

Trends in Health Care Employment

Where Are Health Care Jobs?

- The health care industry consists of the following nine segments:
 - *Hospitals*
 - Provide complete medical care
 - Diagnostic services, surgical care, continuous nursing care
 - *Nursing and residential care facilities*
 - For those who need continuous nursing care, but do not require hospital services
 - Inpatient nursing
 - Rehabilitation
 - Health-related personal care
 - Nursing aides provide the vast majority of direct care
 - *Offices of physicians*
 - About 37 percent of all health care establishments
 - Physicians and surgeons are increasingly working as salaried employees of group medical practices, clinics, or integrated health systems

Where Are Health Care Jobs?

- *Offices of dentists*
 - About 1 out of every 5 health care establishments is a dentist's office
 - Most employ only a few workers, who provide preventative, cosmetic, or emergency care
- *Home health care services*
 - Skilled nursing or medical care is sometimes provided in the home, under a physician's supervision
 - Thriving due to:
 - The development of in-home medical technologies
 - Substantial cost savings
 - Patients' preference for care in the home
- *Offices of other health practitioners*
 - Chiropractors
 - Optometrists
 - Podiatrists
 - Occupational and physical therapists
 - Psychologists
 - Audiologists
 - Speech-language pathologists,
 - Dietitians
 - Also includes the offices of practitioners of alternative medicine, such as acupuncturists, homeopaths, hypnotherapists, and naturopaths
 - Demand is related to the ability of patients to pay, either directly or through health insurance
 - Hospitals and nursing facilities may contract out for these services

Where Are Health Care Jobs?

- *Outpatient care centers*
 - Kidney dialysis centers
 - Outpatient mental health and substance abuse centers
 - Health maintenance organization medical centers
 - Freestanding ambulatory surgical and emergency centers
- *Other ambulatory health care services*
 - Ambulance and helicopter transport services
 - Blood and organ banks
 - Pacemaker monitoring services
 - Smoking cessation programs
- *Medical and diagnostic laboratories*
 - Provide analytic or diagnostic services to the medical profession or directly to patients
 - Workers may analyze blood, take x rays and computerized tomography scans, or perform other clinical tests
 - Provide the fewest number of jobs in the health care industry

Recent Developments

- Technological advances have made many new procedures and methods of diagnosis and treatment possible
- Clinical developments:
 - Infection control
 - Less invasive surgical techniques
 - Advances in reproductive technology
 - Gene therapy for cancer treatment
- Advances in medical technology also have improved the survival rates of trauma victims and the severely ill
 - Need extensive care from therapists and social workers

Recent Developments

- Advances in information technology continue to improve patient care and worker efficiency
 - Example: hand-held computers that record notes on each patient
- Information on vital signs and orders for tests are transferred electronically to a main database
 - Eliminates the need for paper
 - Reduces recordkeeping errors

Recent Developments

- Cost containment also is shaping the health care industry
 - Growing emphasis on providing services on an outpatient, ambulatory basis
 - Limiting unnecessary or low-priority services
 - Increased use of integrated delivery systems
 - Combine two or more segments of the industry to increase efficiency through the streamlining of functions
 - Primarily financial and managerial
 - Stressing preventive care
 - Reduces the potential cost of undiagnosed, untreated medical conditions

Recent Developments

- Enrollment in managed care programs continues to grow
 - Preferred provider organizations
 - Health maintenance organizations
 - Hybrid plans
 - Point-of-service programs
- These changes will continue to reshape not only the nature of the health care workforce, but also the manner in which health care is provided

Employment

- As the largest industry in 2006 (latest available), health care provided 14 million jobs
 - 13.6 million jobs for wage and salary workers
 - 40 percent were in hospitals
 - 21 percent were in nursing and residential care facilities
 - 16 percent in offices of physicians
 - 438,000 jobs for self-employed and unpaid family workers
 - Majority of jobs in offices of physicians, dentists, and other health practitioners
 - 295,000 out of the 438,000 total self-employed

Employment

- Health care jobs are concentrated in the largest States
 - California, New York, Florida, Texas, and Pennsylvania
- Workers in health care tend to be older than workers in other industries
- Health care workers also are more likely to remain employed in the same occupation
 - Due to high level of education and training required for many health occupations

