Washington State
Department of Social
& Health Services

Research & Data Analysis
Division

Daniel J. Nordlund, Ph.D.
David Mancuso, Ph.D.
Barbara Felver, MES, MPA

In conjunction with

Division of Alcohol &
Substance Abuse

Kenneth D. Stark, Director
Doug Allen, Acting Director
Antoinette Krupski, Ph.D.

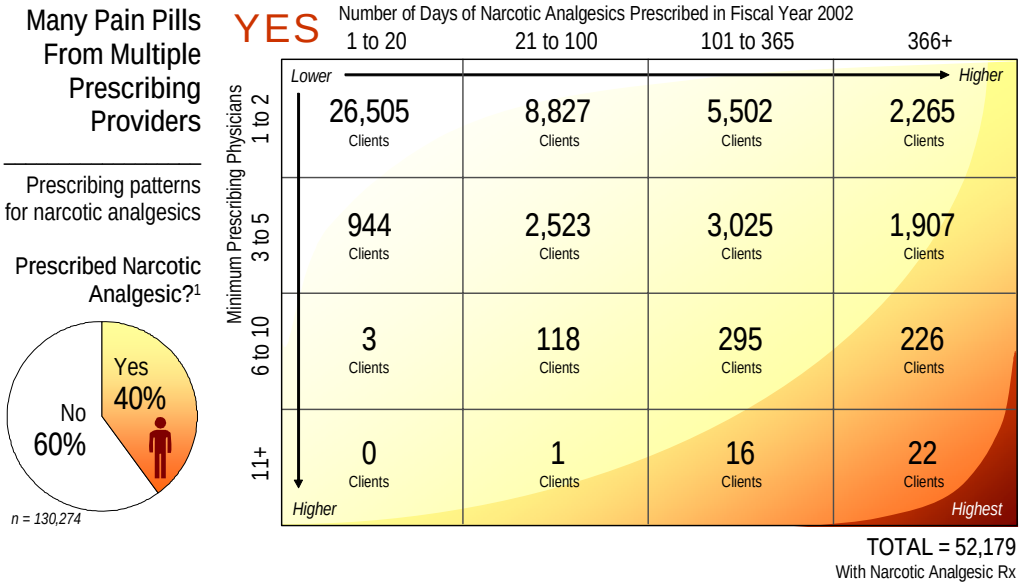
APRIL 2005

Patterns Of Prescription Opiate Use By Aged, Blind, Or Disabled Clients In Washington State

Aged, Blind, Disabled Clients And Prescription Opiates: Areas Of Concern

In a previous study we found that many aged, blind, or disabled clients[1] who are frequent visitors to the hospital emergency room (ER) receive large volumes of prescription narcotic analgesics (opiates).[2] This study sheds light on patterns of prescription opiate use by these clients, including the conditions associated with heavy opiate use, receiving opiate prescriptions from multiple providers, and making frequent ER visits. We find:

- A significant number of aged, blind, or disabled clients receive large volumes of opiates from multiple prescribing providers (see chart below). In Fiscal Year 2002, **at least 2,155 aged, blind, or disabled clients received a total of 366 or more days of opiates prescribed by at least three different providers.**[3]
- It is a concern that **many aged, blind, or disabled clients who receive large volumes of opiates have a clear indication of drug addiction in their medical record** (diagnoses of drug abuse, dependence, or drug-induced psychosis).
- Clients with **headaches, poisonings, tobacco abuse, sprains, strains, and superficial injuries receive large volumes of opiates and are frequent ER visitors.** These conditions may signal **increased risk** of opiate addiction.
- By comparison, **clients who have cancer, HIV/AIDS, arthritis, and diseases of the spine also receive large volumes of opiates, but are less frequent ER visitors.** Although some of these clients have indications of drug addiction, opiate use patterns among these clients appear to be more appropriate.



[1] The study population includes 130,274 clients eligible for medical assistance in the aged, blind, disabled, presumptively disabled, or General Assistance-Unemployable categories in FY 2002. Clients dually eligible for Medicare were excluded. Forty percent (52,179) of these clients received a narcotic analgesic prescription in FY 2002.

[2] Mancuso, David, Ph.D., Nordlund, Daniel J., Ph.D., Felver, Barbara E.M. (2004). *Frequent Emergency Room Visits Signal Substance Abuse and Mental Illness*. Washington State DSHS, Research and Data Analysis Division, Olympia, WA. Updated June 2004.

[3] Of the 399,036 opiate prescriptions provided in FY 2002 to the 130,274 clients in the study, only 101,093 had a provider ID number that identified the actual prescribing provider. The remaining prescription claims contained one of two non-unique provider numbers. Therefore, the count of prescribing providers used in this report is clearly an underestimate. See page 2 for more detail.

Narcotic Analgesic Prescribing Patterns: Four Examples

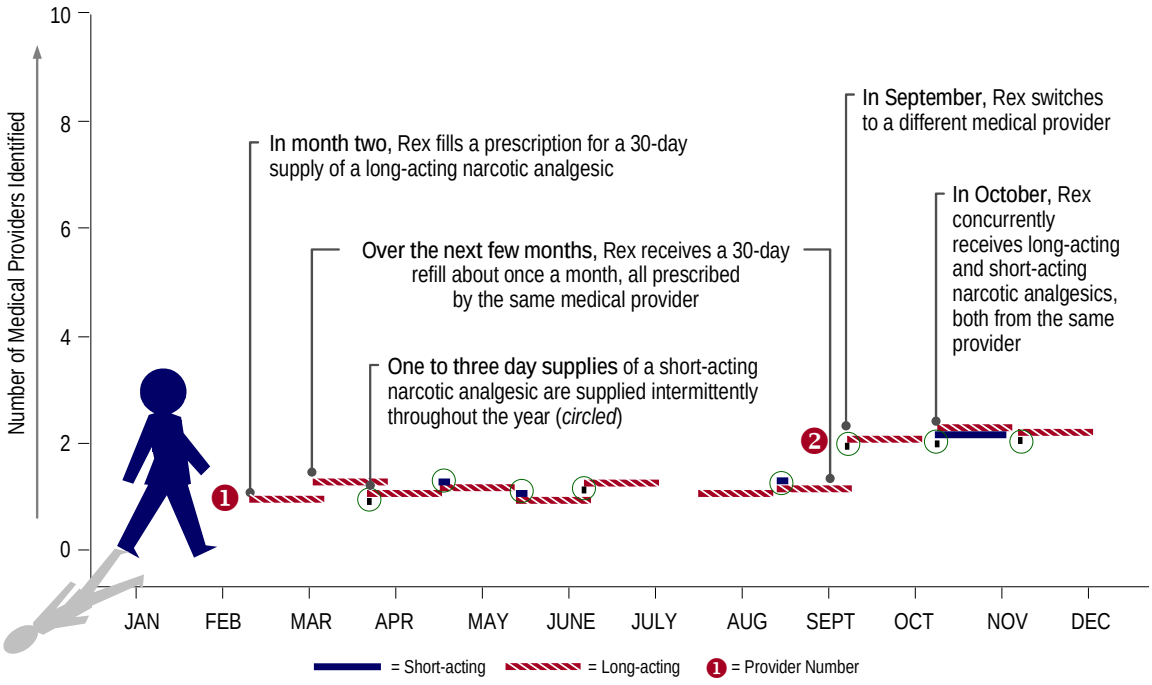
The next four pages illustrate prescribing patterns observed among clients who receive large volumes of opiates, using actual client data for a one-year period. Opiates are a broad class of drugs including morphine, codeine, methadone, hydrocodone (e.g., Vicodin), hydromorphone (Dilaudin), meperidine (Demerol), oxycodone (Oxycontin), fentanyl (Duragesic), propoxyphine (Darvon), and pentazocine (Talwin).

