2

Arthritis, Osteoporosis, and Chronic Back Conditions

Arthritis and Other Rheumatic Conditions

- 2-1 Mean number of days without severe pain
- 2-2 Activity limitations due to arthritis
- 2-3 Personal care limitations
- 2-4 Help in coping
- 2-5 Employment rate
- 2-6 Racial differences in total knee replacement
- 2-7 Seeing a health care provider
- 2-8 Arthritis education

Osteoporosis

- 2-9 Cases of osteoporosis
- 2-10 Hospitalization for vertebral fractures

Chronic Back Conditions

2-11 Activity limitations due to chronic back conditions

Arthritis and Other Rheumatic Conditions

2-1. (Developmental) Increase the mean number of days without severe pain among adults who have chronic joint symptoms.

Comments An operational definition could not be specified at the

time of publication.

A proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS. A proposed State data source is the Behavioral Risk

Factor Surveillance System (BRFSS), CDC,

NCCDPHP.

See Part C for a description of NHIS and BFRSS and Appendix A for focus area contact information.

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2-2. Reduce the proportion of adults with chronic joint symptoms who experience a limitation in activity due to arthritis.

National Data Source National Health Interview Survey (NHIS), CDC,

NCHS.

State Data Source Not identified.

Healthy People 2000

Objective

Not applicable.

Measure Percent (age adjusted—see Comments).

Baseline 27 (1997).

Numerator Number of adults aged 18 years and older with

chronic joint symptoms who report difficulty with

activities due to arthritis/rheumatism.

Denominator Number of adults aged 18 years and older with

chronic joint symptoms.

Population Targeted U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National

Data

From the 1997 National Health Interview Survey:

> By yourself, and without using any special equipment, how difficult is it for you to...

Walk 1/4 of a mile—about 3 city blocks?
Walk up 10 steps without resting?
Stand or be on your feet for about 2 hours?
Sit for about 2 hours?
Stoop, bend, or kneel?
Reach up over your head?
Use your fingers to grasp or handle small objects?
Lift or carry something as heavy as 10 pounds such as a full bag of groceries?
Push or pull large objects like a living room chair?
Go out to things like shopping, movies, or sporting events?

Participate in social activities such as visiting friends, attending clubs and meetings, going to parties? Do things to relax at home or for leisure (reading, watching TV, sewing, listening to music)?

[Response categories:]

- 0 Not at all difficult
- 1 Only a little difficult
- 2 Somewhat difficult
- 3 Very difficult
- 4 Can't do at all

[If response categories are 1-4 to any of the above statements:]

- What condition or health problem causes you to have difficulty with {names of up to 3 specified activities/these activities}? [Response categories include:] Arthritis/rheumatism
- During the PAST 12 MONTHS, have you had pain, aching, stiffness or swelling in or around a joint?

[If yes:]

 Were these symptoms present on MOST DAYS FOR AT LEAST ONE MONTH?

Expected Periodicity A

Annual.

Comments

Persons are considered to have chronic joint symptoms (arthritis) if they report having had pain, aching, stiffness, or swelling in or around a joint for most days for at least 1 month in the past 12 months. Persons were considered to be limited in activity if they reported that it was only a little difficult, somewhat difficult, very difficult, or they could not do at all <u>any</u> of the activities listed above. The limitation was considered to be due to arthritis if they selected "arthritis/rheumatism" from the list of conditions.

The NHIS, with input from the National Arthritis Data Workgroup, changed its approach to collecting arthritis data in 1996. Instead of asking for self reports of arthritis diagnosis, which is difficult for many respondents who do not know their type of arthritis, the NHIS now asks for self-reports of symptoms.

A proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS). The personal interview-based NHIS and the telephone-based BRFSS optional arthritis module ask identical questions about pain, aching, stiffness, or swelling in or around a joint that was present on most days for at least 1 month in the past 12 months (the self-report definition of chronic joint symptoms).

The new field of arthritis public health is evolving rapidly and case definitions may change as understanding improves. Cognitive testing and validation of self-reports and other arthritis-related questions over the next few years may result in the rephrasing of some of the national arthritis objectives.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion on age adjustment, see Part A, section 5.

See Part C for a description of NHIS and Appendix A for focus area contact information.



2-3. Reduce the proportion of all adults with chronic joint symptoms who have difficulty in performing two or more personal care activities, thereby preserving independence.

National Data Source National Health Interview Survey (NHIS), CDC,

NCHS.

State Data Source Not identified.

Healthy People 2000 Not applicable.

Objective

Measure Percent (age adjusted—see Comments).

Baseline 2.0 (1997).

Numerator Number of adults aged 18 years and older with

chronic joint symptoms who report difficulty with two

or more personal care activities.

Denominator Number of adults aged 18 years and older with

chronic joint symptoms.