Employment

- Health care firms employ large numbers of workers in **professional and service occupations**
 - These two occupational groups account for 3 out of 4 jobs in the industry
 - The next largest share of jobs, 18 percent, is in office and administrative support
 - Management, business, and financial operations occupations account for only 4 percent of employment
 - Other occupations: 2 percent of the total

Employment

- Each segment of the health care industry provides a different mix of wage and salary health-related jobs
- *Hospitals*
 - Employ workers with all levels of education and training
 - Provides a wider variety of services than is offered by other segments of the health care industry
 - 3 in 10 hospital workers is a registered nurse
 - Also employ many physicians and surgeons, therapists, and social workers
 - About 1 in 5 hospital jobs are in a service occupation
 - Nursing
 - Psychiatric
 - Home health aides
 - Building cleaning workers
 - Hospitals also employ large numbers of office and administrative support workers

Employment

- *Nursing and residential care facilities*
 - About 2 out of 3 jobs are in service occupations
 - Nursing
 - Psychiatric
 - Home health aides
 - Professional and administrative support occupations make up a much smaller percentage of employment
 - Federal law requires nursing facilities to have licensed personnel on hand 24 hours a day

Employment

- *Offices of physicians*
 - Professional and related occupations
 - Physicians, surgeons, and registered nurses
 - Two-fifths of all jobs are in office and administrative support occupations
 - Receptionists and information clerks
- *Offices of dentists*
 - 1/3 of jobs are in service occupations, mostly dental assistants
 - Typical staffing pattern: one dentist with a support staff of dental hygienists and dental assistants
 - Larger practices are more likely to employ office managers and administrative support workers

Employment

- *Home health care services*
 - About 3 in 5 jobs are in service occupations
 - Home health aides
 - Personal and home care aides
 - Nursing and therapist jobs also account for substantial employment
- *Offices of other health practitioners*
 - About 2 in 5 jobs are professional and related occupations
 - Physical therapists
 - Occupational therapists
 - Dispensing opticians
 - Chiropractors

Employment

- *Outpatient care centers*
 - High percentage of professional and related workers
 - Counselors
 - Social workers
 - Registered nurses
- *Other ambulatory health care services*
 - Ambulance services
 - Employs about 2 out of every 5 *emergency medical technicians and paramedics and ambulance drivers and attendants*
- *Medical and diagnostic laboratories*
 - Professional and related workers
 - Clinical laboratory
 - Radiologic technologists and technicians
 - Service workers
 - Medical assistants
 - Medical equipment preparers
 - Medical transcriptionists

Training and Advancement

- Most workers have jobs that require less than 4 years of college education
 - But health diagnosing and treating practitioners are among the most educated workers
- A variety of programs after high school provide specialized training for jobs in health care
- Students preparing for health careers can enter programs leading to a certificate or a degree at the associate, baccalaureate, or graduate level

Training and Advancement

- Some health care establishments provide on-the-job or classroom training, as well as continuing education
- Hospitals are more likely than other facilities to have the resources and incentive to provide training programs and advancement opportunities to their employees

Training and Advancement

- Some hospitals provide training or tuition assistance in return for a promise to work at their facility for a particular length of time after graduation
- Many nursing facilities have similar programs
- Some hospitals have cross-training programs that train their workers—through formal college programs, continuing education, or in-house training—to perform functions outside their specialties

Training and Advancement

- Health specialists with clinical expertise can advance to department head positions or even higher level management jobs
- Medical and health services managers can advance to more responsible positions, all the way up to chief executive officer

Outlook

- Health care will generate 3 million new wage and salary jobs between 2006 and 2016, more than any other industry
- Seven of the twenty fastest growing occupations are health care related
- Job opportunities should be good in all employment settings

Outlook

- ***Employment change***

- Wage and salary employment in the health care industry is projected to increase 22 percent through 2016, compared with 11 percent for all industries combined
- Employment growth is expected to account for about 3 million new wage and salary jobs—20 percent of all wage and salary jobs added to the economy over the 2006-16 period
- Projected rates of employment growth for the various segments of the industry range from 13 percent in hospitals, the largest and slowest growing industry segment, to 55 percent in the much smaller home health care services

Outlook

- Employment in health care will continue to grow for several reasons
 - The number of people in older age groups, with much greater than average health care needs, will grow faster than the total population between 2006 and 2016
 - Employment in home health care and nursing and residential care should increase rapidly as life expectancies rise, and as aging children are less able to care for their parents and rely more on long-term care facilities