Prescribing providers include emergency room physicians, general practitioners, and other providers. In FY 2002, the 130,274 clients in our study population received 399,036 narcotic analgesic prescriptions. It is important to note that only 101,093 of these narcotic analgesic prescription claims (25 percent of the total) included a unique ID number that identified the individual prescribing provider. The other 297,943 narcotic analgesic claims included one of two non-unique provider ID numbers. In counting the number of prescribing providers per client, we treated each non-unique provider ID number as a single prescribing provider. This method underestimates the true number of prescribing providers for clients who received multiple narcotic analgesic prescriptions with non-unique provider numbers.

In many cases, prescribing patterns are consistent with appropriate use, as in Example 1. In more extreme cases, the patterns suggest varying degrees of "doctor-shopping" and ER "wandering." We call the client "Prescription Rex" or simply Rex. This is not the client's real name.

1. Use As Intended

In this example, Rex does not appear to be "doctor-shopping." He received 386 days of opiates in the year, prescribed by two different providers and filled by a single pharmacy. This client is in his early 50s and has HIV. He did not have an ER visit in the year.



Narcotic Analgesic Prescribing Patterns: Four Examples

2. With Multiple Diagnoses And Five Different Prescribing Providers

In this example, opiate prescribing patterns look more problematic. Rex received 491 days of opiates from five different prescribing providers. These were filled at two different pharmacies.

This client had several diagnoses in his medical claims in the year, including:

- Manic-depression
- Severe malnutrition
- Anemia
- Hypotension
- Bronchitis
- Peptic ulcer
- Irritable bowel syndrome
- Joint pain
- Backache
- Neuralgia
- Leg fracture

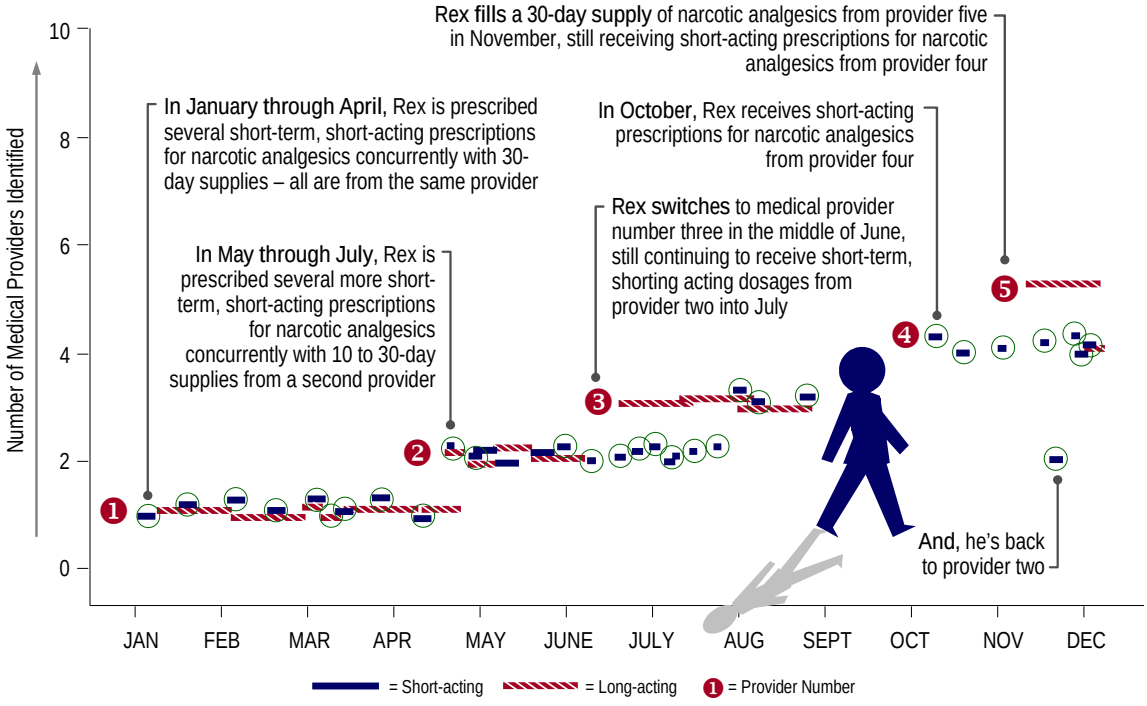
Age**: Late 30s**

Visits to the ER in the year: **1**

Number of prescribing providers: **5**

Days of opiates prescribed in a calendar year: **491**

Pharmacies visited: **2**



Narcotic Analgesic Prescribing Patterns: Four Examples

3. Multiple Providers And Overlapping Concurrent Prescriptions

This client received 1,023 days of opiates from at least nine different prescribing providers. Provider 1 in the chart below represents prescription claims with a non-unique provider number and probably corresponds to several different prescribing physicians.

