening within this population is needed in order to be effective in delivering cervical cancer screening and other health services. (Mn. Dept. Admin. 2003)

IV. RESOURCES AVAILABLE IN MINNESOTA

A. Minnesota’s Government-Assisted Health Insurance Programs

- Medical Assistance (MA) is Minnesota’s Medicaid program for low-income families with children, seniors and people with disabilities.
- General Assistance Medical Care (GAMC) provides healthcare coverage for low-income adults, ages 21-64, who have no dependent children and who do not qualify for Medical Assistance.
- MinnesotaCare is a subsidized health insurance program for Minnesota residents who do not have access to affordable healthcare coverage.
- Prescription drug and Medicare-related programs help Medicare enrollees pay for prescription drugs and their Medicare premiums.

Each program has different age, family status, income, and asset restrictions on eligibility. Income limits are low and are derived from federal poverty levels. For example, the maximum monthly income allowed for a single person for full medical coverage under General Medical Care Assistance is \$599; for Minnesota Care, maximum income for a single person is \$1396. (See Appendix F for a table of Income and Asset Limits for Minnesota Health Care Programs and Appendix G for the 2005 federal poverty guidelines.)

B. Sage

Sage, Minnesota’s Breast and Cervical Cancer Screening Program, provides free cervical cancer screening services and timely follow-up for uninsured and

underinsured women up to 250 percent of the federal poverty level. Sage is funded by the U.S. Centers for Disease Prevention and Control (CDC), the state general fund, and the Susan G. Komen Breast Cancer Foundation, Minnesota Affiliate (through its major fund raising activity, Race for the Cure).

Sage has a highly effective service delivery system that is supported by and integrated into the traditional healthcare system. Sage's extensive network of service providers includes more than 350 sites where women from each of Minnesota's 87 counties can access program-funded services. Sage's screening network is a mix of primary care clinics, specialty offices, hospital-based breast centers, community clinics, urgent care centers, local public health agency clinics, Indian Health Service facilities, and federally-funded clinics.

Sage serves over 16,000 women per year. More than 149,000 Pap tests, 14,600 colposcopies, and 135,000 mammograms have been provided in the last 15 years. In addition, as of December 2005, 696 women have received treatment through the state and federally funded Breast and Cervical Cancer Prevention and Treatment Act of 2000 (MA-BC). Current enrollment in MA-BC is 249.

In addition to providing free screening and follow-up services, Sage promotes screening through statewide partnerships, educates the public about the importance of screening, and raises awareness of screening among health professionals. In order to reach its target population, Sage does extensive marketing through television, radio, direct mail, newspapers, community organizations, clinic-based promotions and other means. Sage successfully reaches women who are more likely to have barriers to access, such

as women of color, rural woman, the working poor, and women who are unemployed. For example, more than 25 percent of the women Sage serves are women of color.

C. Family Planning

Family Planning Special Projects (FPSP) is a state-funded grant program. FPSP grants provide public information, outreach, family planning methods counseling, clinical services, and follow-up for women and men of reproductive age. FPSP provides low-cost birth control to women, conditioned on the appropriate medical services being performed, including cervical screening.

A Medicaid waiver for the Minnesota Family Planning Program will start in July 2006. This program will cover Minnesota residents ages 15-50 at or below 200 percent of the federal poverty level. It will pay for Pap tests that take place in the context of a family planning visit.

Title X is a federal grant program that provides family planning counseling, clinical services including Pap tests, sexually transmitted disease checks, and family planning methods to women of reproductive age. Services are provided at no cost to clients living below the federal poverty level. A discounted fee is charged for clients between 100 and 250 percent of poverty. Clients above 250 percent of poverty pay full fees.

D. Neighborhood Healthcare Network

The Neighborhood Healthcare Network is a collaborative of community health clinics providing primary and preventive health care to economically and ethnically diverse populations in the Minneapolis-St. Paul metropolitan area. Network membership

includes fifteen independent non-profit community health centers that provide comprehensive medical, dental, mental health, and health education services. Most patients are either uninsured (served on a sliding fee scale) or on public insurance or government programs. (Neighborhood Health Care Network 2004)

E. Cancer Plan Minnesota

Implementation of the Cancer Plan Minnesota provides the cancer community with an opportunity to build new partnerships, reduce unnecessary duplication of resources, improve coordination of resources, and develop innovative strategies. A workgroup of the Minnesota Cancer Alliance is discussing strategies to increase Pap screening to reduce cervical cancer incidence. Many of the strategies to increase screening outlined in this report are the same as or consistent with those proposed in Cancer Plan Minnesota.

F. Eliminating Health Disparities Initiative

The Eliminating Health Disparities Initiative seeks to close the gap in health disparities in breast and cervical cancer by 2010. Nine community and tribal grants are funded to develop and implement culturally-appropriate strategies to increase the number of women screened for these cancers. Five grantees are funded to work with African American women and African-born people, three are working with Latinos, and two with American Indians. Examples of strategies implemented include media campaigns, personalized health plans, worksite education, and arrangements for transportation, childcare, and patient navigators.

G. American Cancer Society Patient Navigators

The American Cancer Society has staff that serve as patient navigators in Minnesota. ACS Navigators offer free, confidential assistance to cancer patients and those who care for them. Navigators are trained to listen to callers, identify their concerns and create an individualized plan to address their needs. ACS Navigator services include cancer information, access to durable medical equipment and wig resources, support groups, coordination of transportation, and lodging, as well as connection to other state and local resources.

H. Other Opportunities

Other opportunities exist within MDH to inform women of the value of routine preventive health care services, including periodic screening for cervical cancer. The integration of appropriate prevention messages into programs or web sites serving primarily women serves not only as a mechanism to inform women of the need for preventive care but also can provide women with additional supports or information on how to obtain those services.

Other MDH programs that primarily serve women and could be a venue for distribution of general information on cervical cancer screening to women include Family Home Visiting, WIC, and Positive Alternatives.

MDH also has a number of websites that assist the general public in learning about health promotion and prevention measures and financial resources available to assist women in obtaining care. These general resources available to all women with access to the internet can provide women with important information about periodic screening for cervical cancer.

MDH is working with MNSCU to promote Community Health Worker training across the state and among diverse communities. The Minnesota Cancer Alliance is developing a cancer curriculum with MNSCU that goes beyond the basic training already offered. Community health workers receiving this additional training will be equipped to connect cancer patients and their families with information and local resources.

V. STRATEGIES TO INCREASE SCREENING

Minnesota already has high cervical cancer screening rates. The entire health system – health providers, health plans, community-based organizations, all levels of government, individuals, and private and public research – are responsible for this achievement. Continued collaboration is necessary to maintain present levels of screening. New partnerships and strategies will be required to further improve cervical cancer screening rates.

A. Patients Seen by Medical Providers

Women seen by medical groups pose an interesting challenge – although they see medical providers, they fail to have a relatively short, simple medical procedure to prevent a life-threatening disease.

1. Education and Information

Because cervical cancer screening rates are high, further educational efforts should be narrowly focused on women who are rarely or never screened. This presents a problem – the identity of these women is not known. Data indicate that screening is lower among women of color but, in Minnesota, women of color are geographically scattered and

constitute ethnically, racially, linguistically, and culturally diverse populations. There is likely no efficient way to target educational campaigns geographically. Furthermore, there is no “one size fits all” message that will effectively communicate with all or most rarely and never screened women.

- ▶ *Assist clinics in providing patient reminders.* Client reminders inform people in communities or healthcare systems that they are due or late for screening and may take the form of letters, postcards, or telephone calls. Barriers to more comprehensive reminder systems may include cost or lack of technology to automate the process.
- ▶ *Provide information about screening to patients at medical clinics.* Clinic waiting room and examination rooms constitute excellent opportunities to provide educational materials to patients. Every clinic could have access to patient-appropriate materials, including information for non-English speakers, about cervical cancer and screening procedures.
- ▶ *Educate medical providers to raise awareness of appropriate cervical cancer screening and its importance.* Because encouragement may be a critical piece of the decision-making process for some women, those with access to these women could be enlisted to encourage them to get screened. A woman’s medical provider is in a unique position to encourage screening – the provider has access to the woman and she is likely to view her provider as trustworthy and a credible source of information. Medical providers’ motivation to offer and encourage screening may be enhanced through

educational efforts that raise awareness about cultural and language barriers to appropriate screening and follow-up. Dissemination of guidelines for cervical cancer screening and follow-up might also contribute to raising provider awareness. Incorporation of information about cervical cancer, HPV, and the benefits of screening could be incorporated into Continuing Medical Education classes.

- ▶ *Conduct targeted awareness campaigns.* Multi-component interventions that are geared toward under-screened groups could be developed. These campaigns could include mass media and small media (e.g., brochures, posters, or newsletters), incentives, education (either a small group or one-on-one education), and enhanced access (removal of a financial or structural barrier).

2. Reducing Financial Barriers

- ▶ *Eliminate financial disincentives for clinics and doctors.* Medicare reimbursement rates are low and may not cover the cost of providing appropriate cervical cancer screening and follow-up. The state could supplement Medicare reimbursement rates to cover costs and to provide a margin of profit.
- ▶ *Increase access for women under 40 years of age.* Sage provides an important safety net for women who cannot afford preventive healthcare, but does not have adequate resources to provide services for women under 40 years of age. Funding to cover cervical cancer screening costs for Sage-eligible women (below 250 percent of the Federal poverty level and no or

inadequate health insurance) under 40 years of age would greatly reduce financial barriers to screening.

- ▶ *Increase funding for colposcopy and other follow-up.* Additional funding could ensure that women who are known to need further medical services receive care.

3. Patient Support

- ▶ *Enlist insurers in efforts to promote cervical cancer screening.* Insurers, including programs such as Medicare and Minnesota's government-assisted health insurance programs, have access both to patients and to healthcare providers. The prevalence of HPV infection and a comparison of the cost of early cervical cancer screening versus the cost of treating invasive cervical cancer could be sufficient incentive for insurers to promote early screening for cervical cancer. Education and lobbying of insurance companies to make promotion of early screening a priority might encourage greater efforts to screen women.
- ▶ *Provide patient navigators.* Women with abnormal Pap test results may not understand what follow-up is needed or how to obtain it. Using the American Cancer Society as a resource, clinics could designate staff to act as patient navigators to help these women through the system. As stated in Cancer Plan Minnesota, this would help eliminate disconnects between primary care, screening services, and follow-up/treatment.
- ▶ *Provide opportunistic screening to all appropriate patients.* Women whose primary contact with the healthcare

system is for episodic care may not get preventive services, pelvic exams, or Pap tests. Providers could be educated and encouraged to offer cervical cancer screening to every woman who attends their clinic for whom screening is appropriate.

- ▶ *Increase availability of female providers.* Women may be more likely to be screened if they can be assured that they can see a female provider. Among women from some cultures and religions, this may be a necessary accommodation.

4. Geographic accessibility

- ▶ *Increase availability of colposcopy at existing clinics.* Not all clinics offer colposcopy as follow-up to an abnormal Pap test result. Increasing the number of clinics that offer colposcopy may improve the likelihood of women obtaining these services.

B. Women Who Should But Have Not Been Screened

Because so few women are rarely or never screened, these individuals are difficult to identify and reach. The best alternative is to identify groups that have a disproportionate number or proportion of rarely or never screened members and target them for intervention. However, these groups are likely to present substantial challenges to recruitment efforts, including cultural differences, possible language barriers, and low geographic concentration.

Data from BRFSS, SHAPE, the Community Measurement Project, and Minnesota International Health Volunteers indicate that some women of color may have lower screening rates than the general population.

Aggregate data from BRFSS show that the proportion of women ages 18 or older who had a Pap test in the last three years is lowest among Asian/Pacific Islanders (74 percent), but is similar among the other race/ethnic groups: African Americans (88 percent), Hispanics (87 percent), non-Hispanic whites (86 percent), and American Indians (82 percent). Women who have not completed high school and live in rural areas are least likely to have had a Pap test within the last three years (60 percent) vs. those who have post-high school education, whether they live in an urban or rural area (91 percent).

1. Education and Recruitment

- ▶ *Develop innovative interventions to reach unscreened women.* Since existing efforts have been unsuccessful in reaching or effectively communicating the importance of regular Pap tests to the small proportion of women who are not screened, new innovative approaches could be developed, tested, and implemented.
- ▶ *Conduct targeted awareness campaigns.* Multi-component interventions that include mass media and small media (e.g., brochures, posters, or newsletters), incentives, education (either a small group or one-on-one education), and enhanced access (removal of a financial or structural barrier) could be developed and geared towards these under-screened groups. Special efforts could be made to tailor messages to women who have not been screened and have no knowledge or familiarity with the need for or process of screening.

The Sage program has developed some of the most effective and innovative recruitment strategies used in the

National Breast and Cervical Cancer Early Detection Program. Many of these were developed with large federal grants and rigorously evaluated. These strategies have focused on breast cancer and have not been targeted to populations that may be at highest risk to be unscreened for cervical cancer.

Potentially, these strategies could be revised to target these at-risk groups for cervical cancer screening and evaluated accordingly.

- ▶ *Create additional educational and recruitment materials in languages other than English.* Having linguistically and culturally appropriate materials and educational approaches is essential to effectively recruiting, screening, and providing appropriate follow-up to non-English speakers.
- ▶ *Identify and enlist lay health workers in immigrant communities.* Having a trusted community member to whom to turn for information and reassurance can improve willingness within the community to receive health care. Lay workers could be identified from within immigrant communities and enlisted to assist in persuading women from their communities to get screened.
- ▶ *Adopt programs proven to be effective for other populations.* Well-evaluated programs designed for specific ethnic groups might be of use in Minnesota, including a program designed for Cambodian women, which could be adapted to serve Minnesota's Hmong population, and a program targeted to African American women in North Carolina.

2. Financial Assistance

- ▶ *Invest in infrastructure to provide service in underserved areas.* Provide funding and/or incentives to build, maintain, and staff clinics in sparsely populated and other underserved areas.

3. Accessibility

- ▶ *Expand clinic hours.* Women who work may not be able to get to clinics during hours they are open. Expanding clinic hours to evening and weekend hours may allow these women to be screened.

4. Eliminating Health Disparities Initiative

- ▶ *Increase funding for EHDI.* Funds could be specifically targeted to community-based organizations for cervical cancer screening.

VI. MONITORING RESULTS

A. Administrative Data

Administrative data currently available to monitor results by medical groups include claims data from commercial health plans, Medicaid, and Medicare, individual medical offices, and special screening programs. Information from healthcare providers – whether private or public – will reflect the demographics of the particular populations covered by those plans.

1. Health Employer Data Information Set (HEDIS)

HEDIS is a set of standardized performance measures designed to allow a comparison of the performance of managed healthcare plans. HEDIS is sponsored, supported, and

maintained by National Center for Quality Assurance (NCQA) and includes information from commercial health plans for those under age 65. (See <http://www.ncqu.org/index.htm>.) HEDIS data allow calculation of the percentage of women ages 21–64 who were enrolled in a health plan for two consecutive years and who had one Pap test during the measurement year or the two years prior. Screening rates for different plans can be compared.