Outlook

- Advances in medical technology will improve the survival rate of severely ill and injured patients, who will then need extensive therapy and care
- New technologies will identify and treat conditions that were previously not treatable

Outlook

- Medical group practices and integrated health systems will become larger and more complex increasing the need for office and administrative support workers
- Industry growth also will occur as a result of the shift from inpatient to less expensive outpatient and home health care
 - Improvements in diagnostic tests
 - Improvements in surgical procedures
 - Patients' desires to be treated at home

Outlook

- Many of the occupations projected to grow the fastest in the economy are concentrated in the health care industry
 - Over the 2006-16 period, total employment of home health aides—including the self-employed—is projected to increase by 49 percent
 - Medical assistants by 35 percent
 - Physical therapist assistants by 32 percent
 - Physician assistants by 27 percent

Outlook

- Rapid growth is expected for workers in occupations concentrated outside the inpatient hospital sector
 - Pharmacy technicians
 - Personal and home care aides
- Because of cost pressures, many health care facilities will adjust their staffing patterns to reduce labor costs
- Where patient care demands and regulations allow, health care facilities will substitute lower paid providers and will cross-train their workforces

Outlook

- Many facilities have cut the number of middle managers, while simultaneously creating new managerial positions as the facilities diversify
- Traditional inpatient hospital positions are no longer the only option for many future health care workers
 - Must be willing to work in various employment settings

Outlook

- Hospitals will be the slowest growing segment within the health care industry
 - Efforts to control hospital costs
 - The increasing use of outpatient clinics and other alternative care sites

Outlook

- Demand for dental care will rise
 - Population growth
 - Greater retention of natural teeth by middle-aged and older persons
 - Greater awareness of the importance of dental care
 - An increased ability to pay for services
- Dentists will use support personnel such as dental hygienists and assistants to help meet their increased workloads

Outlook

- In some management, business, and financial operations occupations, rapid growth will be tempered by restructuring to reduce administrative costs and streamline operations
- Office automation and other technological changes will slow employment growth in office and administrative support occupations
 - But because the employment base is large, replacement needs will continue to create substantial numbers of job openings

Employment in health care by industry segment, 2006 and projected change, 2006-16
(Employment in thousands)

Industry Segment	2006 Employment	2006-16 Percent Change
Health services, total	13,621	21.7
Hospitals, public and private	5,438	13.0
Nursing and residential care facilities	2,901	23.7
Offices of physicians	2,154	24.8
Home health care services	867	55.4
Offices of dentists	784	22.4
Offices of other health practitioners	571	28.3
Outpatient care centers	489	24.3
Other ambulatory health care services	216	32.3
Medical and diagnostic laboratories	202	16.8

Job Prospects

- Job opportunities should be good in all employment settings
 - High job turnover
 - Baby boomer retirements
 - Tougher immigration rules
 - Slowing the numbers of foreign health care workers entering the United States
- **Nursing aides, orderlies and attendants, and home health aides** are adding the most new jobs between 2006 and 2016
 - About 647,000 combined

Job Prospects

- Another occupation that is expected to have many openings is **registered nurses**
 - Median age is increasing
 - Not enough younger workers are replacing them
- Employers are reporting difficulties in attracting and retaining nurses
 - May need to
 - Restructure workloads and job responsibilities
 - Improve compensation and working conditions
 - Subsidize training or continuing education

Industry Earnings

- Average earnings of nonsupervisory workers in most health care segments are higher than the average for all private industry
 - Hospital workers earn considerably more than the average
 - Percentage of jobs requiring higher levels of education and training is greater than in other segments
 - Nursing and residential care facilities and home health care services workers earn less
- Those segments of the industry with lower earnings employ large numbers of part-time service workers

Industry Earnings

- Professionals and managers working in health care typically earn more than other workers in the industry
- Earnings in individual health care occupations vary as widely as the duties, level of education and training, and amount of responsibility required by the occupation

Industry Earnings

- Health care establishments that must be staffed around the clock to care for patients and handle emergencies often pay premiums for overtime and weekend work, holidays, late shifts, and time spent on call
 - Bonuses and profit-sharing payments also may add to earnings.
- Salaries tend to be higher in larger hospitals and group practices
- Geographic location also can affect earnings