Population Targeted U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data From the 1997 National Health Interview Survey:

Because of a physical, mental, or emotional problem, (do/does) (<u>Person</u>) need the help of other persons with PERSONAL CARE NEEDS, such as eating, bathing, dressing, or getting around inside this home?

[If yes:]

(Do/Does) (<u>Person</u>) need the help of other persons with... bathing or showering? dressing? eating? getting in or out of bed or chairs? using the toilet, including getting to the toilet? getting around inside the home?

During the PAST 12 MONTHS, have you had pain, aching, stiffness or swelling in or around a joint?

[If yes:]

 Were these symptoms present on MOST DAYS FOR AT LEAST ONE MONTH?

Expected Periodicity Annual.

Comments

Persons are considered to have chronic joint symptoms (arthritis) if they report having had pain, aching, stiffness, or swelling in or around a joint for most days for at least one month in the past 12 months. Persons are considered to have difficulty with personal care activities if they responded "yes" to needing help of other persons with two or more of the six personal care activities listed above.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion on age adjustment, see Part A, section 5.

See Comments provided with objective 2-2 for more information.

See Part C for a description of NHIS and Appendix A for focus area contact information.

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2-4. (Developmental) Increase the proportion of adults aged 18 years and older with arthritis who seek help in coping if they experience personal and emotional problems.

Comments An operational definition could not be specified at the

time of publication.

A proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS. A proposed State data source is the Behavioral Risk

Factor Surveillance System (BRFSS), CDC,

NCCDPHP.

See Part C for a description of NHIS and BFRSS and Appendix A for focus area contact information.

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2-5. Increase the employment rate among adults with arthritis in the working-aged population.

National Data Source National Health Interview Survey (NHIS), CDC,

NCHS.

State Data Source Not identified.

Healthy People 2000

Objective

Not applicable.

Percent (age adjusted—see Comments). Measure

Baseline 67 (1997).

Number of adults aged 18 to 64 years with chronic Numerator

joint symptoms who report being employed.

Denominator Number of adults aged 18 to 64 years who report

having chronic joint symptoms.

Population Targeted U.S. civilian, noninstitutionalized population

Questions Used To Obtain the National

Data

From the 1997 National Health Interview Survey:

[NUMERATOR:]

Which of the following {were/was} {person} doing last week? Working at a job or business With a job or business but not at work Looking for work Not working at a job or business

[DENOMINATOR:]

During the PAST 12 MONTHS, have you had pain, aching, stiffness or swelling in or around a joint?

[If yes:]

 Were these symptoms present on MOST DAYS FOR AT LEAST ONE MONTH?

Expected Periodicity

Annual.

Comments

Persons are considered employed if they answered "yes" to "working at a job or business" or "with a job or business but not at work." Persons are considered to have chronic joint symptoms (arthritis) if they report having had pain, aching, stiffness, or swelling in or around a joint for most days for at least 1 month in the past 12 months.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion on age adjustment, see Part A, section 5.

See Comments provided with objective 2-2 for more information.

See Part C for a description of NHIS and Appendix A for focus area contact information.



2-6. (Developmental) Eliminate racial disparities in the rate of total knee replacements.

Comments

An operational definition could not be specified at the time of publication.

Proposed data sources are Medicare records, HCFA, National Hospital Discharge Survey (NHDS), CDC, NCHS; and Hospital Cost and Utilization Project (HCUP), AHQR.

See Appendix A for focus area contact information.

2-7. (Developmental) Increase the proportion of adults who have seen a health care provider for their chronic joint symptoms.

Comments

An operational definition could not be specified at the

time of publication.

A proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS. A proposed State data source is the Behavioral Risk Factor Surveillance System (BRFSS), CDC,

NCCDPHP.

See Appendix A for focus area contact information.

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2-8. (Developmental) Increase the proportion of persons with arthritis who have had effective, evidence-based arthritis education as an integral part of the management of their condition.

Comments

An operational definition could not be specified at the

time of publication.

Effective, evidence-based arthritis education includes information about community and self-help

resources.

A proposed national data source is the National Health Interview Survey (NHIS), CDC, NCHS. A proposed State data source is the Behavioral Risk

Factor Surveillance System (BRFSS), CDC,

NCCDPHP.

See Appendix A for focus area contact information.



Osteoporosis

2-9. Reduce the proportion of adults with osteoporosis.

National Data Source National Health and Nutrition Examination Survey

(NHANES), CDC, NCHS.

State Data Source Not identified. **Healthy People 2000**

Objective

Not applicable.

Measure Percent (age adjusted—see Comments).

Baseline 10 (1988–94).

Numerator Number of adults aged 50 years and older with a

femoral bone mineral density (BMD) value less than

0.64.

Denominator Number of adults aged 50 years and older.

Population Targeted U.S. civilian, non-institutionalized population.

Questions Used To Obtain the National

Data

Not applicable.