2. Community Measurement Project

The Minnesota Community Measurement Project performs quality measures at the medical group level. Founding members include the Minnesota Medical Association and seven nonprofit Minnesota health plans: Blue Cross and Blue Shield of Minnesota/Blue Plus, First Plan of Minnesota, HealthPartners, Medica, Metropolitan Health Plan, PreferredOne and UCare Minnesota. Medical groups voluntarily participate in these measurements, which are based on administrative data augmented with medical record reviews. (See <http://www.mnhealthcare.org/>.) Cervical cancer screening is one of the measures tracked. Screening rates for participating provider groups can be accessed on the internet.

3. Sage

Sage is Minnesota's breast and cervical cancer screening program for lower income uninsured and underinsured women. Sage patient data, tracked through a system internal to MDH, provide information on demographics, including age, geographical location, race, Hispanic or Latino ethnicity, foreign birth, health insurance status, household income, household size, and on

cervical cancer screening history. In addition, the data allow comparisons between women served within specified periods of time.

4. Medicare/Medicaid

Medicare data can provide a reasonably accurate view of utilization patterns for women 65 years of age and older. The Minnesota Department of Human Services has Minnesota's Medicaid data and could track utilization of Pap tests. These data sources would not capture women enrolled in capitated Medicare and Medicaid plans.

B. Population Data

1. Behavioral Risk Factor Surveillance System (BRFSS)

BRFSS is an on-going health survey funded by CDC that collects information about health risk behaviors, clinical preventive practices, and health care access and use. BRFSS has insufficient data on women of color to establish rates and may disproportionately lack representation by unscreened women. A special survey to determine screening rates of important subgroups could be administered.

2. Hennepin County's Survey of the Health of Adults, the Population and the Environment (SHAPE)

SHAPE is an ongoing joint public health surveillance and assessment project of the Hennepin County Human Services and Public Health Department to repeatedly survey the health of adults in Hennepin County. SHAPE asks about Pap tests and is able to provide data broken down by the racial and ethnic populations within Hennepin County. Planning is underway for SHAPE 2006.

VII. RECOMMENDATIONS

Many activities could be implemented in an effort to increase screening. However, achieving measurable improvements would require a substantial investment of funds and other resources. Cervical cancer incidence and mortality is very low and is widely dispersed across the population. Women who are easy to reach are already screened. Without information about who is still unscreened, there is no guarantee that any campaign to increase cervical cancer screening will reach women still unscreened. The following activities are likely to yield the most benefit.

A. Address Direct Financial Barriers To Screening And Follow-Up

- ▶ *Increase coverage and reimbursement for colposcopies.* Current funding for the colposcopy program is inadequate. This program provides direct service to women with an immediate need. Estimated cost: \$800,000 per year.
- ▶ *Provide funding for Pap tests for women less than 40 years of age.* Sage cannot pay for services for these women. As Sage already has an infrastructure in place, Sage could readily address the cost barriers for younger women in households earning less than 250 percent of the federal poverty level who are not covered by other programs. Estimated cost: \$1,600,000 per year.
- ▶ *Increase Minnesota's Medicare reimbursement rate for liquid-based Pap tests.* Minnesota's reimbursement rate for liquid-based Pap tests covers a small portion of the costs and is lower than in other states. Efforts could be made to increase Minnesota's reimbursement rate for liquid-based Pap tests so that

economic considerations do not preclude performing this test when it is the only Pap test provided. Estimated cost: \$170,000 per year.

- ▶ *Expand MA-BC to cover more women.* The Breast and Cervical Cancer Treatment Option currently provides Medical Assistance coverage (MA-BC) only to uninsured women who are enrolled in Sage and who need treatment. MA-BC could be expanded to provide coverage for more women. Estimated cost: not known at this time.
- ▶ *Promote CME classes around the role of HPV in cervical cancer.* CME classes around the role of HPV in cervical cancer and the emerging issue of HPV vaccine could be promoted to healthcare professionals. Estimated cost: negligible.

B. Intensify Outreach To Women Who Have Rarely Or Never Been Screened For Cervical Cancer

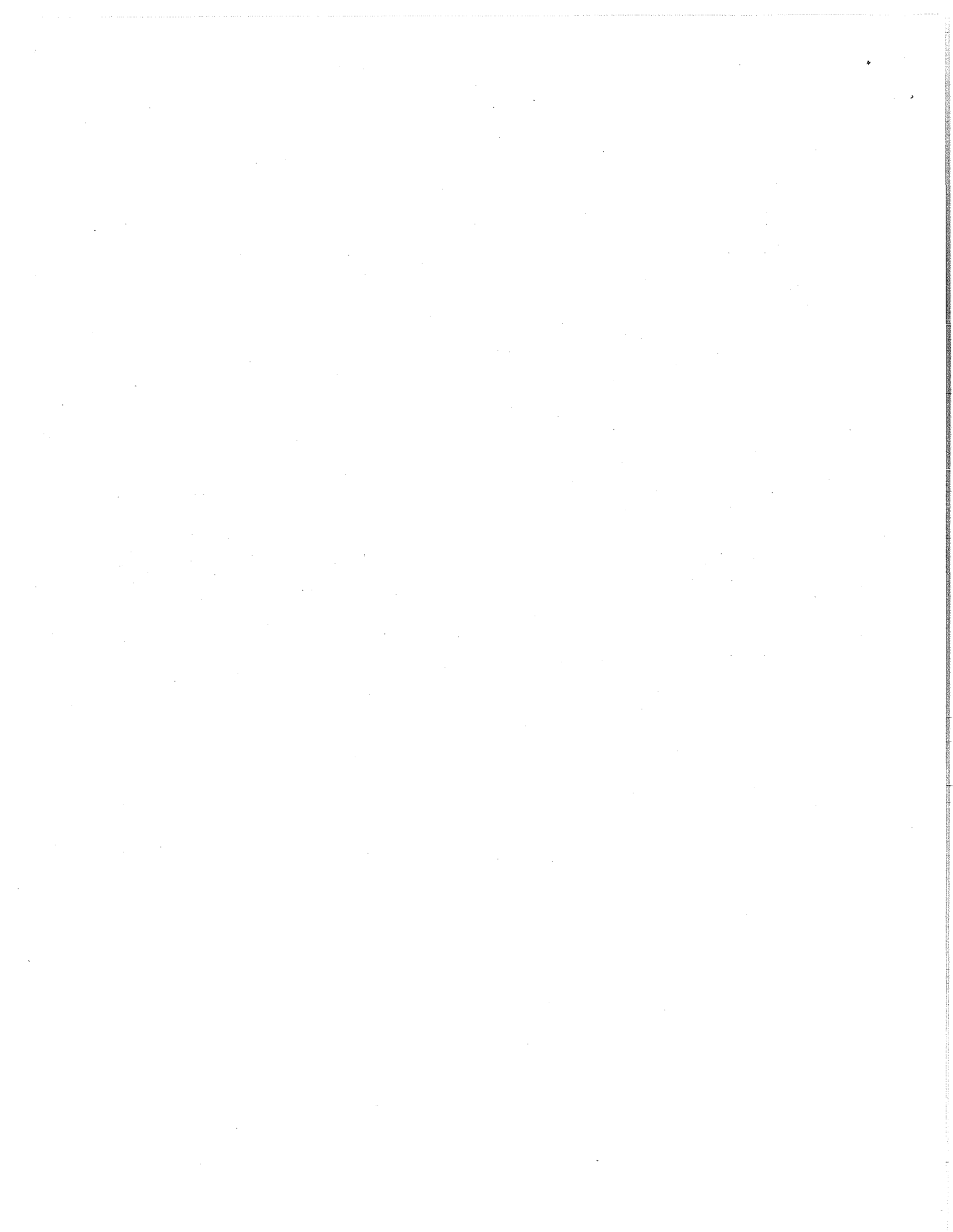
- ▶ *Conduct research to identify women who have not been screened.* Non-targeted campaigns to increase cervical cancer screening could result in expending substantial resources on women who are already compliant. Research is needed to identify women or groups of women who are not being screened, so that recruitment campaigns can be based on such shared characteristics as geographical location, socioeconomic status, education, race, religion, culture, or country of origin. Estimated one-time cost: \$400,000.
- ▶ *Conduct research among the identified women to better understand reasons for failure to be screened and to develop effective interventions.* Research is

needed to specifically identify the barriers that contribute most to failure to be screened. These data would be used to determine strategies likely to be most effective in reaching noncompliant women and to design effective campaigns to promote screening. Estimated one-time cost: \$20,000.

- ▶ *Design and implement targeted media campaigns.* Information about who is not being screened and why could be used in designing targeted media campaigns. Media, especially television and direct mail, has been highly effective in increasing breast cancer screening in Sage and can be expected to be equally effective in increasing cervical cancer screening. Campaigns may be designed for particular geographical regions and would have to be conducted in a variety of languages using approaches tested and found to be culturally sensitive. Estimated cost: \$190,000 per year.
- ▶ *Implement intensive outreach in immigrant and refugee populations.* Immigrants and refugees may have lower screening rates than the general population, and some come from areas of the world where cervical cancer rates are high. Absent appropriate intervention, an increase in cervical cancer incidence can be anticipated in Minnesota due to the expected high rates within these populations in coming years. Increased information about relevant factors in these populations, such as health practices and social behaviors and what influences them, is essential to the ability to effectively combat cervical cancer. Appropriate materials and educational approaches could be developed, and contacts in the communities could be identified and

cultivated. Estimated cost: \$650,000 per year.

- ▶ *Make translation services more widely available.* Having translation services available to non-English speaking women could decrease the number of rarely and never screened women. It would also improve the quality of care by enabling providers to better take medical histories, to communicate risk, to provide results, and to communicate and emphasize the need for follow-up in appropriate cases. Estimated cost: \$65,000 per year.
- ▶ *Improve information provided to older patients and joint decision-making between providers and older patients.* Communication and joint decision making between providers and older patients on appropriate cervical cancer screening could be improved. The Medicare-enrolled population could be informed about cervical cancer through collaboration with the quality improvement organization in Minnesota that serves the Medicare population. Estimated one-time cost: \$15,000.
- ▶ *Conduct a follow-back study of Minnesota women diagnosed with cervical cancer.* Factors other than screening utilization account for some cases of invasive cervical cancer. A study to review previous Pap test results as well as health insurance, screening, and medical histories of Minnesota women diagnosed with cervical cancer is needed to identify whether strategies to improve testing techniques, laboratory methods, and timely follow-up of identified abnormalities are needed. Estimated one-time cost: \$150,000.



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APPENDICES

LIST OF APPENDICES

Appendix A

Table 1. Cervical Cancer Screening Guidelines

Table 2. Recommendations for Liquid-Based Cytology and HPV Testing

Appendix B ICSI Health Care Guideline: Cervical Cancer Screening

Appendix C Who Pays? Taking the MAZE Out of Funding.

Funding Flow Chart

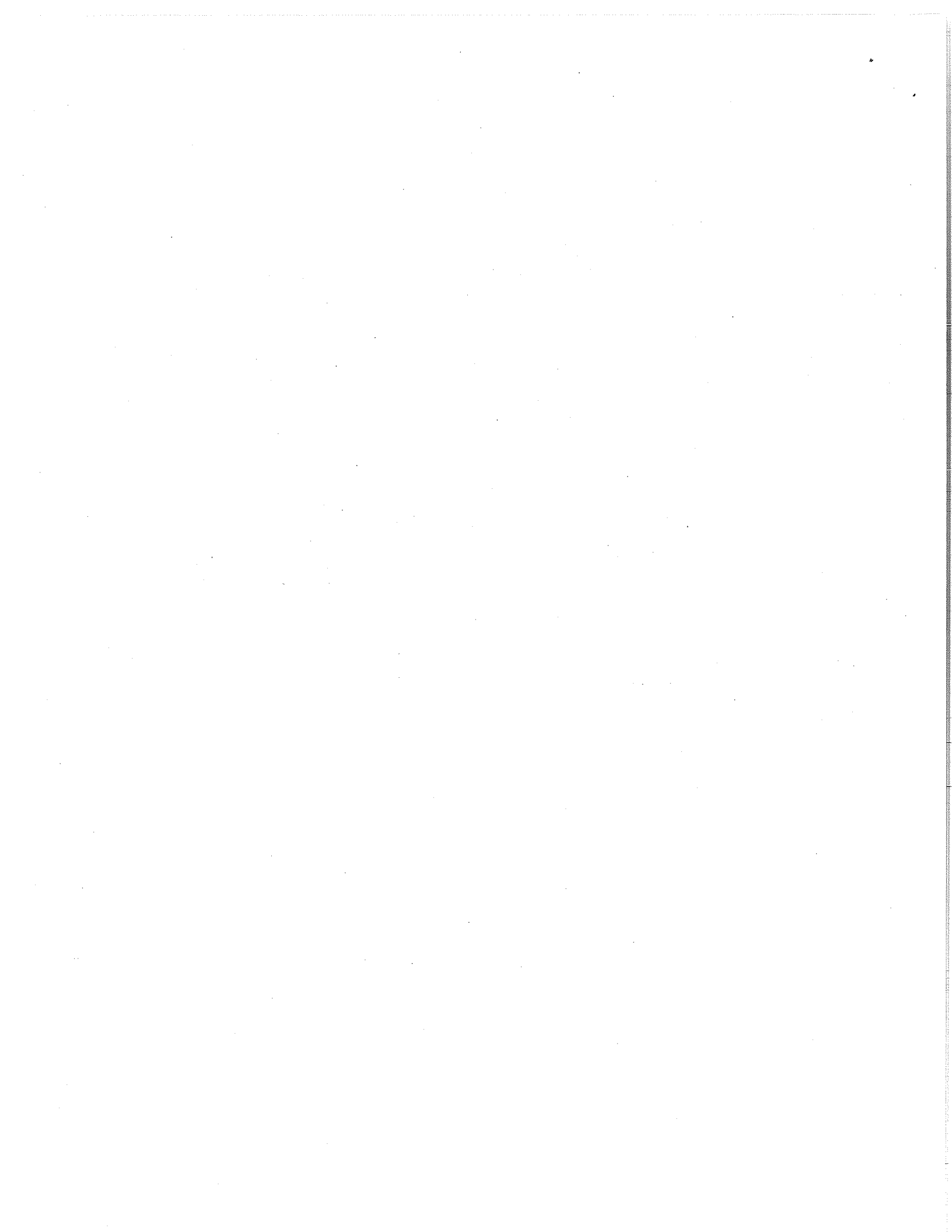
Non-Citizen Summary

Appendix D Screening Pap Smear Abnormalities

**Appendix E Medicare Reimbursement Rates – Cervical Cancer Screening and Diagnosis
(Effective January 1, 2005)**

**Appendix F Minnesota Health Care Programs. Income and Asset Limits effective 7/1/05
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**Appendix G 2005 Poverty Guidelines for the 48 Contiguous States and the District of
Columbia**