Average earnings and hours of nonsupervisory workers in health services by industry segment

Industry segment	Earnings		Weekly hours
	Weekly	Hourly	
Hospitals, public and private	794	22.19	35.8
Medical and diagnostic laboratories	715	19.48	36.7
Offices of physicians	669	19.98	33.5
Outpatient care centers	658	19.33	34.1
Offices of dentists	557	20.51	27.1
Other ambulatory health care services	555	15.58	35.
Offices of other health practitioners	498	17.27	28.8
Home health care services	429	14.78	29.0
Nursing and residential care facilities	415	12.84	32.3

Job Placement

- Million college grads to enter the market this spring
- 3.3 million high school grads
- Unemployment 8% nationally
- 10% in some states
- Employees shedding jobs at 500,000+ per month

Crash

- Source – Workforce Communications 5/09
- Meaning
 - Increased default rates
 - Accreditation problems – Failed benchmarks
 - Unhappy students
- Some sectors will do better than others

What to Do?

- Use open door data
 - Health care demands outstrips available employees
 - Auto mechanics – Maintenance vs. New purchase
- Trend is toward necessity rather than optional
 - Decrease \$ on recruitment
 - Increase the \$ on placement

What to Do?

- Placement plan vs. Admissions plan
 - How many times a year you have grads vs. how many times a year you have a start enrollment
- Increase efforts of placement staff to identify job opportunities
 - 1) Plan
 - 2) Increase visits to potential employers
 - 3) Show students how to do online portfolios “a sample of work”
 - 4) Post-graduate internships = experience and contracts
- *Limit who comes in the door –

What to Do?

- 5) Teach flexibility!
- 6) Create hurdles in the loan process to ensure students understand the risk
- Assess where you are
 - less clinicals ... warning
- Don't forget “we educate based upon employer demand”
- Idea: Regulate placement benchmarks vs. unemployment benchmarks within a state

Health Occupations Associated with ABHES

- **Medical Laboratory Technicians ***
 - **Medical Assistants ***
 - **Surgical Technologists ***
 - **Dental Assistants ****
 - **Diagnostic Medical Sonographers ****
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- *Approved by USDE for programmatic accreditation
 - ** Programmatic standards developed

Medical Laboratory Technologists and Technicians

- Rapid job growth and excellent job opportunities are expected
- Most jobs will continue to be in hospitals, but employment will grow faster in other settings
- ***Employment change***
- Employment of clinical laboratory workers is expected to grow 14 percent between 2006 and 2016, faster than the average, for all occupations
- The volume of laboratory tests continues to increase with both population growth and the development of new types of tests

Medical Laboratory Technologists and Technicians

- Technological advances will continue to have opposing effects on employment
 - On the one hand, new, increasingly powerful diagnostic tests will encourage additional testing and spur employment
 - On the other, research and development efforts targeted at simplifying routine testing procedures may enhance the ability of non-laboratory personnel—physicians and patients in particular—to perform tests now conducted in laboratories

Medical Laboratory Technologists and Technicians

- Hospitals are expected to continue to be the major employer of medical laboratory workers
- But employment is expected to grow faster in:
 - Medical and diagnostic laboratories
 - Offices of physicians
 - All other ambulatory health care services

Medical Laboratory Technologists and Technicians

- *Job prospects*
- Job opportunities are expected to be excellent
 - The number of job openings will continue to exceed the number of job seekers
- Many additional openings will result from the need to replace workers who transfer to other occupations, retire, or stop working for some other reason

Medical Laboratory Technologists and Technicians

- Medical laboratory technologists and technicians held about 319,000 jobs in 2006
 - More than half of jobs were in hospitals
 - Most of the remaining jobs were in offices of physicians and in medical and diagnostic laboratories
 - A small proportion was in educational services and in all other ambulatory health care services

Employment Projections for Medical Laboratory Technologists, Technicians from the National Employment Matrix

Occupational title	Employment, 2006	Projected employment, 2016	Change, 2006-16	
			Number	Percent
Medical and clinical laboratory technologists	167,000	188,000	21,000	12
Medical and clinical laboratory technicians	151,000	174,000	23,000	15