This client was treated for:

- Sprains
- Contusions
- Headaches
- Joint pain
- A broken clavicle
- Unspecified shoulder and leg injuries
- Lumbago
- Sinusitis
- Bronchitis
- Chronic pancreatitis
- Osteoporosis

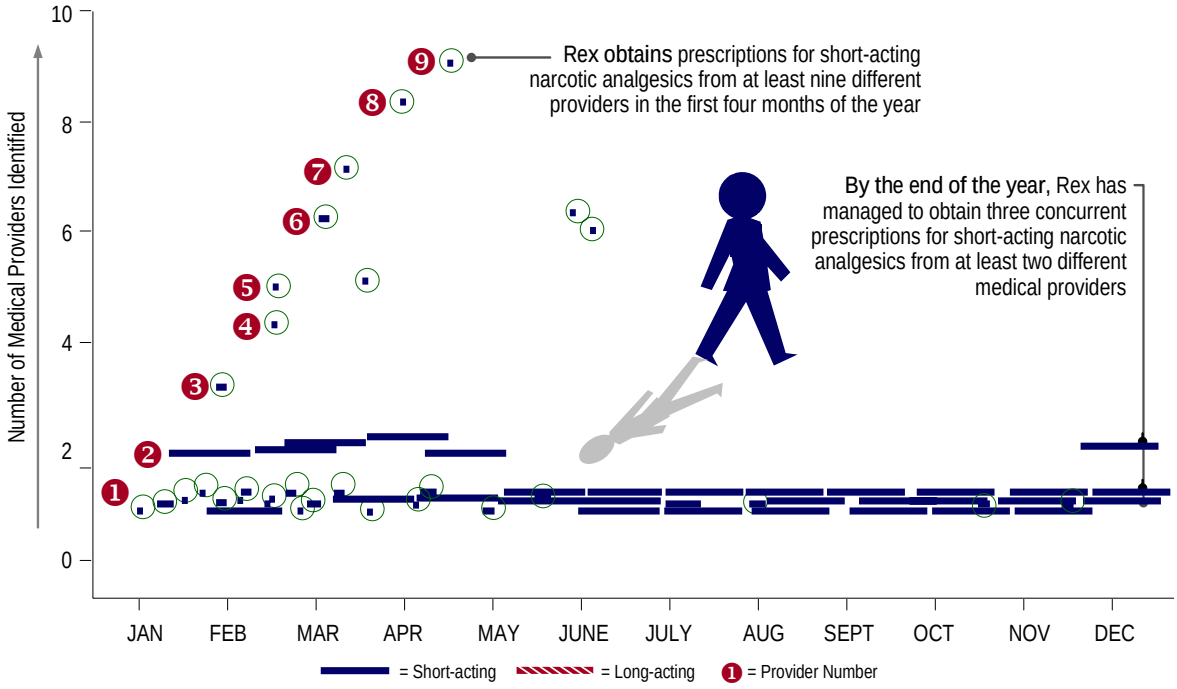
Age: **Late 40s**

Visits to the ER in the year: **20**

Number of prescribing providers: **At least 9**

Days of opiates prescribed in a calendar year: **1,023**

Pharmacies visited: **7**



Narcotic Analgesic Prescribing Patterns: Four Examples

4. The Classic Wanderer

In this example, Rex is wandering all over the map. This client received 361 days of opiates from at least 13 different prescribing providers filled at nine different pharmacies.

This client was treated for:

- Abdominal pain
- Sprains
- Lumbago
- Sciatica
- Unspecified backache
- Carpal tunnel
- Sinusitis
- Urinary tract infection
- Uterine endometriosis

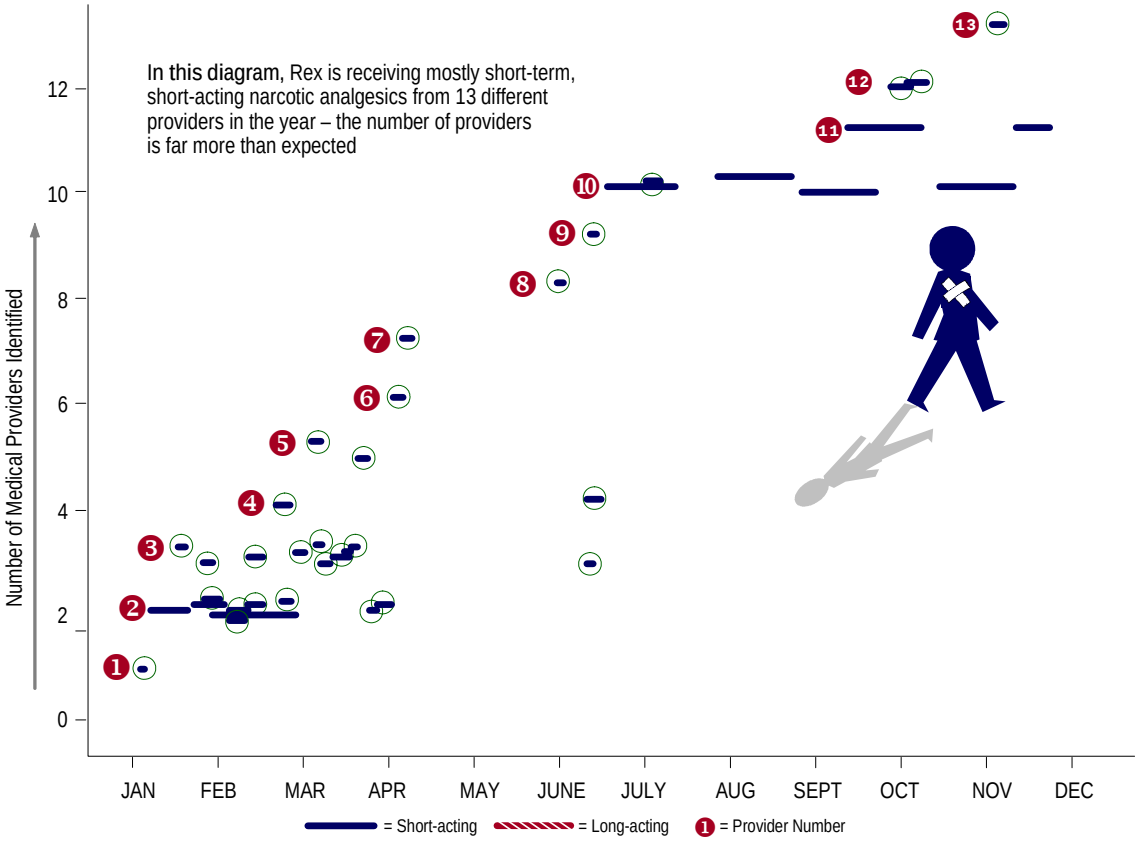
Age: **Mid 40s**

Visits to the ER in the year: **12**

Number of prescribing providers: **At least 13**

Days of opiates prescribed in a calendar year: **361**

Pharmacies visited: **9**



Which Conditions Are Associated With Frequent Opiate Prescriptions?

