HIV/AIDS Clinical Guidelines for Adults

This guideline is designed for general use for most adult patients, but may need to be adapted to meet the special needs of a specific patient as determined by the patient's provider.

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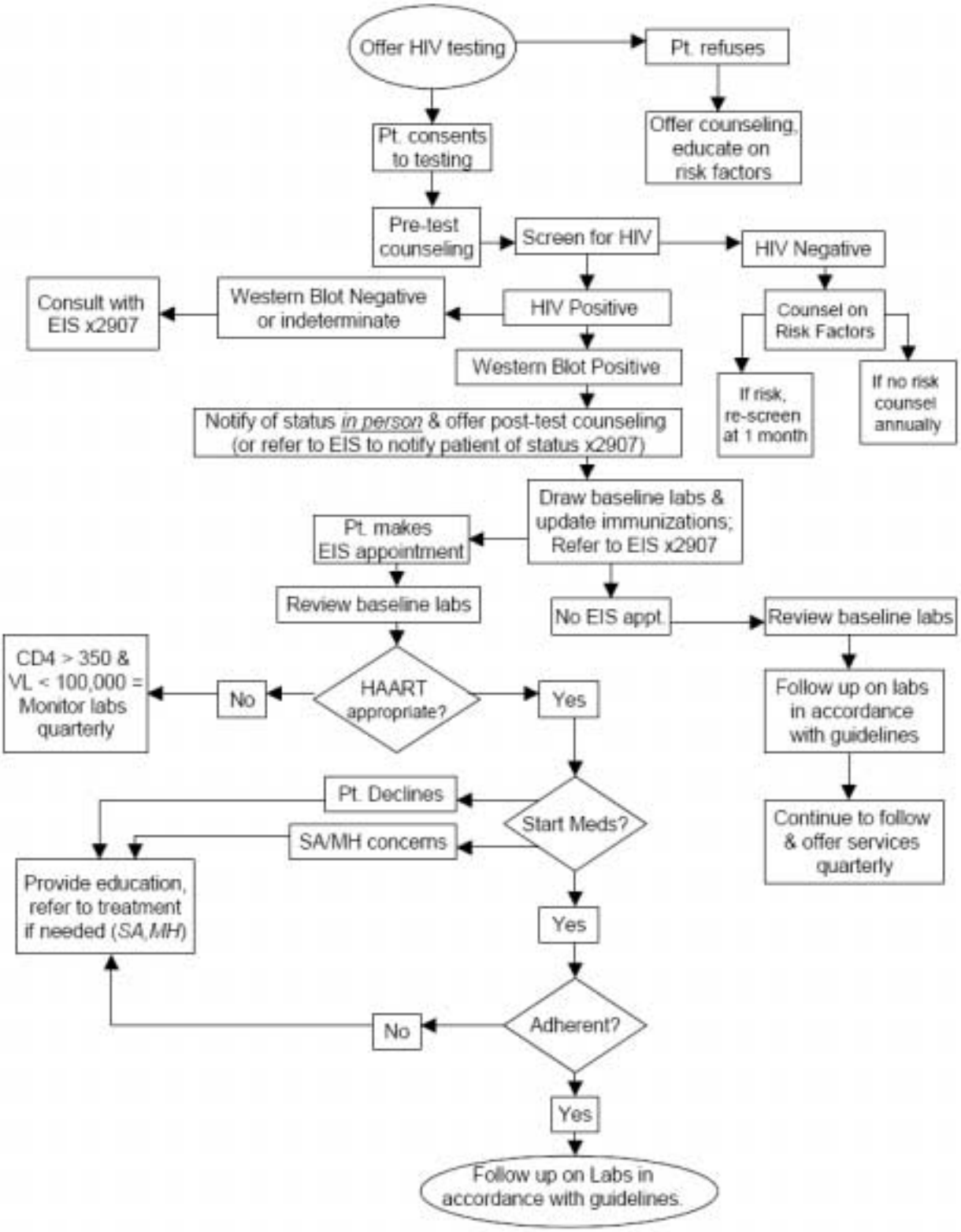
Algorithm for HIV Screening & Care



**EIS clinic serves all HIV+ clients on referral. Clinic visits and labs are scheduled quarterly, as needed and by patient request. EIS clinicians & SCF Care Coordinator review immunizations, make ancillary referrals for retinal and oral health exams and to other community services.*

This guideline is designed for general use for most patients but may need to be adapted to meet the special needs of a specific patient as determined by the patient's provider.