Appendix A

- Table 1. Cervical Cancer Screening Guidelines**
- Table 2. Recommendations for Liquid-Based Cytology and HPV Testing**

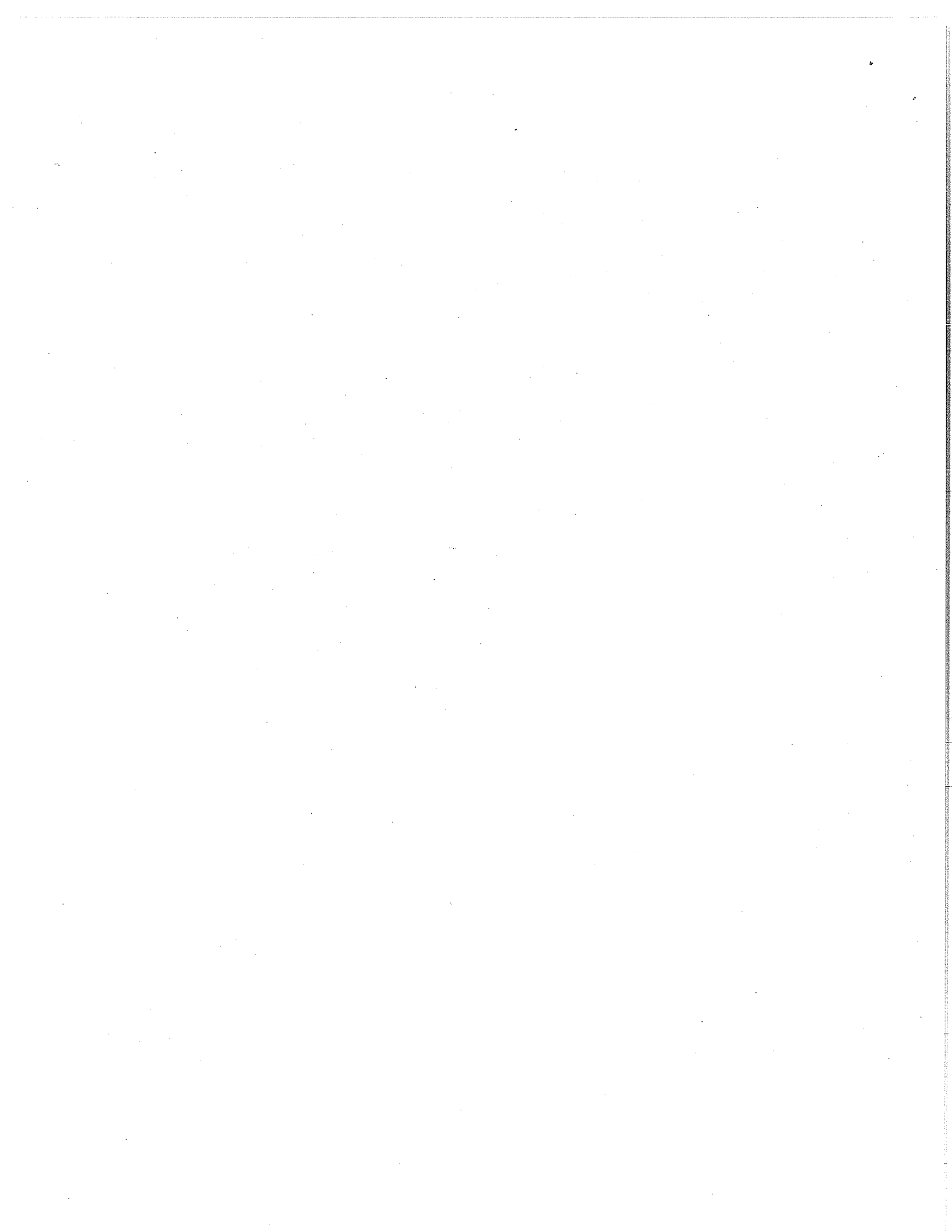


Table 1. Cervical Cancer Screening Guidelines

	American Cancer Society ¹ (ACS, Nov 2002)	U. S. Preventive Services Task Force ² (USPSTF, Jan 2003)	American College of Obstetricians and Gynecologists ³ (ACOG, Aug 2003)
When to start	Approximately 3 years after onset of vaginal intercourse, but no later than age 21	Within 3 years of onset of sexual activity or age 21, whichever comes first	Approximately 3 years after onset of sexual intercourse, but no later than age 21
Intervals			
Conventional Pap test	Annually; every 2-3 years for women ≥30 with 3 negative cytology tests*	At least every 3 years	Annually; every 2-3 years for women ≥30 with 3 negative cytology tests*
If liquid-based cytology used**	Every 2 years; every 2-3 years for women ≥30 with 3 negative cytology tests*	Insufficient evidence	Annually; every 2-3 years for women ≥30 with 3 negative cytology tests*
If HPV testing used**	Every 3 years if HPV negative, cytology negative	Insufficient evidence	Every 3 years if HPV negative, cytology negative
When to stop	Women ≥70 years with ≥3 recent, consecutive negative tests & no abnormal tests in prior 10 years*	Women >65 years with negative tests, who are not otherwise at high risk for cervical cancer	Inconclusive evidence to establish upper age limit
Post total hysterectomy	Discontinue if for benign reasons & no prior history of high-grade CIN*	Discontinue if for benign reasons	Discontinue if for benign reasons & no prior history of high-grade CIN*

*Some exceptions apply (e.g., women who are immunocompromised, have a history of prenatal exposure to DES, etc.). See guidelines for details.

** See Table 2 (entitled "Recommendations for Liquid-Based Cytology and HPV Testing") for recommended use.

¹ Saslow D, et al. American Cancer Society Guideline for the Early Detection of Cervical Neoplasia and Cancer. *CA Cancer J Clin* 2002; 52: 342-362. Available at: <http://caonline.amcancersoc.org/cgi/content/full/52/6/342>

² USPSTF. *Screening for Cervical Cancer*. Jan 2003. Available at: <http://www.ahcpr.gov/clinic/uspstf/uspstfscerv.htm>

³ ACOG. Cervical Cytology Screening. ACOG Practice Bulletin No. 45. *ACOG* 2003;102: 417-427. See also: http://www.acog.org/from_home/publications/press_releases/nr07-31-03-1.cfm

Table 2. Recommendations for Liquid-Based Cytology and HPV Testing

	American Society for Colposcopy and Cervical Pathology ¹	American Cancer Society ²	U. S. Preventive Services Task Force ³	American College of Obstetricians and Gynecologists ⁴	American Society for Colposcopy and Cervical Pathology, and American Cancer Society ⁵
	(ASCCP, Apr 2002)	(ACS, Nov 2002)	(USPSTF, Jan 2003)	(ACOG, Aug 2003)	(ASCCP & ACS, Feb 2004)
Liquid-based cytology	--	Option	Insufficient Evidence	Option	--
HPV testing					
Women with ASC-US (reflex testing)	Recommended*, Guidance Provided ¹	Option ⁶	Insufficient Evidence	Option	--
Women ≥30 years (adjunct to Pap test)	--	Option	Insufficient Evidence	Option	Recommended*, Guidance Provided ⁵

*Some exceptions apply [e.g., women who are immunosuppressed for any reason, including infection with human immunodeficiency virus (HIV)]

¹ Wright TC, et al. 2001 Consensus Guidelines for the Management of Women with Cervical cytological abnormalities. *JAMA*;2002; 287: 2120-2129. See also: <http://www.asccp.org/consensus.shtml>

² Saslow D, et al. American Cancer Society Guideline for the Early Detection of Cervical Neoplasia and Cancer. *CA Cancer J Clin* 2002; 52: 342-362. Available at: <http://caonline.amcancersoc.org/cgi/content/full/52/6/342>

³ USPSTF. *Screening for Cervical Cancer*. Jan 2003. Available at: <http://www.ahcpr.gov/clinic/uspstf/uspstfscerv.htm>

⁴ ACOG. Cervical Cytology Screening. ACOG Practice Bulletin No. 45. *ACOG* 2003; 102: 417-427. See also: http://www.acog.org/from_home/publications/press_releases/nr07-31-03-1.cfm

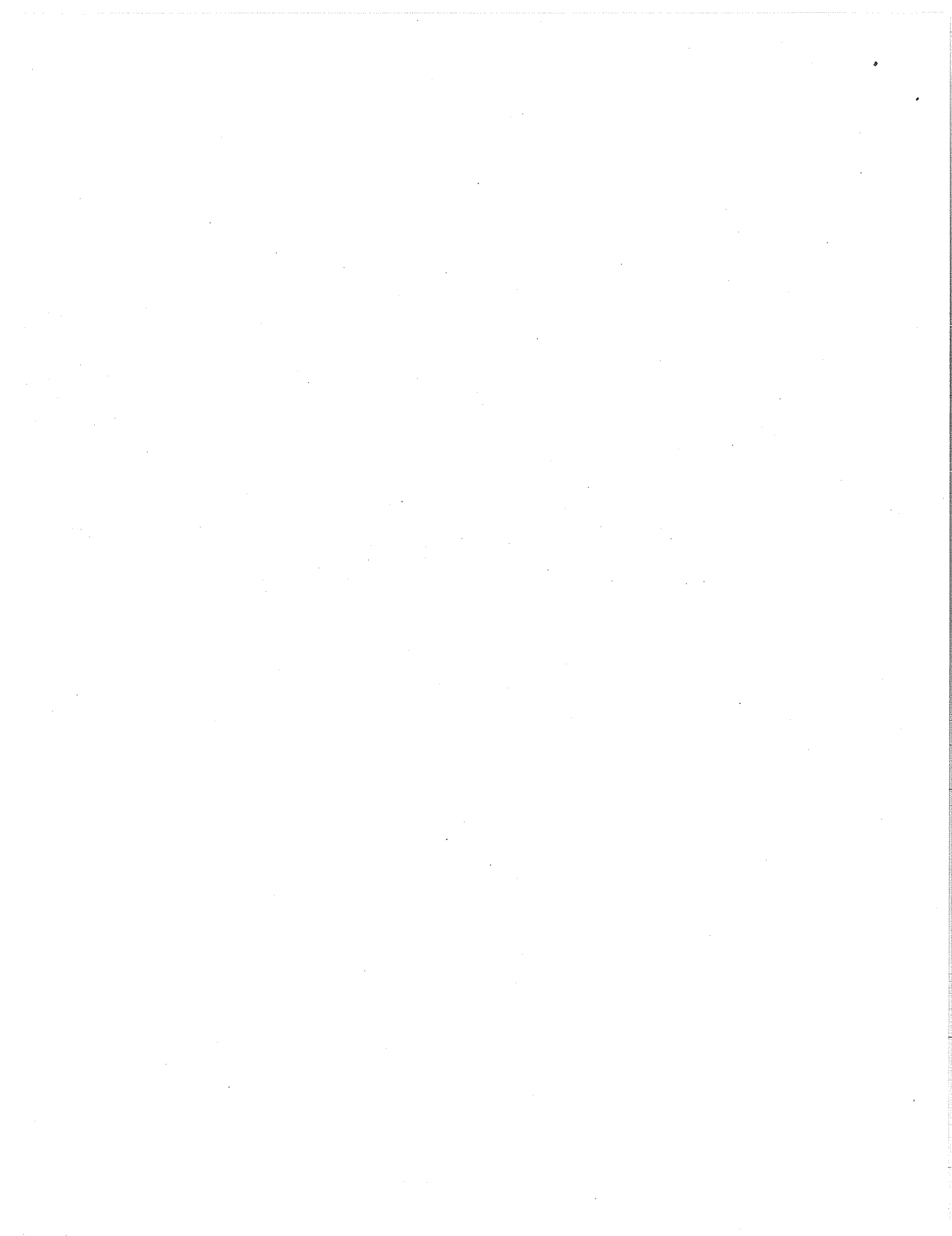
⁵ Wright TC, et al. Interim Guidance for the Use of Human Papillomavirus DNA Testing as an Adjunct to Cervical cytology for screening. *Obstet Gynecol*. 2004; 103: 304-309.

⁶ ACS. Patient Pages: Early Detection of Cervical Cancer. *CA Cancer J Clin*, 2002; 52: 375 - 376. See also: <http://caonline.amcancersoc.org/cgi/content/full/52/6/375>