We next examine how opiate use varies with clients' physical conditions. Conditions were identified using all diagnoses in clients' fee-for-service (FFS) medical claims in Fiscal Year 2002 – whether or not the diagnosis was related to a narcotic analgesic prescription. Clients with multiple conditions are counted in each diagnosis category present in their FFS claims. For example, a client who was treated at one time for a headache and at another time for a fracture would be counted in both diagnosis categories. The technical notes (page 12) provide more detail about the diagnosis categories.

- The **average aged, blind, or disabled client** in the study population received **40 days of opiates** in Fiscal Year 2002.
- As expected, clients with **cancer** (82 to 122 days), **HIV/AIDS** (83 days), **diseases of the spine** (120 days), and **arthritis** (117 days) used large volumes of opiates.
- Of concern is the volume of opiates received by clients with diagnoses of **drug abuse, dependence, psychosis or drug overdose** (medicinal/biologic poisoning). These clients received on average 83 to 95 days of opiates in Fiscal Year 2002.
- Also of note are the days of opiates prescribed for clients with **headaches** (132), **tobacco abuse** (98), **sprains and strains** (93), and **superficial injuries** (83).

Use Of Opiates Varies With Clients' Physical Conditions

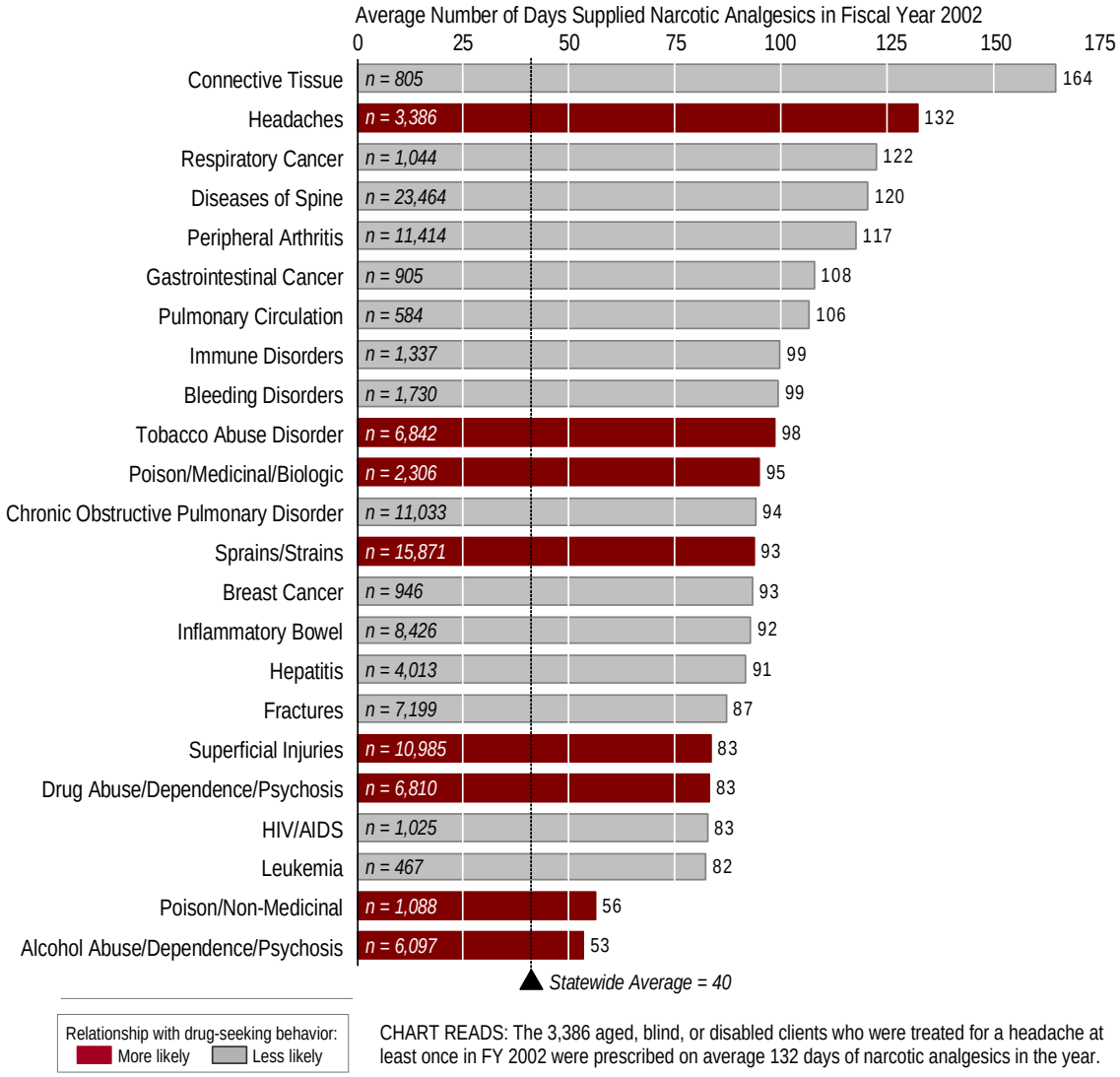


CHART READS: The 3,386 aged, blind, or disabled clients who were treated for a headache at least once in FY 2002 were prescribed on average 132 days of narcotic analgesics in the year.

Which Conditions Are Associated With Multiple Providers?

Receiving opiates from a large number of prescribing providers may indicate doctor shopping or "ER wandering." When we rank aged, blind, or disabled client diagnosis groups by the average number of different prescribing providers per client, conditions more likely to be associated with drug-seeking behavior rise to the top of the chart. Again, because we count non-unique provider ID numbers as a single prescribing provider, we underestimate the average number of prescribing providers per client.