2. Introduction

Since the 1980's when HIV/AIDS was first diagnosed in the United States, the incidence of HIV/AIDS diagnoses in Alaska have progressively increased. As of December 2006, 1,145 cumulative cases, for all races, of HIV/AIDS were identified across Alaska, 370 of whom are known to have died. While the population of Alaska Natives and American Indians living in Alaska (according to the 2000 Census) was only 15.6%, Alaska Natives and American Indians represented 22% of the total HIV/AIDS cases in Alaska in 2006.

Risk factors for HIV/AIDS infection for all races in Alaska include injection drug use (IDU) (14% of cases), men who have sex with men (MSM) (48%), MSM and IDU (7%), heterosexual contact (14%), transmission through transfusion or transplant (1%), hemophilia (1%), perinatal transmission (1%), and unspecified exposure category (15%). Although there is no cure for HIV/AIDS, if properly managed, patients can lead a healthy, normal lifestyle for many years. (Retrieved June 19, 2007 from: http://www.epi.alaska.gov/bulletins/docs/b2007_06.pdf)

The Centers for Disease Control (CDC) estimates that 252,000 to 312,000 people (24-27%) of the 1 to 1.2 million estimated HIV/AIDS cases in the U.S. are infected with HIV but unaware of their positive status. The CDC revised their testing recommendations for adults and adolescents in 2006 which are published in the September 22, 2006 issue of the Morbidity and Mortality Weekly Report (MMWR). (Retrieved June 19, 2007 from: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm).

Revised guidelines include the following recommendations:

1. Every person in the U.S. between the ages of 13 and 64 being seen in a health care facility should be given the opportunity to know their HIV status. All patients being seen for treatment of TB should have an HIV test. Patients attending STD clinics for screening or treatment should have HIV testing offered. If a patient is deemed high risk for acquiring HIV screening should be annually or more frequently as risks dictate. If testing proves to have a less than 0.1% yield of positive HIV screens, such screening would be no longer warranted.

2. Screening for HIV should always be voluntary. It is recommended that the patient always be given information on the HIV testing and be given the opportunity to "opt out." Consideration should be given to incorporating the consent for HIV testing into the consent for general medical care, again stressing that the test should not be done without the oral or written consent of the patient. Results should be communicated in the same manner as other diagnostic/screening tests. If a screening test and confirmatory Western Blot returns positive, referral into HIV care and extensive post test counseling should be offered.

3. All pregnant women in the U.S. should be screened for HIV, using the same "opt out" formula. A second screen during the third trimester may be considered for all pregnant women and is recommended for women who are deemed to be at increased risk for acquisition of HIV. If HIV status is unknown at the time of delivery, a rapid HIV screen should be made available to the woman, again on an "opt-out" basis. If an infant is born to a woman with unknown HIV status, a rapid HIV test should be administered and and antiretroviral prophylaxis for the infant initiated based upon the result. (The screen is antibody based and would indicate the positive status of the mother.)

For the full test of the MMWR publication *Revised Recommendations for HIV Testing of Adults, Adolescents and Pregnant Women in Health-Care Settings*, see http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm.

3. Management of HIV/AIDS Infected Adults (Standards of Care)

See chart below.

Management of HIV-Infected Adults

Refer to:www.AIDSinfo.nih.gov for continuously updated information.