A-7

Appendix B

ICSI Health Care Guideline: Cervical Cancer Screening



Main Algorithm

A = Annotation

Eleventh Edition

June 2005

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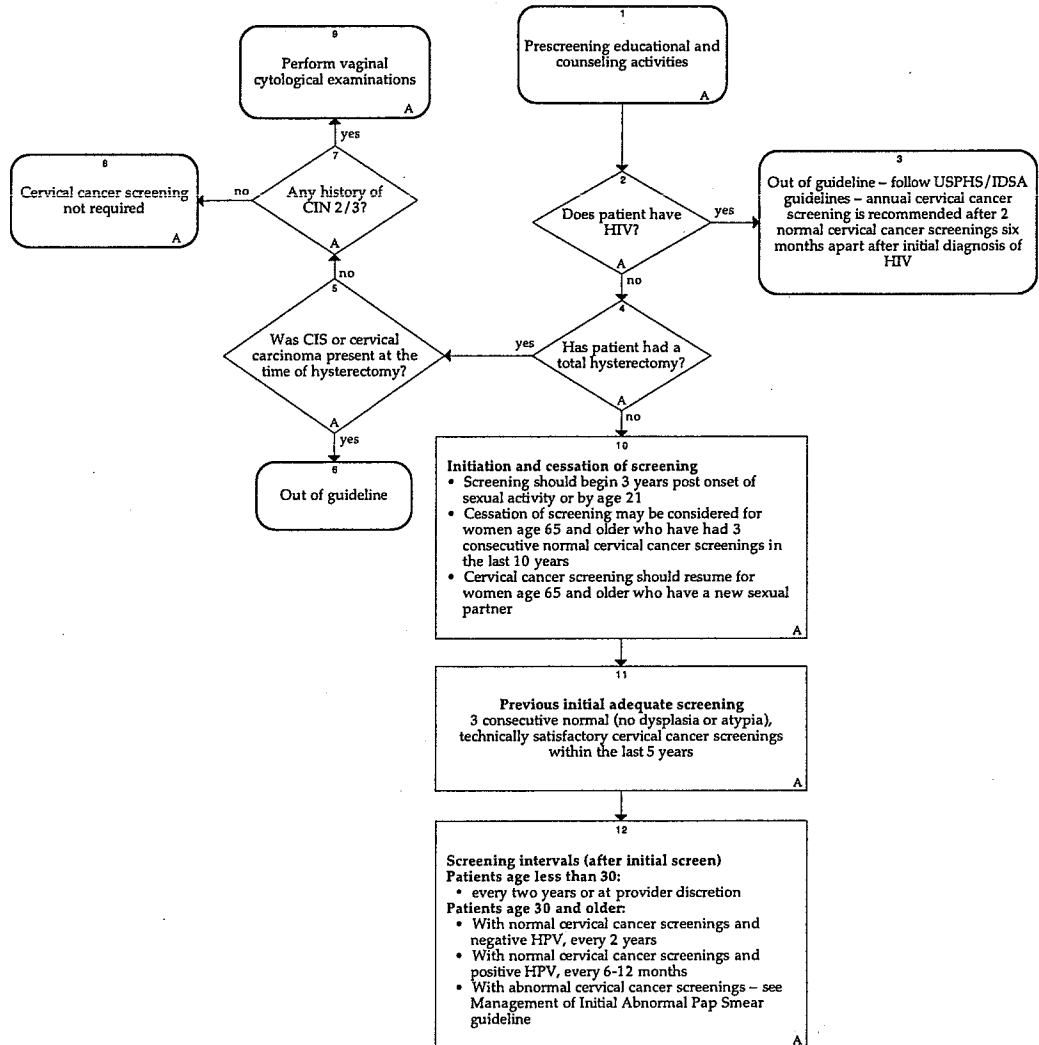
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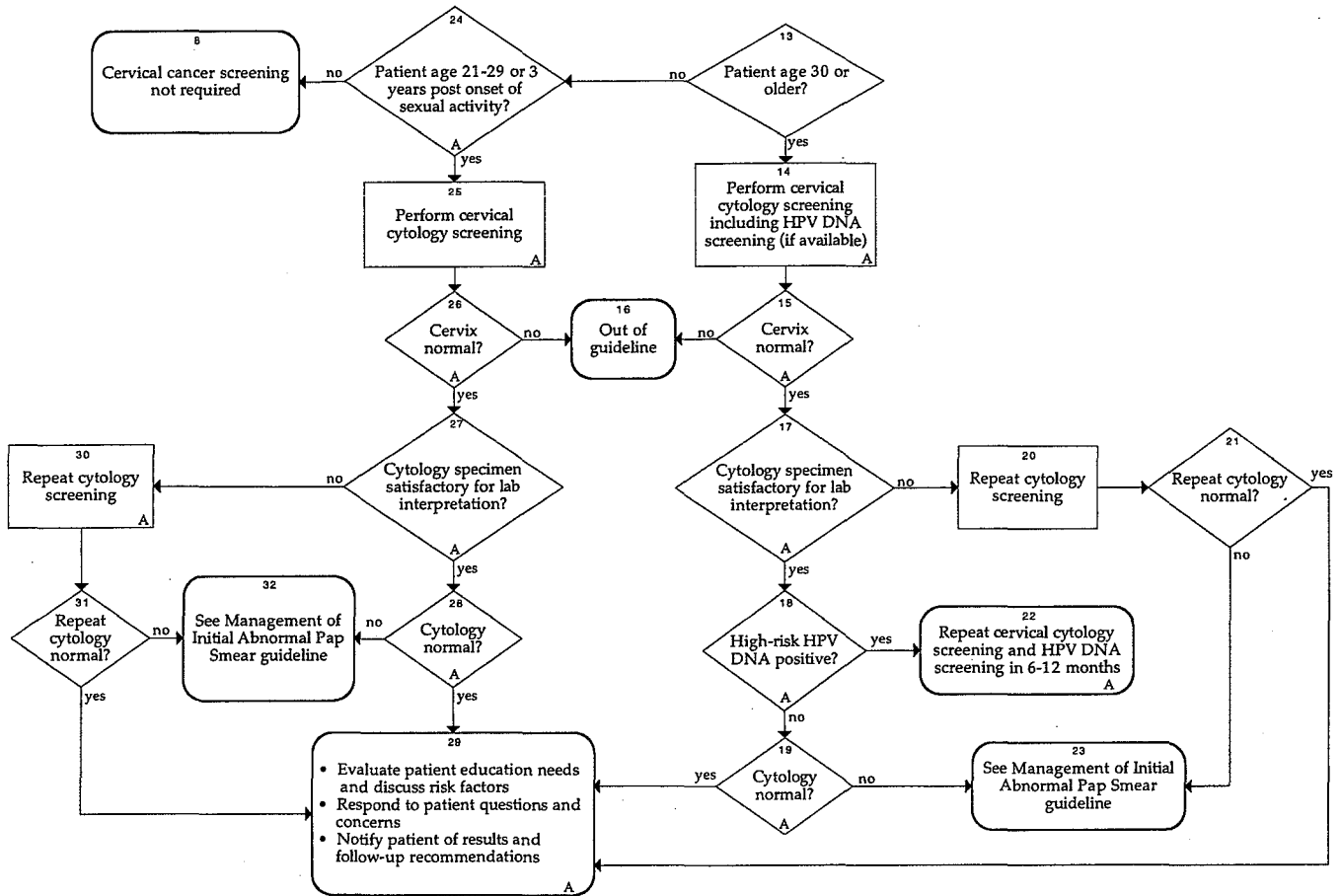


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These clinical guidelines are designed to assist clinicians by providing an analytical framework for the evaluation and treatment of patients, and are not intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition. A guideline will rarely establish the only approach to a problem.

Main Algorithm Continued

A = Annotation



Algorithm Annotations

1. Prescreening Educational and Counseling Activities

Employer, School and Community Education Activities

This group, through this guideline, acknowledges the crucial role played by education and outreach efforts in helping to increase the number of age-appropriate women who present themselves for regular cervical cancer screening, thereby reducing the incidence of cervical cancer mortality.

The following are some ideas for employers, schools, and community organizations:

Awareness initiative programming, including:

- Posters for company bulletin boards,
- Payroll stuffers with general screening information,
- General screening information "tents" for tables in reception areas, cafeterias, employee lounges, restrooms, locker rooms, and other such places.

Educational initiative programming, including:

- Articles in employee newsletters, magazines and/or newspapers,
- Brown-bag lunch seminars and health fairs,
- Direct-mail campaigns with screening information sent to all eligible employees and health plan enrollees.

Behavioral change incentive programming, including:

- Financial incentive plans, such as employer group programs, which reward enrollees who practice a range of preventive health behaviors including regular cervical cancer screening,
- Removal of any time, transportation or other pragmatic barriers to screening,
- Making high-level management commitment to cervical cancer screening and other prevention programs.

Information on the importance of regular cervical cancer screening can be included as part of broader health promotion/disease prevention initiatives that include not only cancer prevention education, but address heart disease and appropriate health care utilization as well. Some employers and HMOs around the country have also launched successful Women's Health Campaigns which include cervical cancer screening along with other prominent health issues for women such as breast cancer detection, smoking, exercise and so on.

Provider Prescreening Educational and Counseling Activities

Materials such as brochures, posters, "special message" prescription pads, chart reminders and so on can help support the provider in his/her role as patient counselor/educator. Face-to-face opportunities to encourage women – especially those who haven't had a cervical cancer screen recently or ever – to take advantage of this important and potentially life-saving procedure are instrumental in improving screening rates, thereby reducing cervical cancer mortality (*Kottke, 1995; Mandelblatt, 1989; Tseng, 2001*).

Algorithm Annotations

Suggested health care provider activities include:

- Use brochures, posters and direct-mail materials to recruit women for cervical cancer screening.
- Have a process in place to communicate results to patients following cervical cancer screening, such as:
 - Letter/postcard re: need for repeat cervical cancer screening,
 - Letter/postcard re: normal cervical cancer screening results,
 - Letter/postcard re: cervical cancer screening findings necessitate repeat cervical cancer screening in six months,
 - Letter/postcard re: cervical cancer screening findings necessitate further diagnostic follow-up.
- Have available materials such as brochures, booklets or videos regarding findings, disorders and follow-up diagnostic procedures.
- Have a process in place to remind patients regarding their next appointment for cervical cancer screening, including any patient-specific instructions.
- Have a process in place to identify women who are overdue for cervical cancer screening and contact them to encourage them to come in for screening. Techniques, such as follow-up phone calls or opportunistic screening by providers may be effective. Combinations of modified invitations, written reminders and phone reminders have been shown to double attendance for screening and triple the number of cytologic abnormalities detected (*Eaker, 2004*).
- Have available support and awareness-building opportunities for providers to assist them in the role of patient "recruiter" (e.g., chart reminders, special prescription pads, CME gatherings.)
- As a last resort, consideration could be given to self-sampling methods (*Belinson, 2003*).

Supporting evidence is of classes: A, C, D, M, R

2. Does Patient Have HIV?

As advocated in the 1999 USPHS/IDSA guideline for prevention of opportunistic infection in HIV persons, annual screening is recommended after two normal cervical cancer screenings six months apart after the initial diagnosis of HIV (*Eddy, 1990; Goldie, 1999; U.S. Public Health Services [USPHS] and Infectious Diseases Society of America [IDSA], 1999*).

Supporting evidence is of classes: M, R

4. Has Patient Had a Total Hysterectomy?

A total hysterectomy is a hysterectomy with removal of the cervix in its entirety.

5. Was CIS or Cervical Carcinoma Present at the Time of Hysterectomy?

Women who have had a hysterectomy for carcinoma in situ or invasive cancer should be monitored clinically on at least an annual basis with pelvic exam and vaginal cytology test from the vaginal apex. Immediately following a hysterectomy for these indications, a vaginal cytology test should be performed on a more frequent basis.

Algorithm Annotations

7. Any History of CIN 2/3?

Women with a history of CIN 2/3 prior to, but not as the indication for hysterectomy should be screened until three documented consecutive, technically satisfactory normal/negative vaginal cytology tests with no abnormal/positive cytology test within a ten-year period are achieved.

8. Cervical Cancer Screening Not Required

Further cytologic examination is not required for women who have undergone a hysterectomy with removal of cervix for benign disease (*USPSTF, 2003*).

Supporting evidence is of class: R

9. Perform Vaginal Cytological Examinations

Perform vaginal cytologic examinations until three documented consecutive technically satisfactory normal/negative tests are obtained within a ten-year period.

10. Initiation and Cessation of Screening

Initiation of Screening

Cervical cancer screening should be initiated on all women beginning at age 21 or 3 years after the onset of sexual activity. The selection of an age for initiation of screening is to some degree arbitrary. As outlined in the recommendations within ACOG Practice Bulletin #45, August 2003, "Cervical cancer screening in adolescents within the first three years after initiation of sexual intercourse is not likely to result in the identification of HSIL or cancer. In addition, earlier onset of screening may increase anxiety, morbidity, and expense from follow-up procedures. Furthermore, squamous cell cervical cancer is exceedingly rare in the first two decades of life. Therefore, it seems reasonable to begin cervical cancer screening approximately three years after the initiation of sexual intercourse, but no later than age 21 years (*American College of Obstetricians and Gynecologists, 2003; Mosicki, 2003*). Under rare circumstances in which the clinician has strong reason to believe the patient beyond age 21 has never been sexually active, the decision to perform cervical cancer screening is left to the discretion of the clinician (*Economos, 1994*). In the asymptomatic patient, there is no known benefit to performing a pelvic exam as a screening procedure for gynecological disease.

Cessation of Screening

In women who have had previous adequate screening, there is no clear evidence of the need for cervical cancer screening in women over 65 years of age. However, there is still a significant incidence of cervical cancer in this age group in of women who have not had previous screening. Cervical cancer screening may be performed with mutual consent of patient and provider and should not be performed within less than 2- to 3-year intervals because of the risk of false positives. Please note as well, women who were exposed to DES in utero and women who are immunosuppressed should continue Pap smear cervical cancer screening as long as they are in good health.

There is no consensus in the literature on whether there should be an upper age limit for cervical cancer screening (*Fletcher, 1990; Mandelblatt, 1989*). The United States Preventive Services Task Force recommends discontinuing screening at age 65 years if the physician can document previous Papanicolaou screening in which smears have been consistently normal (*USPSTF, 2003*). The American Cancer Society recommends triennial screening with no upper age limit (*Saslow, 2002*). The Canadian Task Force on Cervical Cancer Screening Programs recommends that women over age 69 years who have had at least two satisfactory normal Pap smears and no significant epithelial abnormality in the last nine years and who have never had

Algorithm Annotations

biopsy-confirmed dysplasia or carcinoma in situ can be dropped from the cytology screening program. After in-depth discussion, it is this group's recommendation that cervical cancer screening may be discontinued after age 65 at the mutual consent of the patient and provider, given that there has been previous adequate screening. A recent report from the Heart and Estrogen/Progestin Replacement Study (HERS) suggests that Pap smears performed within two years of normal cytologic results have a poor positive predictive value (Sawaya, 2000). By logical extension, the work group recommends that women over age 65 who have a new sexual partner resume Pap smear cervical cancer screening within three years, though data to support this are currently lacking.

Women over 65 years of age with a minimum of 3 consecutive normal cervical cancer screenings in the past 10 years and who are not otherwise at high risk for cervical cancer may cease routine screening [*Conclusion Grade II: See Conclusion Grading Worksheet – Appendix A – Annotation #10 (Cessation of Screening)*] (Cruickshank, 1997; Forsmo, 1996; Gustafsson, 1995; Lawson, 1998; Sawaya, 2000a; Sawaya, 2000b; Van Wijngaarden, 1993).

11. Previous Initial Adequate Screening

12. Screening Intervals (After Initial Screen)

Adequate screening is defined as within the last 5 years, the patient has had:

- 3 consecutive normal (no dysplasia or atypia), technically satisfactory cervical cancer screenings within the last 5 years.

The American College of Obstetricians and Gynecologists (ACOG) and many other national medical organizations recommend that a woman who has three consecutive normal cervical cancer screenings at 1-year intervals may, in consultation with her physician, decrease the frequency of screening to every 2 to 3 years (ACOG, 2003; Ball, 2003; Janerich, 1995).

The timeline for the progression of pre-invasive and invasive cervical disease is fairly well defined. Whereas the mean patient age for cervical dysplasia is about 34 years old, the mean ages for carcinoma in situ and invasive cancer is 42 and 50 respectively. The relatively slow progression from cervical dysplasia to cervical cancer explains the success of screening intervals greater than one year. Indeed, the International Agency for Research on Cancer evaluated cervical cancer screening programs in Europe and Canada involving 1.8 million women. The expected reductions in the incidence of cervical cancer screening with intervals of one, two, and three years were 93.5%, 92.5%, and 90.9%, respectively (IARC, 1986). Furthermore, in the United States, David Eddy has concluded that the probability of dying from cervical cancer is not substantially different in women who are screened annually as opposed to those screened every two, three or four years.

Changing the frequency of screening from yearly up to three years should not result in significant excess incidence of morbidity or mortality from cervical dysplasia, even for so-called high-risk women, as long as:

- the woman has a documented history of negative cytology screenings
- cytopathology laboratories continue to have a low rate of false negative reports
- the patient complies with the recommended frequency for cervical cancer screening up to three years.