- **The average aged, blind, or disabled client in the study population received an opiate prescription from 0.7 different prescribing providers** in Fiscal Year 2002. The average is less than one because 60 percent of clients did not receive a narcotic analgesic prescription in the year.
- **Aged, blind, or disabled clients with headaches had the largest number of prescribing providers** (2.0 per client per year). Other conditions that might signal drug addiction (tobacco abuse, sprains, strains, and superficial injuries) are also high.
- Aged, blind, or disabled clients with a **clear indication of a drug problem** (drug abuse, dependence, psychosis, poisoning by medicinal or biologic substances) had **twice the average number of providers** prescribing opiates.

Headache Sufferers Rise To The Top Of The List

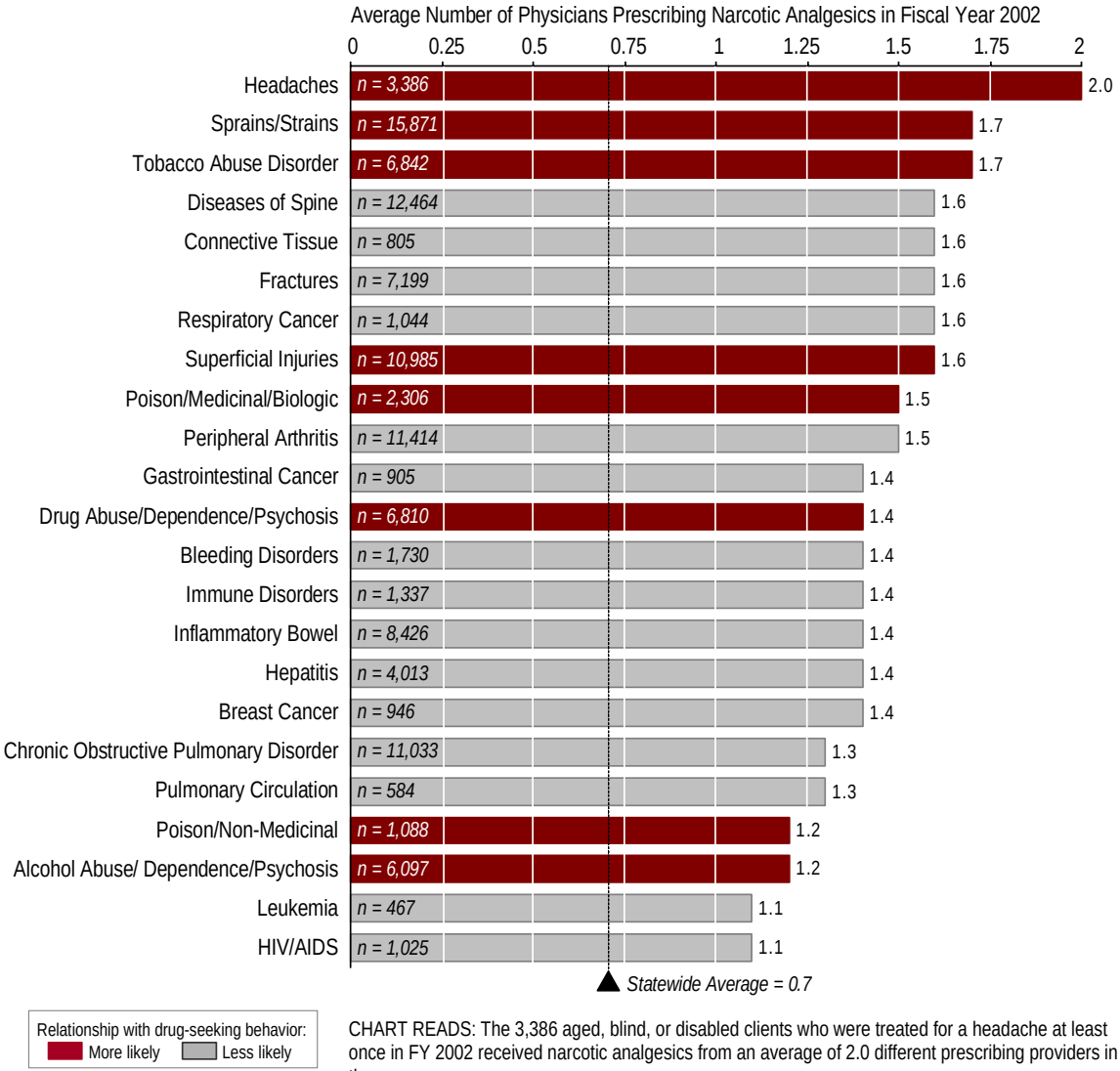


CHART READS: The 3,386 aged, blind, or disabled clients who were treated for a headache at least once in FY 2002 received narcotic analgesics from an average of 2.0 different prescribing providers in the year.

Which Clients Are Frequent ER Visitors?

An examination of how ER visits vary with clients' physical conditions reinforces the conclusion that alcohol and drug addiction is a key driver of ER use.

- The **average aged, blind, or disabled client** in the study population had **1.2 ER visits** in Fiscal Year 2002.
- Clients with a diagnosis of **drug abuse, dependence, or drug-induced psychosis averaged five ER visits** in Fiscal Year 2002.
- Clients with other conditions that may signal drug addiction – **headaches, tobacco abuse, and poisonings** – dominate the top of the chart with ER visits ranging from 5.0 to 6.6 per client in Fiscal Year 2002.
- By comparison, clients who have **connective tissue disorders, cancer, HIV/AIDS, arthritis, and diseases of the spine** – who receive large volumes of opiates – visit the ER at much lower rates (1.2 to 2.4 visits per year).