Recommended HIV Guidelines

A. New Patients:

The following information should be discussed and documented at the 2nd or 3rd visit:

- HIV knowledge base/education needs (refer for education)
- HIV risk factors/transmission prevention strategies (discuss at every visit, refer for risk reduction counseling)
- HIV history: CD4, Viral loads, Opportunistic Infections (OI)
- Antiretroviral history/adherence issues (discuss at every visit; refer for adherence counseling)
- Mental health history (refer as appropriate)
- Substance use history (refer as appropriate)
- Hepatitis A, B, C history
- STD history

Immunizations & Screenings *(see section F below)*

Laboratory

- HIV EIA and western blot
- CD4 lymphocyte count and CD4 %
- HIV bDNA 3rd generation
- Genotyping
- CBC/differential and platelets
- Chem 7
- LFTs
- Toxo IgG/CMV IgG
- RPR
- Hepatitis A, B, and C serologies
- Fasting Lipids

B. Primary Prevention of Opportunistic Infections*

Condition	Indication	Recommendation
Pneumocystis carinii	CD4 <200 *or* esophageal candidiasis	***1st choice:*** TMP-SMX 1 DS (800/160mg) daily
		Alternatives: TMP-SMX 1 SS (400/80mg) daily Dapsone 100 mg by mouth, daily Aerosolized pentamidine 300 mg every month Atovaquone 1500 mg by mouth, daily
Mycobacterium *tuberculosis*	PPD reaction >= 5mm *or* Prior PPD + without TX *or* Contact with case of active TB	***INH-sensitive TB:*** *Refer to MMWR December 17, 2004 Treating Opportunistic Infections Among HIV-Infected Adults and Adolescents Table 6—Treatment of AIDS-associated opportunistic infections among adults (Mycobacterium tuberculosis) (http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5315a1.htm.)*
		INH-resistant TB: See above recommendations or consult State Health Department.
		Multi-drug (INH and Rifampin) resistant TB: Consult State Health Department.
Toxoplasma gondii	Toxo IgG negative	Counsel on prevention, repeat at CD4 <100
	Toxo IgG + *and* CD4 <100	***1st choice:*** TMP-SMX 1 DS (800/160mg) daily
		Alternative *(all 3 combined)*: Dapsone 50 mg by mouth, daily + Pyrimethamine 50 mg by mouth, weekly + Leucovorin 25mg by mouth, weekly
Mycobacterium *Avium* complex	CD4 <50	Azithromycin 1200 mg by mouth each week *or* Clarithromycin 500 mg by mouth B.I.D.
Cytomegalovirus	Negative anti-CMV	Transfuse only negative anti-CMV blood
	Positive anti-CMV	Annual fundoscopic exam
	CMV+ with CD4<50	Fundoscopic exam every 6 months

****Consider discontinuing prophylaxis for MAC, PCP and TOXO when CD4 is above cut-off for >3-6 months***

C. Indications for Initiating HAART (Highly Active Antiretroviral Therapy

Clinical Category:	*CD4+ T Cell Count:*	*Plasma HIV RNA:*	*Recommendation:*
Symptomatic (AIDS, severe symptoms)	Any value	Any value	Treat
Asymptomatic, AIDS	<200 cells/uL	Any value	Treat
Asymptomatic	>200 cells/uL but <350 cells/uL	Any value	Treatment should be offered, with consideration of pros and cons.
Asymptomatic	>350 cells/uL	>100,000 copies/mL	Most clinicians recommend deferring therapy; some will treat.
Asymptomatic	>350 cells/uL	<100,000 copies/mL	Defer therapy.