Expected Periodicity Annual, beginning with 1999.

Comments Bone mineral densities are determined from

measurements made as part of the NHANES battery of examinations. The choice of a femoral BMD of less than 0.64 is the measure 2.5 or more standard deviations below the reference mean for young

adults aged 20 to 29 years. 1, 2

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion on

age adjustment, see Part A, section 5.

See Part C for a description of NHANES and Appendix A for focus area contact information.

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2-10. Reduce the proportion of adults who are hospitalized for vertebral fractures associated with osteoporosis.

National Data Source National Hospital Discharge Survey (NHDS), CDC,

NCHS.

State Data Source State hospital discharge data systems.

Healthy People 2000

Objective

Not applicable.

Measure Rate per 10,000 population (age adjusted—see

Comments).

Baseline 17.5 (1998).

Numerator Number of discharges from short-stay hospitals

among persons aged 65 years and older for vertebral fractures (ICD-9-CM codes 805.0, 805.2, 805.4, or

805.8 in any listed diagnostic field).

Denominator Number of persons aged 65 years and older.

Population Targeted U.S. civilian population.

Questions Used To Obtain the National Data From the 1998 National Hospital Discharge Survey:

- Final diagnoses:
 - Principal:
 - Other/additional:

Expected Periodicity Annual.

Comments

Discharges with an ICD code indicating vertebral fracture due to osteoporosis included any person with a diagnosis of closed cervical, thoracic, or lumbar spine fracture without spinal cord involvement (ICD-9-CM codes 805.0, 805.2, or 805.4) in any of the seven diagnostic fields. Closed spinal injuries elusive of cord involvement without reference to a specific site (ICD-9-CM code 805.8) were also included. These criteria selected the vertebral fractures most likely to be due to osteoporosis by excluding open vertebral fractures and those with spinal cord involvement, which are usually due to severe trauma.³

Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.

See Part C for a description of NHDS and Appendix A for focus area contact information.



Chronic Back Conditions

2-11. Reduce activity limitation due to chronic back conditions.

National Data Source National Health Interview Survey (NHIS), CDC,

NCHS.

State Data Source Not identified.

Healthy People 2000

Objective

Not applicable.

Measure Rate per 1,000 population (age adjusted—see

Comments).

Baseline 32 (1997).

Numerator Number of adults aged 18 years and older with

limitation in activity due to chronic back or neck

problems.

Denominator Number of adults aged 18 years and older.

Population Targeted

U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National

Data

From the 1997 National Health Interview Survey:

Because of a physical, mental, or emotional problem, (do/does) (Person) need the help of other persons with PERSONAL CARE NEEDS, such as eating, bathing, dressing, or getting around inside this home?

[If yes:]

o (Do/Does) (Person) need the help of other persons with...

bathing or showering?

dressing? eating?

getting in or out of bed or chairs?

using the toilet, including getting to the toilet?

getting around inside the home?

- Because of a physical, mental, or emotional problem, (do/does) (Person) need the help of other persons in handling ROUTINE NEEDS, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes?
- Does a physical, mental, or emotional problem keep (Person 18+) from working at a job or business?

- (Are/(Other than the persons mentioned are) any of these family members) (Person 18+) limited in the kind OR amount of work (you/they) can do because of a physical, mental or emotional problem?
- Because of a health problem, (do/does) (you/anyone) in the family walking without using any special equipment?
- (Are/Is) (you/anyone) in the family LIMITED IN ANY WAY in any activities because of difficulty remembering or because {you/they} experience periods of confusion?
- What conditions or health problems cause (<u>Person</u>) limitations?
 - [Response categories include:]

 Back or neck problem causes limitation
- How long (have/has) (<u>Person</u>) had this back or neck problem?

Expected Periodicity

Periodic.

Comments

The estimate for chronic back conditions includes neck problems because of the way the questionnaire was worded. The condition is considered "chronic" if it has lasted 3 months or more. Persons are considered limited in activity if they respond "yes" to any of the activity limitation questions listed above: personal care needs; routine needs; or physical, mental, or emotional problems that preclude working or limit the kind or amount of work that can be done.

Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.

See Part C for a description of NHIS and Appendix A for focus area contact information.



References

- 1. World Health Organization (WHO). Assessment of Fracture Risk and Its Application to Screening for Postmenopausal Osteoporosis. Technical Report Series No. 843. Geneva, Switzerland: WHO, 1994.
- 2. Looker, A.C.; Orwoll, E.S.; Johnston; C.C.; et al. Prevalence and low femoral bone density in older U.S. adults from NHANES III. *Journal of Bone and Mineral Research* 12:1761-8, 1997.
- 3. Jacobsen, S.J.; Cooper, C.; Gottlieb, M.S.; et al. Hospitalization with vertebral fracture among the aged: A national population-based study, 1986–1989. *Epidemiology* 3(6):515-518, 1992.