Frequent ER Use Is Dominated By Clients With Conditions Indicating Drug Or Alcohol Problem

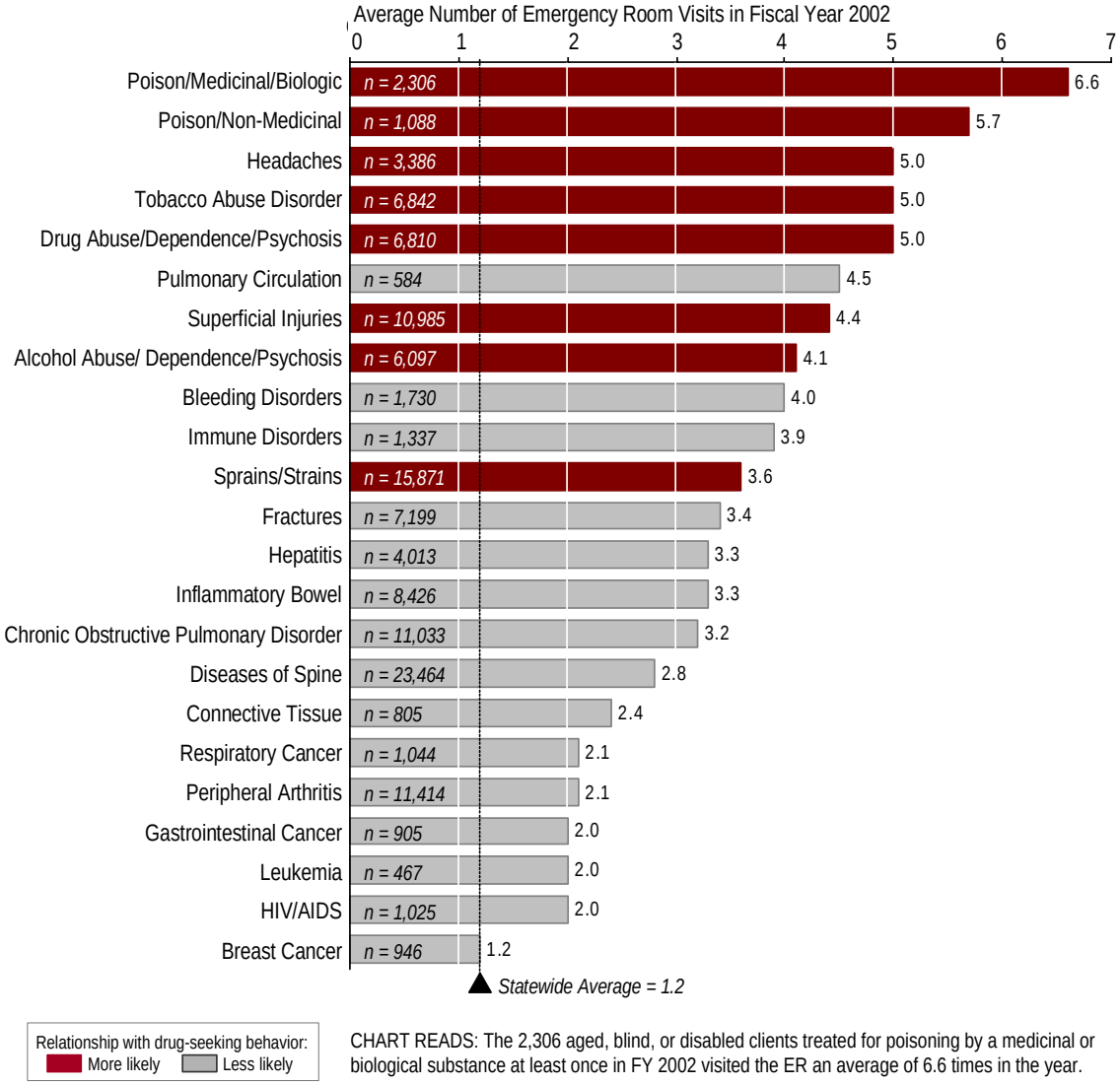


CHART READS: The 2,306 aged, blind, or disabled clients treated for poisoning by a medicinal or biological substance at least once in FY 2002 visited the ER an average of 6.6 times in the year.

Which Clients Have A Diagnosis Of An Alcohol Or Drug Problem?

We also examined the proportion of aged, blind, or disabled clients in each diagnosis group who also have a diagnosis of drug or alcohol abuse, dependence, or psychosis in their FY 2002 medical claims.

- Overall, **9 percent of clients in this population had a diagnosis of drug or alcohol abuse, dependence, or psychosis in their FY 2002 medical claims.**
- Clients with **poisoning diagnoses** are most likely also to have a diagnosis of substance abuse, dependence, or psychosis in their FY 2002 medical claims (43 to 53 percent).
- About one in five clients with superficial injuries and one in six clients with headaches and sprains or strains have a diagnosis of substance abuse, dependence, or psychosis in their FY 2002 medical claims. However, the patterns of opiate use and ER visit frequency among clients with these conditions suggest the actual prevalence of AOD problems may be significantly higher in these groups.