D. Patients on HAART: Recommended Laboratory Schedule

Class/Agent	Adverse Event	Laboratory	Indication/Screening
NRTIs	Hepatic steatosis/ Lactic acidosis	Serum electrolytes; lactate, if symptoms	Fatigue, muscle aches, GI symptoms, dyspnea
Zidovudine (AZT or Retrovir)	Cytopenia	CBC/diff	Baseline, at 4-6 wks & every 3-6 months
	Hepatotoxicity	LFTs	Baseline & every 12 months*
Didanosine (DDI or Videx EC)	Pancreatitis	Serum amylase/ lipase	Baseline and with symptoms of abdominal pain
	Cytopenia	CBC/diff	Baseline & every 12 months
	Hepatotoxicity	LFTs	Baseline & every 12 months*
Lamivudine (3TC, Epivir); Stavudine (d4T, Zerit); Abacavir (ABC, Ziagen)	Cytopenia	CBC/diff	Baseline & every 12 months
	Hepatotoxicity	LFTs	Baseline & every 12 months*
Tenofovir (TDF or Viread)	Renal toxicity	BUN/Creatinine	Baseline & every 3-6 months
NNRTIs: Nevirapine (NVP or Viramune)	Hepatotoxicity	LFTs	Baseline, prior to dose escalation, 2 wks. after escalation, 3 months, then every 6 months
Efavirenz (EFV or Sustiva)	Hyperlipidemia/Lipo dystrophy	Fasting Lipid Profile	Baseline, 3 months, 6months, then every 12 months, if stable
PIs Indinavir (IDV or Crixivan) Saquinavir (Invirase) Ritonavir (RTV or Norvir) Nelfinavir (NFV or Viracept) Fosamprenavir (Lexiva) Lopinavir/Ritonavir (Kaletra) Tipranavir (Aptivus) Atazanavir (Reyataz)**	Hyperlipidemia/Lipo dystrophy	Fasting Lipid Profile	Baseline, 3 months, 6 months, then every 12 months, if stable
	Hepatitis/ Hepatotoxicity	LFTs	Baseline, 3 months, then every 6 months*
	Cytopenias	CBC/diff	Baseline, 4-6 wks, then every 12 months
	Diabetes Mellitus	Fasting glucose	Baseline, then every 12 months
Indinavir (IDV or Crixivan)	Nephrolithiasis	Urinalysis/creatinine	Baseline, every 6 months or if hematuria/flank pain
**Atazanavir (Reyataz)	Increased bilirubin	LFTs	Baseline, 1 month, watch for symptoms of pancreatitis

May need to monitor more frequently with Hepatitis co-infection

E. All Patients: Recommended Laboratory Schedule

Laboratory	Timetable
CD4 , HIV BDNA* **If viral load detectable despite good adherence, consider genotyping**	every 3-4 months
CBC/DIFF, LFTs * ** Chem 7 * Fasting Lipids** RPR, STD screen (see guidelines) including HEP C if negative	every 12 months

****also 2-8 wks after initiation or change of therapy***
*****every 12 months or as suggested in Section D (above)***

F. Screenings and Immunizations Recommended Schedule

Immunization	Frequency
Influenza	Every year
Pneumovax	Repeat in 5 years x 1 (if CD4<200at initial vaccination, repeat when >200)
Tetanus *(consider **Tdap** if >2yrs since last Tetanus)*	Every 10 years
Hepatitis A vaccination per Hepatitis A guidelines	see Hepatitis A guidelines
Hepatitis B vaccination per Hepatitis B guidelines	See Hepatitis B guidelines
Screening	**Frequency**
TST (tuberculin skin test)	Every year
Cervical Pap smear	Every 6 months x 1 year after initial HIV diagnosis; if normal then every year. If **CD4<200 every 6 months** even if normal
Dilated retinal exam & Dental exam	Every year. Every 6 months with CD4<50 (retinal every 6 mos. if CMV IgG+ and CD4<50)
Hepatitis A	HAV-antibody screen initially, then vaccinate per Hepatitis A guidelines
STD screenings	Every year + p.r.n. (Chlamydia, Gonorrhea, Hepatitis B (unless vaccinated and HbSab +), Hepatitis C, Syphilis)
Cytomegalovirus, IgG	Every year unless + *(once +, not needed again)*
Toxoplasma, IgG	Every year unless + *(once +, not needed again)*