Dental Assistants

- Dental assistants held about 280,000 jobs in 2006
 - Almost all jobs were in offices of dentists
 - A small number of jobs were in the Federal, State, and local governments or in offices of physicians
 - About 35 percent of dental assistants worked part time, sometimes in more than one dental office
- Employment is expected to increase much faster than average
- Job prospects are expected to be excellent

Dental Assistants

- *Employment change*

- Employment is expected to grow 29 percent from 2006 to 2016, which is much faster than average for all occupations
 - Expected to be among the fastest growing occupations over the 2006-16 projection period
 - Population growth
 - Greater retention of natural teeth
 - Increased focus on preventative dental care for younger generations
 - Older dentists, who have been less likely to employ assistants or have employed fewer, are leaving the occupation and will be replaced by recent graduates, who are more likely to use one or more assistants
 - As dentists' workloads increase, they are expected to hire more assistants to perform routine tasks, so that they may devote their own time to more complex procedures

Dental Assistants

- *Job prospects*
- In addition to job openings due to employment growth, numerous job openings will arise out of the need to replace assistants who transfer to other occupations, retire, or leave for other reasons
- Many opportunities for entry-level positions offer on-the-job training, but some dentists prefer to hire experienced assistants or those who have completed a dental-assisting program

Employment Projections for Dental Assistants from the National Employment Matrix

Occupational title	Employment, 2006	Projected employment, 2016	Change, 2006-16	
			Number	Percent
Dental assistants	280,000	362,000	82,000	29

Diagnostic Medical Sonographers

- Diagnostic medical sonographers held about 46,000 jobs in 2006
 - More than half were in public and private hospitals
 - The rest were typically in:
 - Offices of physicians
 - Medical and diagnostic laboratories
 - Mobile imaging services
- Faster-than-average employment growth is expected

Diagnostic Medical Sonographers

- *Employment change*

- Employment of diagnostic medical sonographers is expected to increase by about 19 percent through 2016—faster than average for all occupations—as the population ages, increasing the demand for diagnostic imaging and therapeutic technology

Diagnostic Medical Sonographers

- Additional job growth is expected:
 - as sonography becomes an increasingly attractive alternative to radiologic procedures, as patients seek safer treatment methods
 - Unlike most diagnostic imaging methods, sonography does not involve radiation, so harmful side effects and complications from repeated use are less likely for both the patient and the sonographer
- Sonographic technology is expected to evolve rapidly and to spawn many new sonography procedures
 - 3D- and 4D-sonography for use in obstetric and ophthalmologic diagnosis

Diagnostic Medical Sonographers

- Hospitals will remain the principal employer of diagnostic medical sonographers
- However, employment is expected to grow more rapidly in offices of physicians and in medical and diagnostic laboratories
 - Due to strong shift toward outpatient care, encouraged by third-party payers and made possible by technological advances that permit more procedures to be performed outside the hospital

Diagnostic Medical Sonographers

- *Job prospects.*
 - In addition to job openings from growth, some openings will arise from the need to replace sonographers who retire or leave the occupation permanently for some other reason
 - Pain caused by musculoskeletal disorders has made it difficult for sonographers to perform well
 - Some are forced to leave the occupation early because of this disorder

Employment Projections for Diagnostic Medical Sonographers from the National Employment Matrix

Occupational title	Employment, 2006	Projected employment, 2016	Change, 2006-16	
			Number	Percent
Diagnostic medical sonographers	46,000	54,000	8,700	19

Medical Assistants

- Medical assistants held about 417,000 jobs in 2006
 - 62 percent worked in offices of physicians
 - 12 percent worked in public and private hospitals, including inpatient and outpatient facilities
 - 11 percent worked in offices of other health practitioners, such as chiropractors, optometrists, and podiatrists
 - Most of the remainder worked in other health care industries such as outpatient care centers and nursing and residential care facilities.