(Fowler, 1993; Nasiell, 1986; Richart, 1968; Sawaya, 2000; USPSTF, 2003)

A recent workshop co-sponsored by NIH, NCI, ASCCP, and the ACS provided consensus recommendations for cervical cancer screening based on a literature review, expert opinion, and unpublished results from large ongoing screening studies. As a result of this workshop, a new recommendation emerged for screening

Algorithm Annotations

women age 30 or older. Women in this age category who are high-risk HPV DNA negative and have a cervical cytology result of "negative for intraepithelial lesion or malignancy" should not be re-screened before 3 years (*Wright, 2004*).

14. Perform cervical cytology screening including HPV DNA screening (if available)

Cervical cancer screening is recommended as follows for patients age 30 and older:

- Every one to two years if previous cervical cytology reports have been negative and the patient's HPV status is unknown/untested.
- Every three years if previous cervical cytology reports **and** high-risk HPV DNA tests are negative.

To enhance the likelihood of obtaining cells from the squamocolumnar junction, the following procedure is recommended (*Council on Scientific Affairs, 1989; Eisenberger, 1997; ACOG, 1993*):

- It would be best if the patient could be instructed not to use a vaginal douche or any type of lubricant for 24 hours before a cervical cytology screening is performed. However, failure to adhere to this recommendation should not preclude a patient from receiving such screening.
- Cytological specimens should be obtained with a non-lubricated speculum before a bimanual pelvic examination, if the latter is performed.
- The cervix and the area of the vagina adjacent to the cervix must be fully visible when the specimen is obtained.

A. For Liquid Based Cytology (LBC)

- Collection technique may vary by manufacturer
- LBC has been shown to have higher sensitivity and specificity for both low and high grade dysplasia (*Rarick, 1994; Lee, 1997; Minge, 1998; Coste, 2003*)

B. HPV as an adjunct to cervical cytology

HPV DNA testing may be used as an adjunct to cervical cytology for screening women age 30 and older to help minimize unnecessary evaluations and treatments (*Wright, 2004*).

C. For Traditional Pap Smears

- The ectocervix and endocervix should be sampled separately (spatula first, cytobrush last)
- A plastic Ayre spatula preferably with an extended tip, or a wooden spatula is rotated with pressure over the entire ectocervix.
- The standard method for sampling the endocervix is with an endocervical brush, which enhances cell recovery. Proper instructions for use of an endocervical brush include:
 - Sample ectocervical region first using ectocervical spatula
 - Insert brush into the endocervical canal and rotate one half to two full turns.
 - Transfer collected cells to a glass slide with a frosted end by gently rolling and twisting brush against microscope slide, taking care to spread the material thinly (material must be spread thinly to allow for microscopic interpretation) and then apply cytology fixative. Other devices

Algorithm Annotations

such as the pointed Ayre spatula also sample the transformation zone. This device is gently inserted into the endocervix and rotated slowly one to two full turns.

- The slide is fixed immediately to prevent drying, either by immersing it in a jar of 95% ethyl alcohol and fixing for 15 minutes, spraying with aerosol or pump fixative while holding the spray can at least 10 to 12 inches from the slide, or flooding with the liquid fixative. Slides fixed in 95% ethyl alcohol can be transported to the laboratory in the alcohol bath or allowed to air dry following fixation. Smears fixed with aerosol or flooding must be air-dried before sending to the laboratory.

Supporting evidence is of classes: C, M, R

15. Cervix Normal?

A normal looking cervix is defined in any standard medical text. The presence of eversion and/or Nabothian cysts does not constitute an abnormality in this context. If a lesion is grossly visible, cervical cytology alone does not constitute adequate evaluation; biopsy with or without colposcopy should be done.

17. Cytology Specimen Satisfactory for Lab Interpretation?

It is suggested that providers implement some form of quality measurement in order to encourage adequate cytology specimens for accurate lab interpretation. The 2001 Bethesda system of nomenclature for cytology interpretation includes an evaluative component describing the adequacy of the specimen. This component is further subdivided into two categories:

- Satisfactory for evaluation
- Unsatisfactory for evaluation

18. High-Risk HPV DNA Positive?

The relationship of HPV to cervical neoplasia is a subject of intense ongoing study. Sensitive tests can detect evidence of HPV in as many as 70% of all sexually active women. However, only a minority of these will develop dysplasia or cancer. Subtype 16 and 18 seem more associated with onset or progression of disease. Evidence shows that for women age 30 and older, HPV screening does appear to be useful (*Ludicke, 2001; ICSI Technology Assessment, 2005*).

19. Cytology Normal?

In order to achieve a more consistent manner of cervical cytology reporting, it is highly recommended that all providers and their affiliated laboratories adopt the 2001 Bethesda system of nomenclature for cytology interpretation as their system of reporting cervical cytology results (*Solomon, 2002*).

Women should be notified of cervical cancer screening results in a manner that is mutually agreeable to the provider and patient. The authoring work group strongly recommends contacting all patients with the results of their cervical cancer screening results, whether normal or abnormal. In certain circumstances, state/regional laws may regulate the manner by which a patient is contacted with results of laboratory testing. Contact your state/regional health department for more information.

At the time of results notification, a natural opportunity exists for counseling and education specific to the patient's needs. Women whose cervical cancer screening results are abnormal should receive additional information about their results, including the need for follow-up via a repeat cervical cancer screen or other diagnostic procedure. Written educational materials could also be offered at this time. Every opportunity

Algorithm Annotations

should be taken to stress the importance of continued regular cervical cancer screening with all women eligible for screening. An opportune time to reinforce this message with women exists during results notification.

Supporting evidence is of class: R

22. Repeat Cervical Cytology Screening and HPV DNA Screening In 6-12 Months

The 2001 Bethesda system of nomenclature for cytology interpretation (See Annotation #29 "Evaluate Patient Education Needs and Discuss Patient Risk Factors/Respond to Patient Questions and Concerns/Notify Patient of Results and Follow-Up Recommendations") includes an evaluative component describing the adequacy of the specimen. This component is further subdivided into two categories:

- Satisfactory for evaluation
- Unsatisfactory for evaluation

Because this guideline recommends that cervical cancer screening may be performed on an every one- to three-year basis, this work group is also recommending that any cervical cancer screen reported as unsatisfactory for evaluation should be repeated no sooner than eight weeks after the initial cytology screen but before twelve months.

If a reasonable effort to obtain a cervical specimen results in continued "absence of endocervical cells", the cytology report should be considered normal and need not be repeated more frequently than the standard recommendation. In those patients who are postmenopausal and whose cytology specimens are limited by the "absence of endocervical cells," such cervical cancer screenings need not be repeated more frequently than the standard recommendation (*ACOG, 2003; Solomon, 2002*).

Supporting evidence is of class: R

24. Patient Age 21-29 or 3 Years Post-Onset of Sexual Activity?

The ACS recommends annual cervical cancer screening for this group of patients. ACOG recommends a longer interval (every 2 years or at the discretion of the clinician and patient) when three consecutive negative cervical cytology screenings have been achieved.

25. Perform Cervical Cytology Screening

For information on how to perform cervical cytology screening, see Annotation #14.

26. Cervix Normal?

A normal looking cervix is defined in any standard medical text. The presence of eversion and/or Nabothian cysts does not constitute an abnormality in this context. If a lesion is grossly visible, cervical cytology alone does not constitute adequate evaluation; biopsy with or without colposcopy should be done.

27. Cytology Specimen Satisfactory for Lab Interpretation?

See Annotation #17, "Cytology Specimen Satisfactory for Lab Interpretation?"

28. Cytology Normal?

See Annotation #19, "Cytology Normal?"

29. Evaluate Patient Education Needs and Discuss Patient Risk Factors/Respond to Patient Questions and Concerns/Notify Patient of Results and Follow-Up Recommendations

Women who have many risk factors have a greater need to be screened, but do not need to be screened more frequently as long as their prior cervical cancer screenings have been normal (Goldie, 1999; Maiman, 1993; Mandelblatt, 1989; Peters, 1986; Singer, 1975; U.S. Preventive Services Task Force, 2003; USPHS & IDSA, 1999). Below is a table of risk factors.

The HIV-positive female has a much higher risk of developing cervical cancer and therefore should be screened annually.

Women should be notified of cervical cancer screening results in a manner that is mutually agreeable to the provider and patient. The authoring work group strongly recommends contacting all patients with the results of their cervical cancer screening results, whether normal or abnormal. In certain circumstances, state/regional laws may regulate the manner by which a patient is contacted with results of laboratory testing. Contact your state/regional health department for more information.

At the time of results notification, a natural opportunity exists for counseling and education specific to the patient's needs. Women whose cervical cancer screening results are abnormal should receive additional information about their results, including the need for follow-up via a repeat cervical cancer screen or other diagnostic procedure. Written educational materials could also be offered at this time. Every opportunity should be taken to stress the importance of continued regular, periodic cervical cancer screening with all women eligible for screening. An opportune time to reinforce this message with women exists during results notification.

Risk Factors

Relative Risks (Case Control Studies) for Cervical Cancer by Specific Risk Factor:	
RR = relative risk	
HIV:	RR = very high
Moderate dysplasia on cervical cancer screen within past five years:	RR = very high
Intercourse within 1 year of menarche:	RR = 26
Intercourse under the age of 16 years:	RR = 16
No prior screening:	RR = 10
HPV (depending on subtyping):	RR = 2.5 - 30
Six or more lifetime sexual partners:	RR = 5
Low socioeconomic class:	RR = 5
Race (African-American vs. Caucasian):	RR = 2.5
Smoking:	RR = 2
Oral contraceptive use:	RR = 1.2 - 1.5
Barrier contraception:	RR = 0.6
<p>Note: A relative risk of 1.0 would indicate no increased probability of negative outcome, whereas RR of less than 1.0 means an actual protective effect may be present. RR of 10 means a tenfold increase. Overall risk for reproductive age non-hysterectomized American women to develop cervical cancer is about one in 5200 per year, or 0.02%.</p>	

Algorithm Annotations

Patient Communication

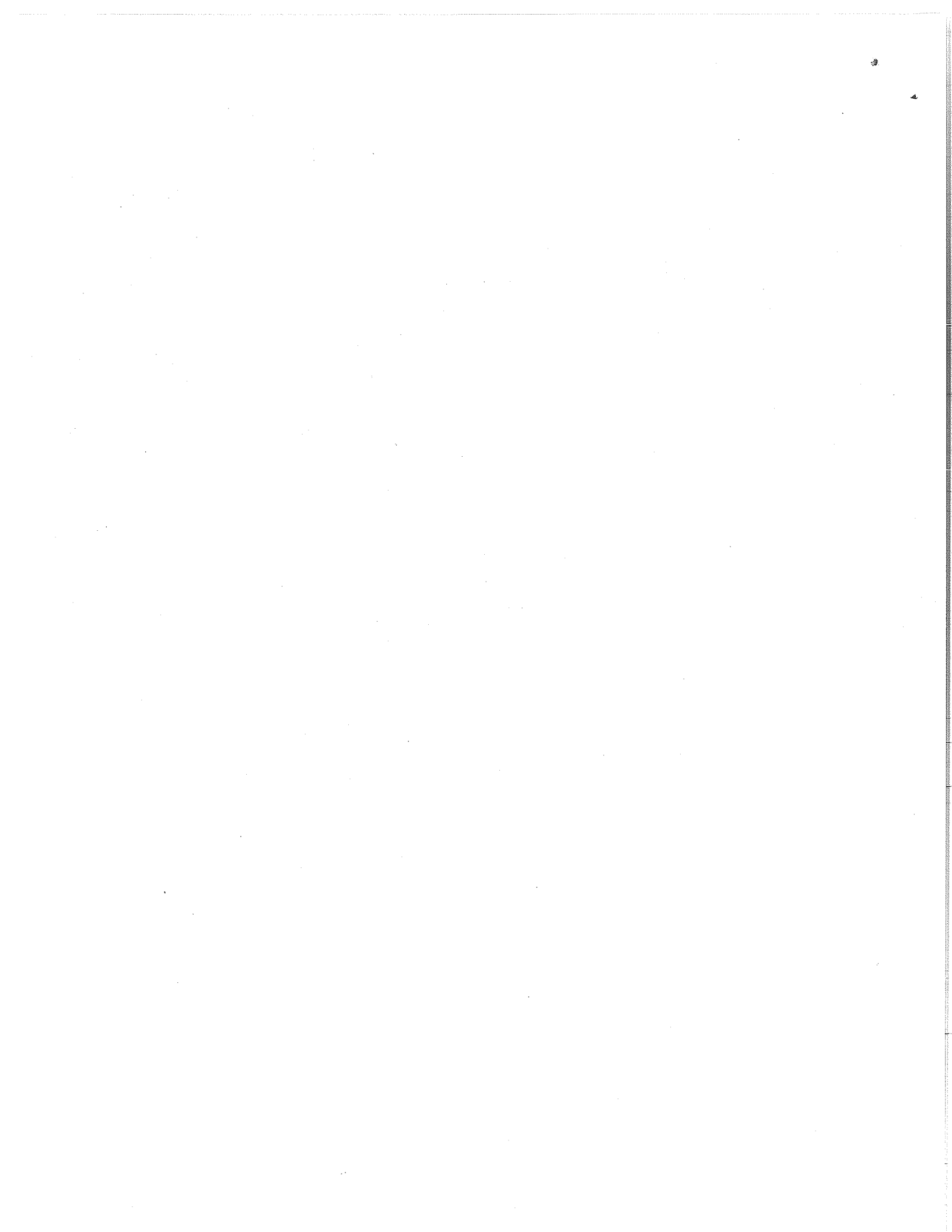
Reminder postcards, letters, and telephone calls are integral components of a cervical cancer screening initiative:

- Communication tools to inform women of cervical cancer screening results
- Explanations of next steps necessary to further diagnose abnormalities
- Reminders regarding completing appropriate tests and/or examinations
- Routine reminders for periodic cervical cancer screening