4. Scope of EIS Provider Services

A. Referral to EIS:

1. Patients will be referred to EIS services upon diagnosis. Some patients prefer to receive care from their primary provider, if this is the case, they should still be referred to EIS and providers may contact EIS at any time for consultation.
2. Referrals are made by calling the EIS Case Manager at 729-2907 or the SCF/EIS Case Manager at 729-4209. If possible, it is requested that an *Alaska Native Medical Center (ANMC) Referral and Consultation Form* (copy at end of guidelines—below) be completed and faxed to the EIS Case Managers at 729-3952.
3. Prior to referral to EIS: If possible, the patient should have initial labs drawn and be updated on immunizations (see section 3 above: Management of HIV/AIDS Infected Adults—Screenings & Immunizations Section).

B. Appointments: Patients must have a scheduled appointment with an EIS clinic provider in order to be seen. Exceptions are made for patients in urgent need of EIS medical care or who can not be accommodated by the normal clinic schedule. A patient may be scheduled in miscellaneous clinic within Internal Medicine at the discretion of the EIS Case Managers (729-2907 or 729-4209).

1. EIS clinic hours in the Internal Medicine Clinic:
   Mondays from 9:00 a.m. – 12:00 noon
   Thursdays from 1:00 p.m. – 4:00 p.m.

2. Local patients (Anchorage and ASU rural) can contact the SCF EIS Case Manager at 729-4209 to schedule an appointment; rural patients (outside ASU) can contact the EIS Case Manager at 729-2907 to schedule. Appointments can also be scheduled by contacting the Internal Medicine Clinic at 729-1500.

3. For new patient appointments, the EIS or SCF Case Manager will initiate the EIS Clinic patient intake form at first phone contact and schedule the first “new” appointment available in the EIS clinic. New patients will be scheduled for one-hour appointments as available.

C. Telephone Consults for Patient Treatment

1. Providers may consult with and exchange medical information with other providers in the interest of coordinating medical treatment to shared clients.

2. The consulting provider should document the following information in the patient’s medical record:

   a. Date of consult

b. Name of medical provider consulted
c. The general context of the information shared

D. Triage for Walk-in or Call-in patients

1. HIV/AIDS patients may experience acute problems. Providers will consult with an Internal Medicine Nurse, an EIS Case Manager (CM) or EIS Provider in clinic before sending an unscheduled patient to clinic. Providers can call the EIS main number: 729-2907.
2. If patient presents during EIS clinic times, they will be given the next available open appointment.
3. Add-on patients:
   a. The triage nurse makes an appointment for the patient in Signature, prints a health summary and PCC+ when the patient checks-in to clinic.
   b. The triage nurse notifies the assigned EIS clinic nurse of the add-on patient.
   c. The patient's name is added to the patient and provider lists at the front desk.
4. A patient may be double-booked into the clinic at the discretion of the EIS CM, EIS Provider or clinic nurse.
5. If a patient can not fit into that day's clinic schedule, they will be triaged to Urgent Care, Primary Care, Miscellaneous Clinic or the next EIS clinic, depending on the urgency of the problem.
6. For additional information on Triage based on the client's present condition, see *Triage for HIV/AIDS infected Clients*, section 5 below.

E. Contacting EIS Providers for urgent conditions

1. Providers can be contacted at the EIS main number, 729-2907.
2. If after hours or the provider is not available due to travel, vacation, etc. the patient will have access to the Primary Care Clinic, Urgent Care Clinic or Emergency Department.
3. If a patient is admitted, providers can request a consult with an EIS provider by calling the EIS main number (729-2907) or faxing consult information to 729-3952.