Medical Assistants

- Employment is projected to grow much faster than average, ranking medical assistants among the fastest growing occupations over the 2006-16 decade
- Job opportunities should be excellent, particularly for those with formal training or experience, and certification

Medical Assistants

- *Employment change*
- Employment is expected to grow 35 percent from 2006 to 2016, much faster than average for all occupations
- Helping to drive job growth is the increasing number of group practices, clinics, and other health care facilities that need a high proportion of support personnel, particularly medical assistants who can handle both administrative and clinical duties
- In addition, medical assistants work primarily in outpatient settings, a rapidly growing sector of the health care industry

Medical Assistants

- *Job prospects.*
- Medical assistants are projected to account for a very large number of new jobs, and many other opportunities will come from the need to replace workers leaving the occupation
- Those with formal training or experience—particularly those with certification—should have the best job opportunities

Employment Projections for Medical Assistants from the National Employment Matrix

Occupational title	Employment, 2006	Projected employment, 2016	Change, 2006-16	
			Number	Percent
Medical assistants	417,000	565,000	148,000	35

Surgical Technologists

- Surgical technologists held about 86,000 jobs in 2006
 - 70 percent of jobs were in hospitals, mainly in operating and delivery rooms
 - Other jobs were in offices of physicians or dentists who perform outpatient surgery and in outpatient care centers, including ambulatory surgical centers
 - A few technologists, known as private scrubs, are employed directly by surgeons who have special surgical teams, like those for liver transplants
- Employment of surgical technologists is expected to grow much faster than the average for all occupations
- Job opportunities will be best for technologists who are certified.

Surgical Technologists

- ***Employment change***
- Employment is expected to grow 24 percent between 2006 and 2016, much faster than average for all occupations, as the volume of surgeries increases
 - The number of surgical procedures is expected to rise as the population grows and ages
 - Older people, including the baby boom generation, who generally require more surgical procedures, will account for a larger portion of the general population
 - Technological advances, such as fiber optics and laser technology, will permit an increasing number of new surgical procedures to be performed and also will allow surgical technologists to assist with a greater number of procedures
- Hospitals will continue to be the primary employer of surgical technologists, although much faster employment growth is expected in offices of physicians and in outpatient care centers, including ambulatory surgical centers
- ***Job prospects***
- Job opportunities will be best for technologists who are certified.

Employment Projections for Surgical Technologists from the National Employment Matrix

Occupational title	Employment, 2006	Projected employment, 2016	Change, 2006-16	
			Number	Percent
Surgical technologists	86,000	107,000	21,000	24

Employment Projections for Various other Health Care Occupations from the National Employment Matrix

Occupational title	Employment 2006	Projected employment, 2016	Change, 2006-16	
			Number	Percent
Cardiovascular technologists and technicians	45,000	57,000	12,000	26
Dental hygienists	167,000	217,000	50,000	30
Dietitians and nutritionists	57,000	62,000	4,900	9
Emergency medical technicians and paramedics	201,000	240,000	39,000	19
Licensed practical and licensed vocational nurses	749,000	854,000	105,000	14
Medical and health services managers	262,000	305,000	43,000	16

Employment Projections for Various other Health Care Occupations from the National Employment Matrix

Occupational title	Employment, 2006	Projected employment, 2016	Change, 2006-16	
			Number	Percent
Medical, dental, and ophthalmic laboratory technicians	95,000	100,000	5,000	5
Medical records and health information technicians	170,000	200,000	30,000	18
Medical transcriptionists	98,000	112,000	13,000	14
Nuclear medicine technologists	20,000	23,000	2,900	15
Nursing, psychiatric, and home health aides	2,296,000	2,944,000	647,000	28
Occupational therapist assistants and aides	33,000	41,000	8,200	25

Employment Projections for Various other Health Care Occupations from the National Employment Matrix

Occupational title	Employment, 2006	Projected employment, 2016	Change, 2006-16	
			Number	Percent
Occupational therapists	99,000	122,000	23,000	23
Personal and home care aides	767,000	1,156,000	389,000	51
Pharmacy technicians	285,000	376,000	91,000	32
Physical therapist assistants and aides	107,000	137,000	31,000	29
Physical therapists	173,000	220,000	47,000	27
Physician assistants	66,000	83,000	18,000	27
Radiologic technologists and technicians	196,000	226,000	30,000	15

Employment Projections for Various other Health Care Occupations from the National Employment Matrix

Occupational title	Employment, 2006	Projected employment, 2016	Change, 2006-16	
			Number	Percent
Receptionists and information clerks	1,173,000	1,375,000	202,000	17
Recreational therapists	25,000	26,000	900	4
Registered nurses	2,505,000	3,092,000	587,000	23
Respiratory therapists	102,000	126,000	23,000	23



CONCLUSION