Percentage Of Clients With An AOD Problem Diagnosis, By Diagnosis Group

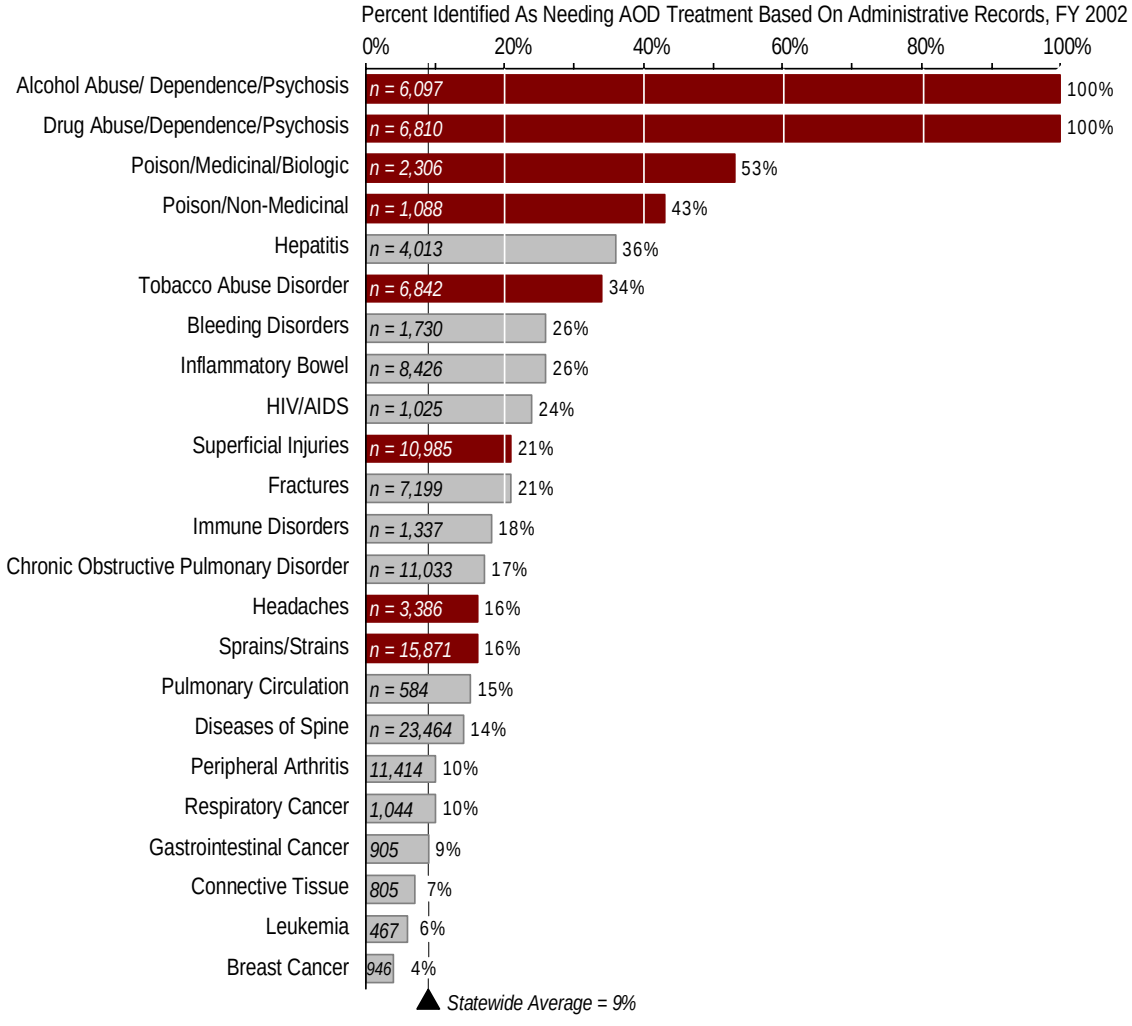


CHART READS: Of the 3,386 aged, blind, or disabled clients who were treated for a headache at least once in FY 2002, 16 percent also had a diagnosis of alcohol or drug abuse, dependence, or drug-induced psychosis in FY 2002.

Opiate Prescribing Patterns: How Many Problem Clients?

In this section we estimate the number of clients who have a pattern of medical diagnoses, opiate prescriptions, and frequent ER visits that should be a focus of concern. We begin by identifying clients who at any time in Fiscal Year 2002 received medical treatment for conditions that directly or indirectly signal increased risk[4] of alcohol or drug addiction:

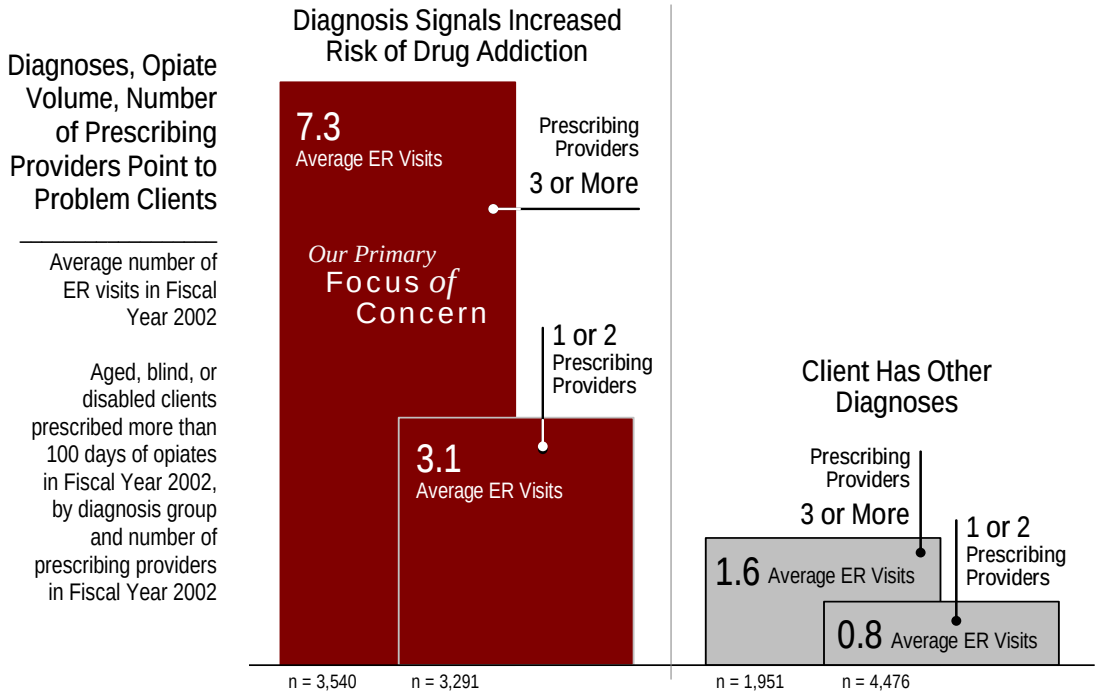
- Drug or alcohol abuse, dependence, or psychosis
- Poisoning by medicinal, biologic, or non-medicinal substances
- Tobacco abuse, headaches, sprains, strains, and superficial injuries

We then identify clients who received more than 100 days of prescription opiates in Fiscal Year 2002. Finally, we distinguish clients who received prescriptions from three or more providers in the year (as opposed to one or two prescribing providers).

There were 3,540 aged, blind, or disabled clients in Fiscal Year 2002 with diagnoses suggesting increased risk of drug addiction who also received more than 100 days of opiates and had three or more prescribing providers. These clients averaged 7.3 ER visits in the year – six times the average number of ER visits in the aged, blind, or disabled population. This population should be a primary focus of concern.

There were 3,291 aged, blind, or disabled clients with diagnoses suggesting drug addiction who received more than 100 days of opiates in Fiscal Year 2002 but who had only one or two prescribing providers in the year. Although they visited the ER at two and a half times the rate of the average aged, blind, or disabled client (3.1 ER visits per client per year), these clients visited the ER less frequently than clients with more prescribing providers.

In contrast, clients receiving more than 100 days of opiates who do not have a diagnosis signaling increased risk of drug addiction do not visit the ER as frequently, regardless of the number of prescribing providers in the year.