5. Triage for HIV/AIDS Clients

a. Patients with the following conditions should be referred directly to the Emergency Department (ED):

1. Patients with acute chest pain lasting more than five minutes and unrelated to respiration.
2. Patients with traumatic injuries such as suspected fractures, lacerations requiring sutures, full thickness burns, or partial thickness burns more than one percent BSA. Any trauma should be referred to the ED.
3. Known or suspected victim of assault
4. Patients with acute neurological problems such as head injuries, seizure activity, loss of consciousness, or unexpected changes in level of consciousness
5. Sudden onset SOB and severe difficulty breathing with or without wheezing, facial swelling and rash (i.e. suspected severe drug reactions)
6. Any other condition for which patient requires emergency medical care

b. Patients with the following conditions should be referred to ED or PCC (Primary Care Center):

1. Patients with CD4 counts less than 100 who present with new onset of fever, worsening malaise, cough or SOB
2. Patients with nausea and vomiting and/or diarrhea with postural changes
3. Suspected shingles (varicella zoster)
4. Symptoms of acute infection including central line infections or localized infections with redness, induration or purulent discharge;
5. Acute abdominal pain
6. Sudden visual deficit or appearance of “floaters” in a patient with CD4 < 50
7. Suspected medication reactions, rash without respiratory compromise
8. Other acute illnesses

When referring a patient to ED, the triage nurse calls the ED triage nurse to notify them of the patient coming.

6. CMV Testing Prior to Blood Transfusion

The following precautions are taken to decrease the possibility of transmission of CMV to an immunosuppressed HIV/AIDS patient:

1. CMV status will be checked on all HIV/AIDS patients who are clinically in need of a blood transfusion.

2. Check CMV IgG status on patient problem list or call the EIS providers at 729-2907 for last screening results. If status is not shown, send for lab verification. This can be done STAT.

3. If the patient is CMV antibody negative, order CMV-negative blood products when a transfusion is required.

4. If unable to get an antibody screen prior to crossmatch, get a CMV antibody screen while doing a crossmatch and order CMV negative blood for the transfusion. Once the CMV status is known, make appropriate adjustments to the type of blood ordered.

5. If CMV+ is documented in the problem list of the patient's chart, it is unnecessary to order CMV negative blood for subsequent transfusions.

7. References

1. Summary of HIV Infection in Alaska, 1982-2006; State of Alaska Epidemiology Bulletin, No. 06, March 2, 2007. Retrieved from: http://www.epi.hss.state.ak.us/bulletins/docs/b2007_06.pdf.

2. Revised Recommendations for HIV Testing of Adults, Adolescents and Pregnant Women in Health Care Settings. MMWR: September 22, 2006. 66(RR-14): 1-17. Retrieved from: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm.

3. Up-to-date DHHS HIV/AIDS guidelines: www.AIDSinfo.nih.gov

Alaska Native Medical Center

Referral and Consultation Form

TO:

- ❑ Clinic Name: _____ Fax: _____
- ❑ Village or Field Clinic: _____ Fax: _____

FROM:

- ❑ Clinic Name: _____ Fax: _____
- ❑ Village or Field Clinic: _____ Fax: _____

Referring Provider: _____

Referring Point of Contact: _____

Point of Contact Phone: _____

NOTE:
Does patient need quarters/housing?
- ❑ YES

Patient's Name: _____ Date of Referral: _____

Age: _____ DOB or Chart Number: _____ Phone: _____

Parent/Legal Guardian (if applicable):
_____

PCP: _____

Please list the reason for the referral and any specific questions or information you want addressed with this referral.

_____

_____

_____

_____

Urgency:

- ❑ Same Day (**IF A MEDICAL EMERGENCY, PROVIDER TO PROVIDER CONTACT IS NEEDED**)
- ❑ Within 1—3 days
- ❑ Within one week
- ❑ Next available appointment
- ❑ Dates in Anchorage: _____

Please fax this form with the PCC to the referring provider and PCP if applicable

Please check any other information included with this referral:

❑ PCIS Form ❑ Treatment Plan ❑ Labs ❑ Progress Notes
❑ Discharge Summary ❑ Initial or Updated Intake Report
❑ Other _____ ❑ Tests Pending _____

Consulting provider to fax PCC and referral form with the comments to referring provider and PCP (if applicable) within 24 hours of patients appointment. Thank you.