Supporting evidence is of classes: C, D, M, R

30. Repeat Cytology Screening

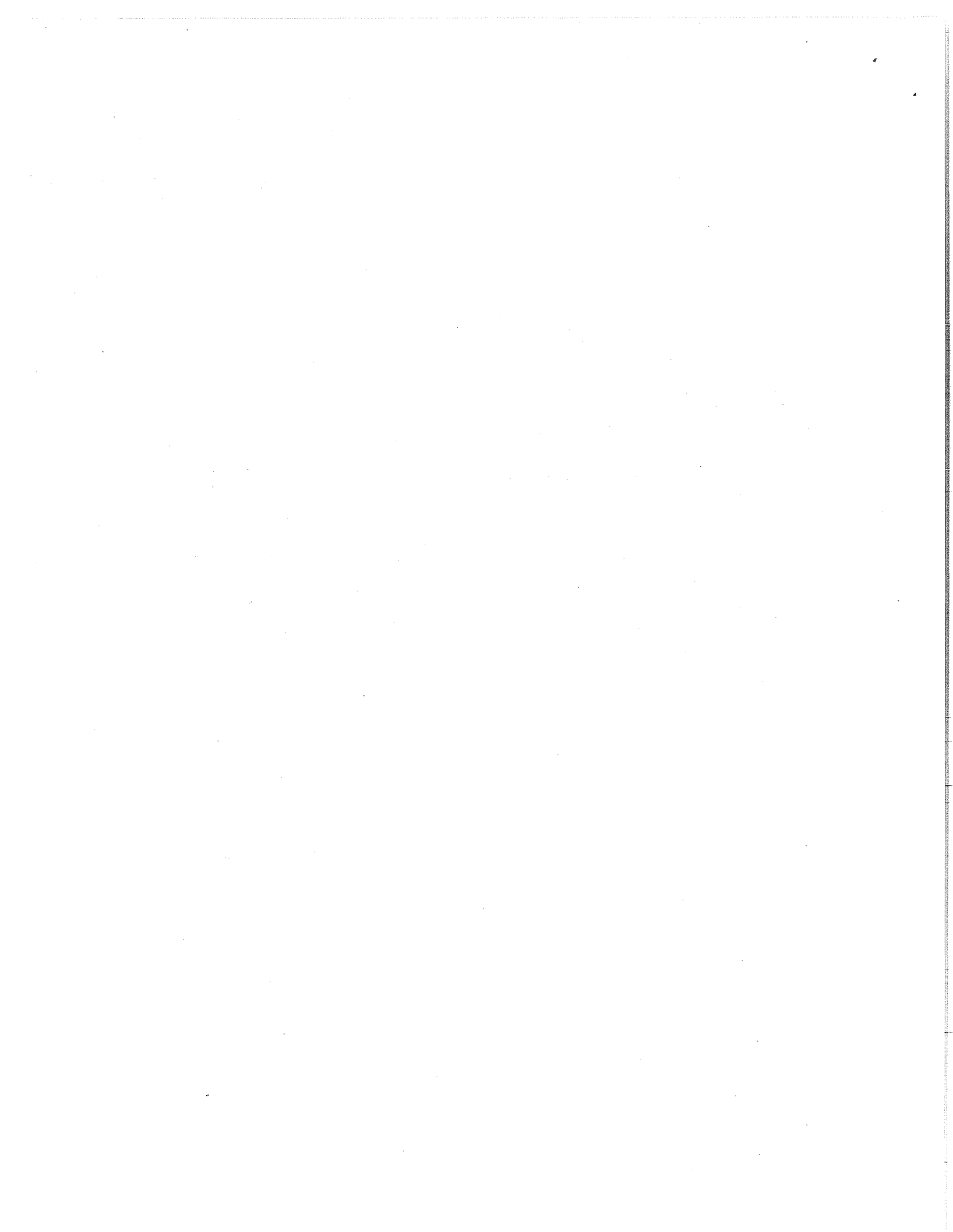
For information on screening adequacy and frequency, see Annotation #22, "Repeat Cervical Cytology Screening and HPV DNA Screening in 6-12 Months."



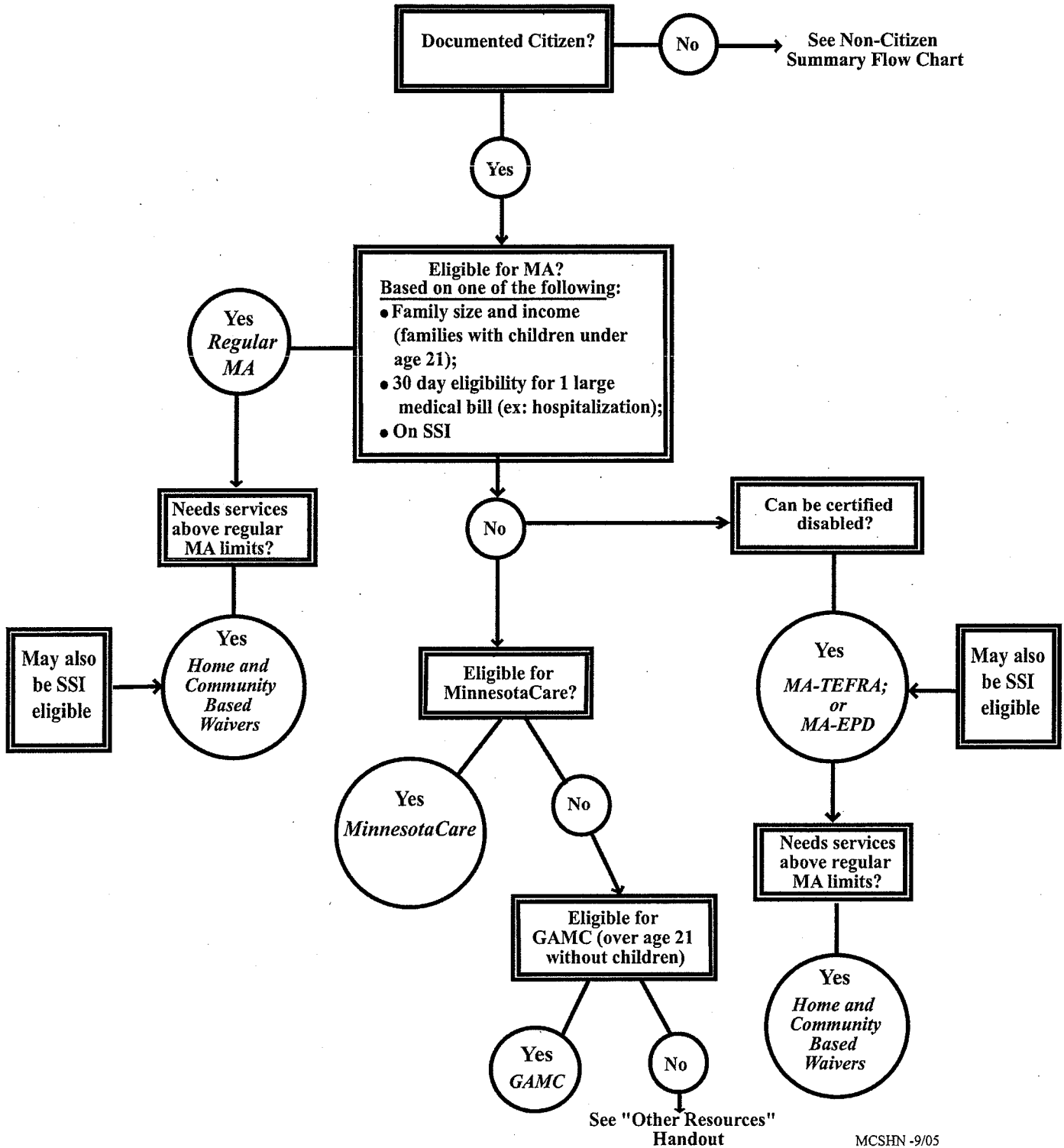
Appendix C

Who Pays? Taking the MAZE Out of Funding. Funding Flow Chart Non-Citizen Summary

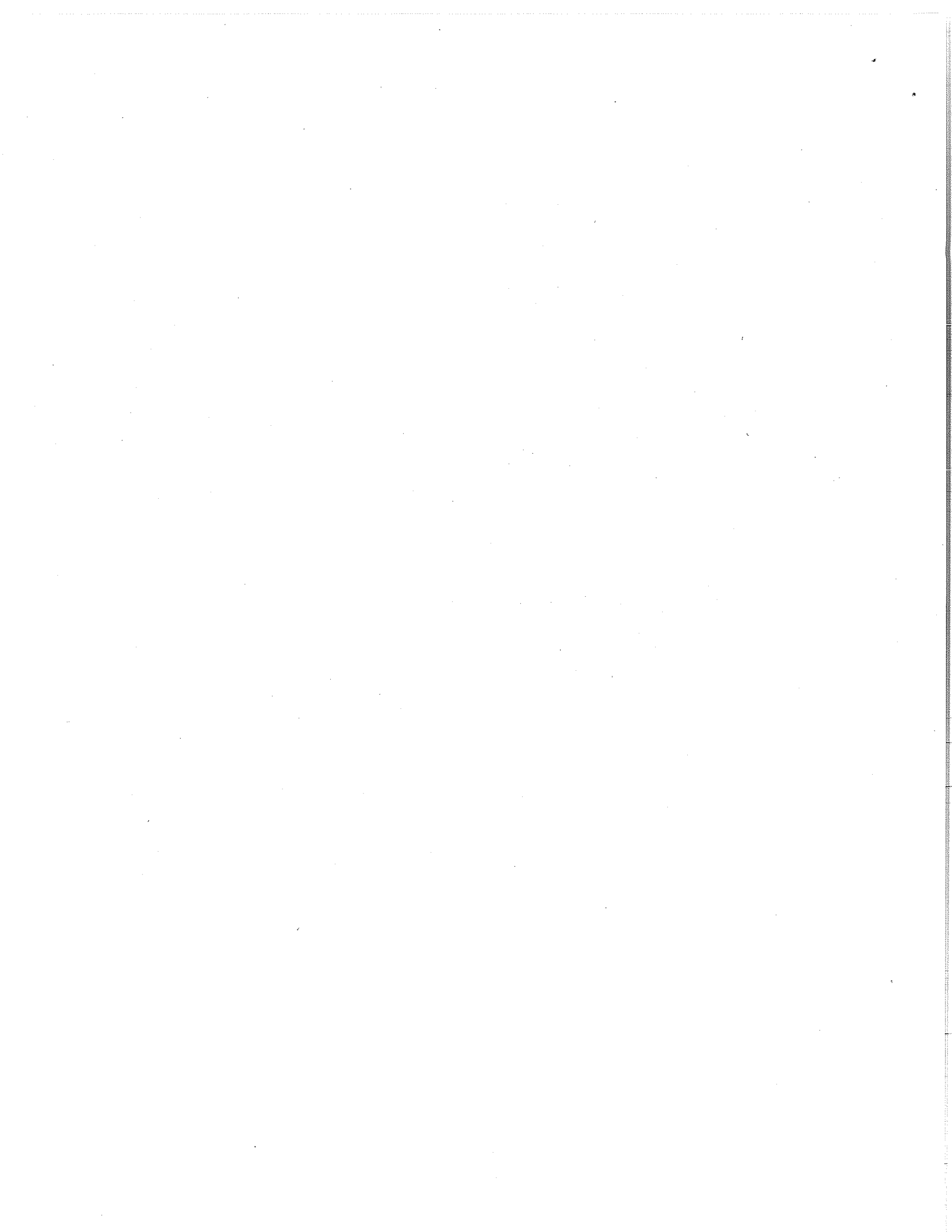
Source: Minnesota Children with Special Health Needs. Who Pays? Taking the MAZE Out of Funding. (Tools. Noncitizen Summary.) September 2005.
<http://www.health.state.mn.us/divs/fh/mcshn/mcshn.html>.



FUNDING FLOW CHART



MCSHN -9/05

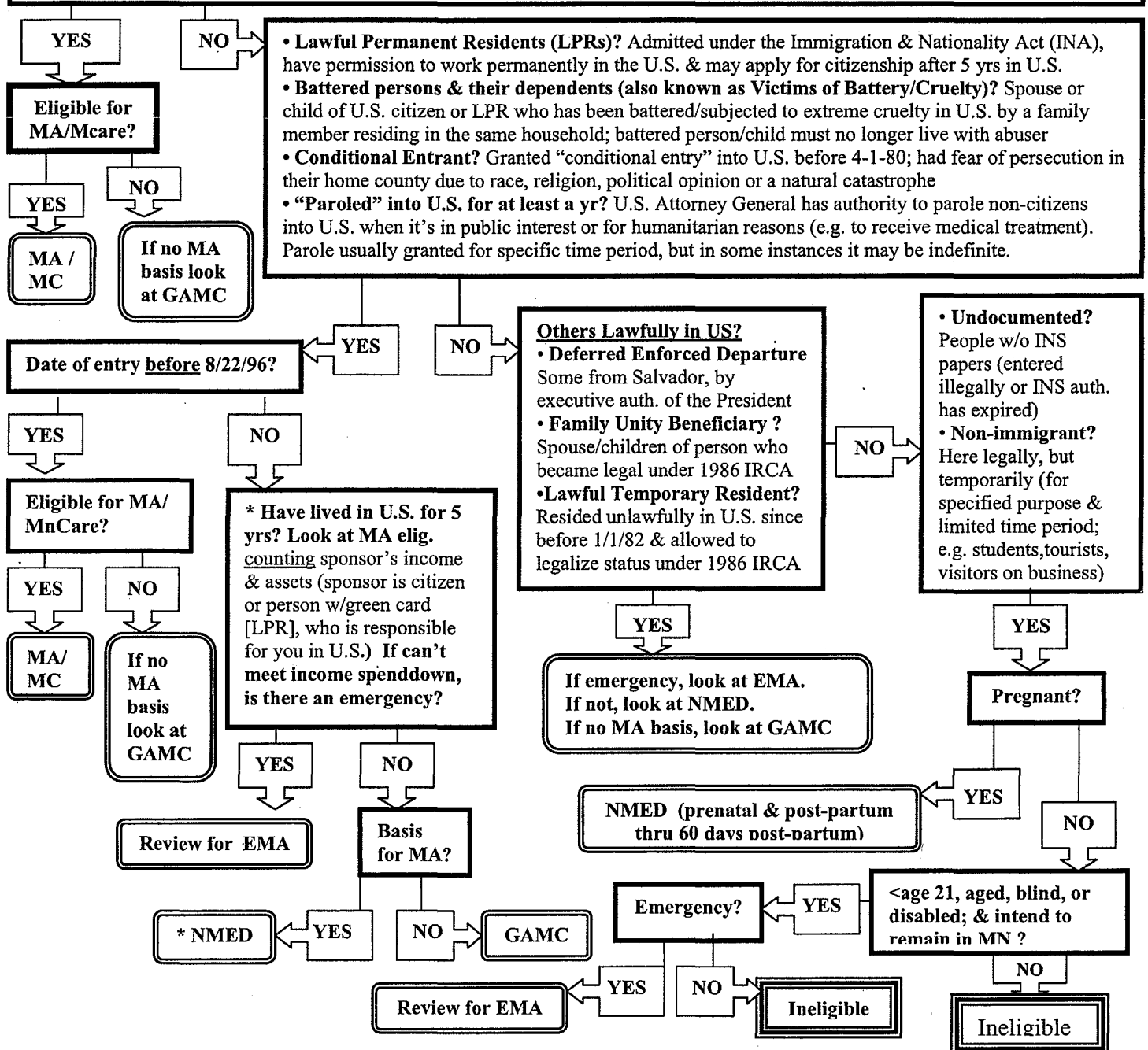


NON-CITIZEN SUMMARY

Non-citizen eligibility depends on a person's immigration status, date of entry into the U.S. and their sponsor's income, if applicable. All non-citizen applicants must provide proof of their status. Public benefits for non-citizens is complicated, involving both immigration & public benefits law. To learn about a specific situation, talk to a lawyer who knows both types of law. * See Reverse

*** Qualified Non-Citizens (QNC):**

- **Amerasian** Children of Vietnamese mothers & American fathers born in Vietnam 1/1/62-1/1/76
- **Persons fleeing persecution** (Coming to U.S. to get away from danger from the government of their home country (only **some countries**, not all): **Refugee** - Status set before entering the U.S.; or **Asylee** - Status set after entering U.S.; or **Applicant for Asylum** - Deportation withheld while application pending with INS [New INS name is BSIC (Bureau of Citizenship & Immigration Services)]
- **Canadian born with at least 50% American Indian blood** and depending on which program eligibility is being determined, may also include adopted children with at least 50% Indian blood
- **Honorably discharged US veterans or those on active military duty in armed forces** – includes spouses & unmarried dependent children; armed forces includes Army, Navy, Air Force, Marine Corps or Coast Guard (does not include National Guard services)
- **Cuban/Haitian Entrant:** Paroled into U.S. as a "Cuban or Haitian entrant", or those who have applied for asylum or who the INS has started exclusion or removal actions. Other Cubans/Haitians who do not meet these criteria may be refugees, Lawful Permanent Residents, undocumented, etc.