[4] Identification of these conditions as signally increased risk of alcohol or drug addiction is discussed in the technical note on page 12.

Policy Implications

Concerns about prescription opiate abuse have increased greatly over the past several years. Recent Washington State and national drug use surveys have found that prescription opiates are now the third most commonly abused substance in Washington State, trailing only alcohol and marijuana. Estimates from the 2003 Washington State Needs Assessment Household Survey indicate that 3 percent of working-age disabled adults need substance abuse treatment and are using prescription opiates without the direction of a doctor or other health professional.[5]

This report shows that about 3 percent of Medicaid-only aged, blind, or disabled clients have a pattern of medical diagnoses, opiate prescriptions, and frequent ER visits that should be a focus of concern. The underlying cause of heavy opiate use and frequent ER visits in many cases may be opiate addiction. In other cases, the cause may be inadequate pain management or lack of access to primary medical care. Clinical review is necessary to determine the cause of potentially problematic prescription opiate use and frequent ER visits for specific clients. What is clear is the potential for better care management for many of these clients.

Our findings have several implications:

- **For those clients who are addicted to prescription opiates, cutting clients off without treating the underlying opiate addiction may drive drug-seeking behavior underground and potentially increase criminal activity. Providing treatment for opiate addiction is a better alternative.** Recent findings from the SSI cost offset study show that providing chemical dependency treatment to SSI clients with opiate addiction reduces medical costs, arrests, and convictions.[6] The cost of treating SSI clients with opiate addiction is more than offset by the reduced medical expenditures that follow treatment, and a significant portion of the medical "cost offset" is due to reduced ER-related costs.

- Screening clients for opiate addiction and directing addicted clients into chemical dependency treatment will place additional strain on an already under-funded treatment system. **It is important that the AOD treatment system have sufficient capacity to handle the increased demand that would likely arise from improved screening and management of aged, blind, or disabled clients at risk of opiate addiction.**

- **Additional training on issues related to opiate use for emergency room staff, pain clinic staff, primary care providers, and managed care planners may help reduce the prevalence of opiate addiction among aged, blind, or disabled Medicaid clients and in the general population.**

[5] Mancuso, D., Gilson, M., and Felver, B., 2004. *The 2003 Washington Needs Assessment Household Survey.* Washington State Department of Social and Health Services, Research and Data Analysis Division, forthcoming.

[6] Nordlund, D., Estee, S., Mancuso, D. and Felver, B., 2004. Non-*Methadone Chemical Dependency Treatment for Opiate Addiction Reduces Health Care Costs, Arrests and Convictions: Washington State Supplemental Security Income Recipients.* Washington State Department of Social and Health Services, Research and Data Analysis Division, March.

TECHNICAL NOTES

This report used data from the Washington Medicaid Integration Partnership (WMIP) database. The WMIP database is a longitudinal client-level database spanning FY 1999 to FY 2002 (July 1998 to June 2002). The database was created to support the planning and development of the WMIP project – a DSHS initiative to better serve aged and disabled clients with complex health needs through the integration of medical care, long-term care, mental health, and AOD treatment services.

The study population included 130,274 FY 2002 clients eligible for Medicaid through the aged, blind, disabled, and presumptively disabled (GA-X) programs, as well as those receiving state-funded medical assistance through the General Assistance-Unemployable (GA-U) program. Clients dually eligible for Medicare were excluded from the study because information on most of the medical care they receive is not available in medical claims from the Medicaid Management Information System (MMIS).

Narcotic analgesic prescriptions and treatment diagnoses were identified using medical claims from the MMIS. Prescribing providers were identified using the performing/prescribing/attending provider field from clients' pharmacy claims. In most cases, this field does not contain a unique provider number. We were not able to identify the actual prescribing physician when the claim contained a non-unique provider number. In counting the number of prescribing providers per client, we treated the non-unique provider ID numbers as a single prescribing provider. This method underestimates the true count of prescribing providers for clients who received multiple prescriptions with non-unique provider numbers.

Diagnoses on medical claims were grouped using a classification method provided by actuaries at Milliman.[7] Conditions were identified using **all diagnoses** in clients' medical claims in FY 2002 – not just the diagnoses clients presented when they received a narcotic analgesic prescription. Clients with multiple conditions are counted in each diagnosis category present in their medical claims.

This approach represents the application of risk-adjustment techniques to identify disease conditions associated with clients who are at increased risk of engaging in drug-seeking behavior. We identified diagnoses that are more likely to be associated with drug-seeking behavior based on several criteria:

- Diagnoses of alcohol or drug abuse, dependence, or alcohol- or drug-induced psychosis provide a direct indication of a drug or alcohol problem.
- Poisoning diagnoses (including drug overdoses) are highly correlated with the presence of alcohol or drug abuse, dependence, or psychosis diagnoses in clients' medical claims and are associated with the greatest emergency room visit frequency.
- Diagnoses of tobacco abuse, headaches, sprains, strains, and superficial injuries are associated with **at least** twice the average volume of prescription opiates, twice the average number of identified prescribing providers, and three times the average number of emergency room visits. Furthermore, long-term prescription of narcotic analgesics is not generally considered to be appropriate treatment for these conditions.

ER visits were identified using a methodology that is similar to that used in MAA's bi-annual report on emergency room visits.[8] This method uses a combination of revenue code, claim type, provider type, category of service, and place of service information from clients' medical claims.

[7] Personal communication with Tim Barclay, Milliman, 1301 Fifth Avenue, Suite 3800, Seattle, WA 98101-2605.

[8] Washington State Department of Social and Health Services, Medical Assistance Administration. 2004. *Emergency Room Visits by Washington State Medicaid Fee-for-Service Clients: Fiscal Years 1999-2003*. January 2004.

Additional copies of this fact sheet may be obtained from the following websites:
http://www1.dshs.wa.gov/RDA/ or http://www1.dshs.wa.gov/dasa/
or through the Washington State Alcohol/Drug Clearinghouse by calling 1-800-662-9111 or 206-725-9696 (within Seattle or outside Washington State), by e-mailing clearinghouse@adhl.org, or by writing to 6535 Fifth Place South, Seattle, Washington 98108-0243.

Washington State Department of Social & Health Services
Research and Data Analysis Division
Report Number 8.27fs