Government Benefits for Non-Citizens

{Reference refers to location in Minn. Health Care Programs manual}

▲ Further explanations related to flowchart on reverse side:

Qualified Non-Citizens {0906.03.03}:

- If ineligible non-citizen & sponsor signed new affidavit of support –I-864 (Filed on/after 12-19-97), the sponsor's & sponsor's spouse's income & assets are counted, until the client becomes a citizen or is credited with 40 work quarters of work where Social security taxes were taken out of client's paycheck, leaves the U.S., dies, etc. The sponsor's income is counted even if the sponsor never gives the client any money.
- Look at sponsor's income & assets to determine if can meet a MA spend-down before looking at EMA. If client can meet a spend-down, there is not eligibility for EMA.
- Exclusions: Sponsor's income is not counted for Refugees & Asylees, EMA, EA, EGA, EMSA.
- 2 Exceptions to counting sponsor's income, if client is a family-based immigrant:
 - Battered – Parent or child has been battered/subjected to extreme cruelty by their spouse or child's parent. Sponsor's income also not counted if client was abused by a relative living in the household, if the spouse/child's parent consented to the abuse. If asking for benefits based on the abuse of a child, parent must show they did not participate in the abuse. The sponsor still has the legal duty to support the parent/child. Exception lasts for 12 months; can be extended if the abuse has been recognized in a court order (including an Order for Protection) or in an earlier decision of the INS. The county Dept. of Human Services decides if the benefits being sought are related to the abuse.
 - Poverty – No food/no shelter (If counting the sponsor's income & assets would make client go hungry or become homeless, then only the amount the sponsor gives the client is counted).

Date of entry on/after 8/22/96 & have lived in U.S. for 5 yrs: If no, eligibility is determined under the original status for 5 yrs. from the date of adjustment to LPR regardless of the original date of entry. After 5 yrs., the LPR criteria is applied. {0906.03.03.05}

NMED: Need to cooperate with INS to adjust their status to a qualified status {0906.03.05}

▲ Other Information:

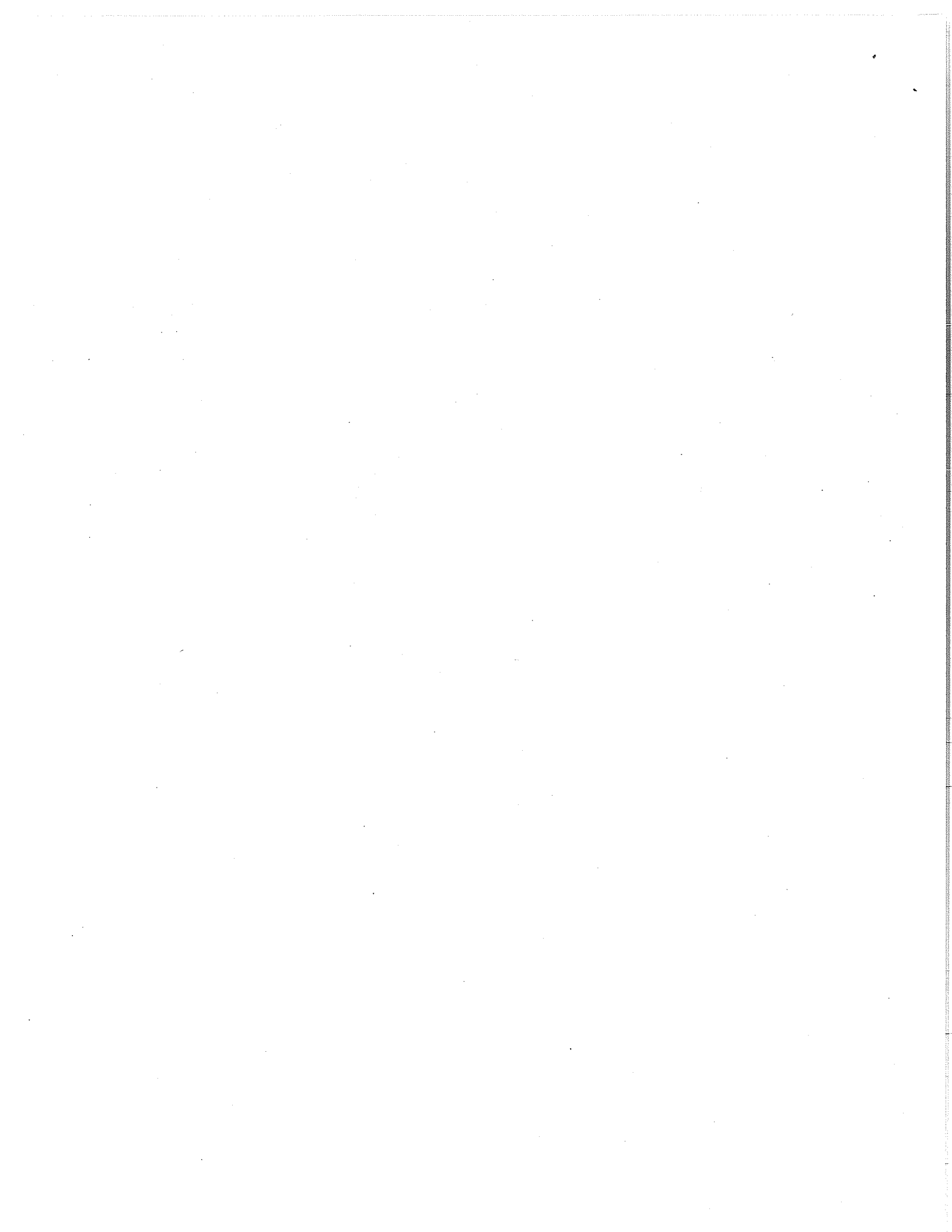
- **Non-Citizens who are considered US citizens:** Puerto Rico, US Virgin Islands, American Samoa, Guam, District of Columbia, Northern Mariana Islands.
- **All low-income immigrants should be able to get some federal benefits. Benefits not requiring a particular immigration status include:** Most emergency medical benefits; Non-cash emergency disaster relief; School lunch/breakfast programs; Public health immunizations; Testing & treatment for communicable diseases; Head Start; WIC (Women, Infants & Children)
- **Regarding Reporting Requirements:** The State Dept. of Human Services (DHS) uses the "SAVE" (Systematic Alien Verification for Entitlements) program; it's purpose is to verify immigration status, not to report it. County DHS agencies are required to do certain things: (1) Not verify your immigration status if your status is not relevant to your eligibility for benefits (ex: applying only for EMA); and (2) Stop asking about your immigration status when you say you can't or don't want to verify your status; and (3) Define "knowledge" (of your unlawful presence) very narrowly. County agencies won't usually have enough information to make a report to the BCIS. County agencies report directly to DHS rather than to the DCIS. The state DHS (not the county agencies), then reports to the BCIS.
- Getting public benefits can make it harder to get a green card for some, but not all immigrants. This depends on the person's immigration status.
- A fact sheet called "Becoming A U.S. Citizen" is available from www.LawHelpMN.org

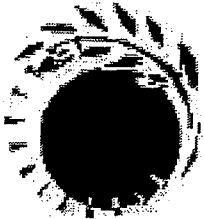
[SOURCE: Flow chart adapted from following sources: (1) DHS internal noncitizen flowchart 7/15/03; (2) "Coalition for Citizenship", Southern Minn. Regional Legal Services, 6/19/03; & (3) "Public Benefits for Non-Citizens", Fact Sheet I-2, Ed. for Justice, Minneapolis Legal Aid, 2004]

MCSHN 8-30-05

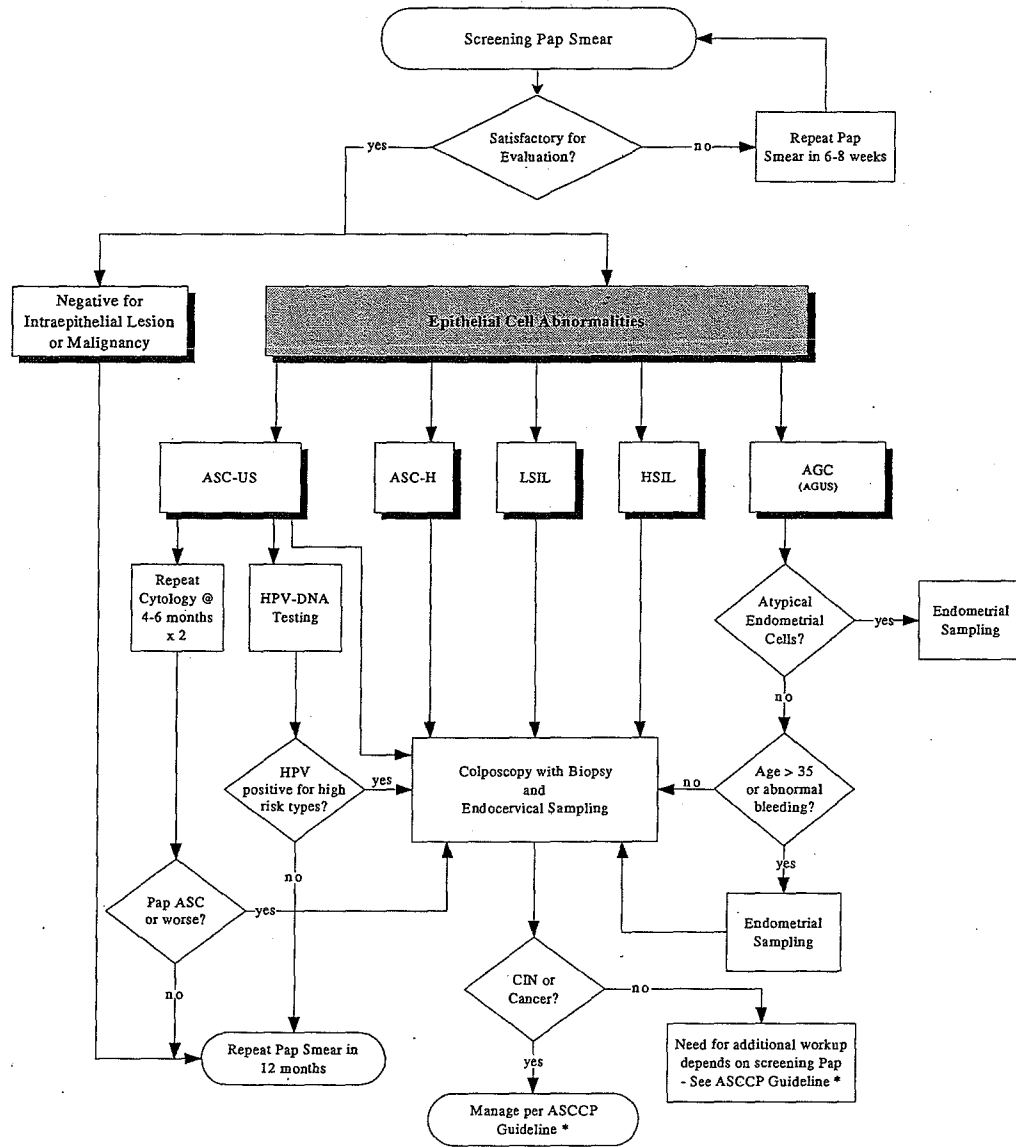
Appendix D

Screening Pap Smear Abnormalities





14.1 Screening Pap Smear Abnormalities: Minimum Recommended Follow-up



* American Society for Colposcopy and Cervical Pathology (ASCCP) Consensus Guidelines can be found in JAMA, 2002, 287:2120-2129 at <http://jama.ama-assn.org/issues/v287n16/full/jst10013.html> or at <http://www.asccp.org/consensus/cytological.html> and includes more detailed management for special circumstances including adolescents, pregnant women and post-menopausal women.

Revised 12/02



14.1 Screening Pap Smear Abnormalities (continued):

MBCCCP RECOMMENDED EVALUATION-SUMMARY:

Program Standards for the Initial Management of an Abnormal Screening Pap Smear

(Based on the ASCCP Algorithms from the Consensus Guidelines)

Note:

These recommendations were developed for the Minnesota Breast and Cervical Cancer Control Program by a multi-disciplinary medical advisory group. MBCCCP recognizes that care must be tailored to the specific needs of each patient. These recommendations will serve as a program standard for monitoring screening and follow-up.

ASC-US

Atypical Squamous Cells of Undetermined Significance

Repeat cytology at 4–6 month intervals x2. If a result is ASC or worse, go to colposcopy with biopsy and endocervical sampling. If both results are negative, repeat Pap smear in 12 months; or
Test for HPV-DNA (if liquid-based cytology or co-collection available). If HPV is negative for high-risk types, repeat Pap smear in 12 months. If HPV is positive for high-risk types, do colposcopy with biopsy and endocervical sampling; or
If not testing for HPV-DNA and concerned about patient compliance or if pathologic qualifiers such as “favor dysplasia” are present, do colposcopy with biopsy and endocervical sampling.

ASC-H

Atypical Squamous Cells: Cannot Exclude High-grade SIL

Do colposcopy with biopsy and endocervical sampling.

LSIL

Low-grade Squamous Intraepithelial Lesions

Do colposcopy with biopsy and endocervical sampling.

HSIL

High-grade Squamous Intraepithelial Lesions

Do colposcopy with biopsy and endocervical sampling.

AGC (AGUS)

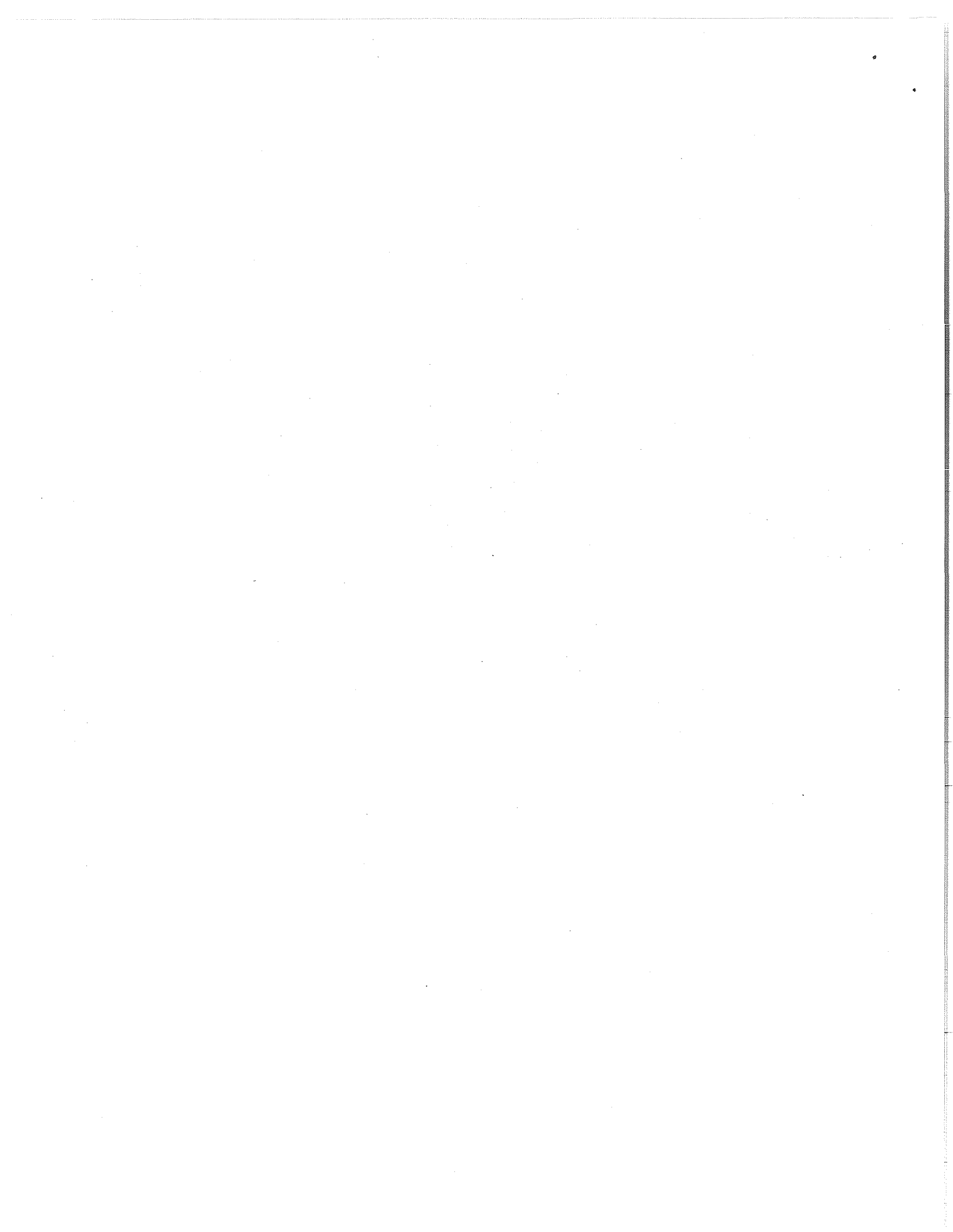
Atypical Glandular Cells:

- *Atypical Endometrial Cells* Do endometrial sampling.
- *(Other) All Subcategories* Do colposcopy with biopsy and endocervical sampling.

If older than 35, or if having abnormal bleeding, do endometrial sampling.

Appendix E

Medicare Reimbursement Rates – Cervical Cancer Screening and Diagnosis (Effective January 1, 2005)



Medicare Reimbursement Rates – Cervical Cancer Screening and Diagnosis (Effective January 1, 2005)

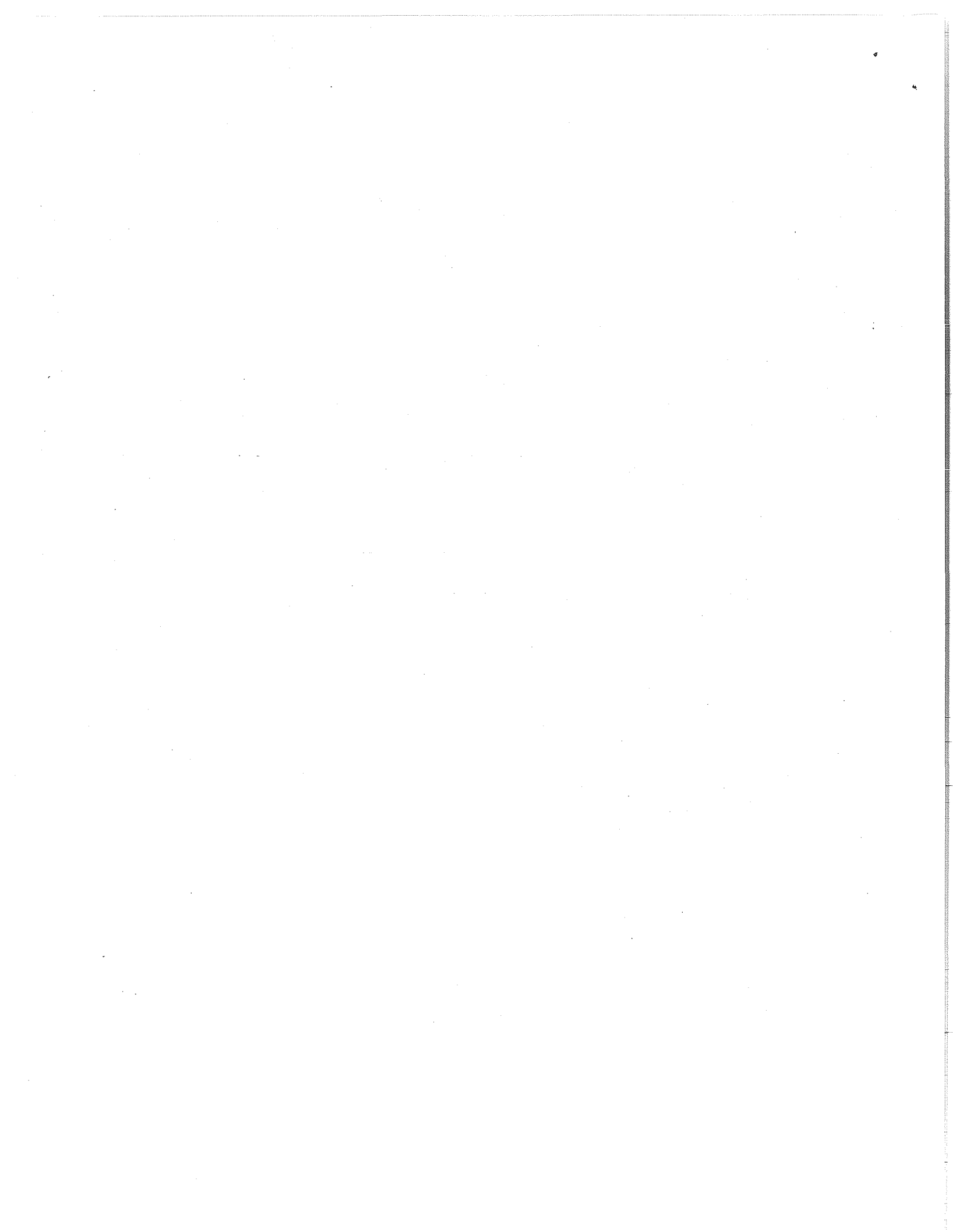
CPT Code	Service Description	Allowable Rate
Office Visit		
99201	New Patient (new to clinic), problem focused exam (10 minutes)	\$35.90
99202	New Patient (new to clinic), expanded problem focused exam (20 minutes)	\$63.77
99203	New Patient (new to clinic), detailed exam (30 minutes)	\$94.58
99211	Established Patient, problem focused exam (5 minutes)	\$21.23
99212	Established Patient, problem focused exam (10 minutes)	\$37.78
99213	Established Patient, expanded problem focused exam (15 minutes)	\$51.75
99214	Established Patient, detailed exam (25 minutes)	\$81.11
Office Consultation		
99241	Office consultation, problem focused (15 minutes)	\$49.04
99242	Office consultation, expanded problem focused (30 minutes)	\$89.46
99243	Office consultation, detailed (40 minutes)	\$119.35
Pap Smear (conventional)		
88150, 88164, P3000	Screening Pap Smear	\$14.76
Pap Smear (liquid-based, thin layer prep)		
88142, G0123	Screening Pap Smear	\$14.76
Pap Smear/Pathology with Additional Interpretation		
88141*, G0124*	Cytopathology, cervical or vaginal; requiring interpretation by physician	\$21.86
P3001*	Screening Pap Smear, requiring interpretation by physician	\$21.86

* Providers will only be reimbursed for one Pap Smear/Pathology with interpretation CPT code per Screening Pap Smear.

CPT Code	Service Description	Allowable Rate
HPV Test		
87621	HPV Test – Amplified Probe Technique (High Risk Panel)	\$49.04
Colposcopy & Associated Pathology (Only visit charge 99213 may be billed in addition)		
57420	Colposcopy of entire vagina, with cervix if present-Without Biopsy (this cpt code is for vaginoscopy for patients with an ABNORMAL PAP and who have had a hysterectomy)	\$114.08
57421	Colposcopy of entire vagina, with cervix if present-With Biopsy(s) (this cpt code is for vaginoscopy for patients with an ABNORMAL PAP and who have had a hysterectomy)	\$156.45
57452	Colposcopy - Without Cervical Biopsy	\$107.51
57454	Colposcopy - With Cervical Biopsy(s) and Endocervical Curettage	\$154.18
57455	Colposcopy - With Cervical Biopsy(s)	\$143.68
57456	Colposcopy - With Endocervical Curettage	\$135.43
88305	Surgical Cervical Pathology, Global	\$101.17
88305-TC	Surgical Cervical Pathology, technical component	\$59.90
88305-26	Surgical Cervical Pathology, professional component	\$41.27
Endometrial Biopsy & Associated Pathology		
For a Sage Screening Program covered AGC Pap (Atypical Glandular Cells) (Only visit charge 99213 may be billed in addition)		
58100	Endometrial Biopsy	\$110.30
88305	Surgical Pathology, Global	\$101.17
88305-TC	Surgical Pathology, technical component	\$59.90
88305-26	Surgical Pathology, professional component	\$41.27

Appendix F

Minnesota Health Care Programs. Income and Asset Limits effective 7/1/05 through 6/30/06



Minnesota Health Care Programs

Income and Asset Limits effective 7/1/05 through 6/30/06

PDF version 

MinnesotaCare	Gross Monthly Income Limit per Family Size				Over Income	Asset Limit
	One	Two	Three	Additional Members		
Adults without children	\$1,396	\$1,872	Not eligible	Not eligible	Not eligible	\$10,000 for one \$20,000 for two or more
Pregnant ¹ women and children under 21	\$2,194	\$2,942	\$3,690	Add \$748 per member	Not eligible ²	No asset limit
Parents, legal guardians, foster parents and relative caretakers of children under 21	\$2,194	\$2,942	\$3,690	Add \$748 per member	Not eligible if gross annual income is over \$50,000	\$10,000 for one \$20,000 for two or more

Medical Assistance (MA)	Net Monthly Income Limit per Family Size					Over Income	Asset Limit
	One	Two	Three	Four	Additional Members		
Pregnant women	N/A ¹	\$2,942	\$3,690	\$4,438	Add \$748 per member	Eligible with a spenddown ³	No asset limit
Infants under age 2	\$2,233	\$2,994	\$3,755	\$4,516	Add \$761 per member		
Children ages 2-18	\$1,197	\$1,605	\$2,013	\$2,421	Add \$408 per member		
Children ages 19-20	\$798	\$1,070	\$1,342	\$1,614	Add \$272 per member		
Parents with children under 19	\$798	\$1,070	\$1,342	\$1,614	Add \$272 per member	Eligible with a spenddown ³	\$10,000 for one \$20,000 for two or more
Elderly, blind and people w/disabilities	\$798	\$1,070	\$1,342	\$1,614	Add \$272 per member	Eligible with a spenddown ³	\$3,000 for one \$6,000 for two plus \$200 for each dependent
Medical Assistance for Employed Persons with Disabilities	No income limit. Must have earned income of at least \$65/month. Enrollees pay a premium based on income.						\$20,000 per enrollee

Medicare Savings	Net Monthly Income Limit per Family Size				Over Income	Asset Limit

Program	One	Two	Three	Four	Additional Members		
Qualified Medicare Beneficiaries	\$818	\$1,090	\$1,362	\$1,634	Add \$272 per member	Not eligible	\$10,000 for a single person \$18,000 for two or more
Service Limited Medicare Beneficiaries	\$977	\$1,303	\$1,629	\$1,955	Add \$326 per member		
Prescription Drug Program	\$977	\$1,303	\$1,629	\$1,955	Add \$326 per member		

General Assistance Medical Care (GAMC)	Gross Monthly Income Limit per Family Size					Over Income	Asset Limit
	One	Two	Three	Four	Additional Members		
Full Medical Benefits	\$599	\$803	\$1,007	\$1,211	Add \$204 per member	Not eligible	\$1,000 per household
Hospital Only Coverage	\$1,396	\$1,872	\$2,348	\$2,824	Add \$476 per member	Not eligible	\$10,000 for one \$20,000 for two or more

1. Pregnant women are counted as family size of 2
2. Some children may remain enrolled in MinnesotaCare if they meet a specific exemption
3. Spenddown: If your income is more than the program limits, Medical Assistance may still pay part of your medical bills with a spenddown. A spenddown is like an insurance deductible. You pay for part of your medical expenses and Medical Assistance will pay the rest.

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Appendix G

2005 Poverty Guidelines for the 48 Contiguous States and the District of Columbia



2005 Poverty Guidelines for the 48 Contiguous States
and the District of Columbia

Poverty Persons in family unit	Guideline
1.....	\$9,570
2.....	12,830
3.....	16,090
4.....	19,350
5.....	22,610
6.....	25,870
7.....	29,130
8.....	32,390

For family units with more than 8 persons, add \$3,260 for each additional person.

Source: Department of Health and Human Services. Annual update of HHS Poverty Guidelines. Federal Register, Vol. 70, No. 33, February 18, 2005, pp. 8373-8375. Available online at: <http://aspe.hhs.gov/poverty/05fedreg.htm>

