

UPMC

Nursing

Trends in the Health of the Nursing Workforce: Impact on the Clinical Environment

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The Perfect Storm



UPMC

Nurse Health and Wellness

Overall Goal:

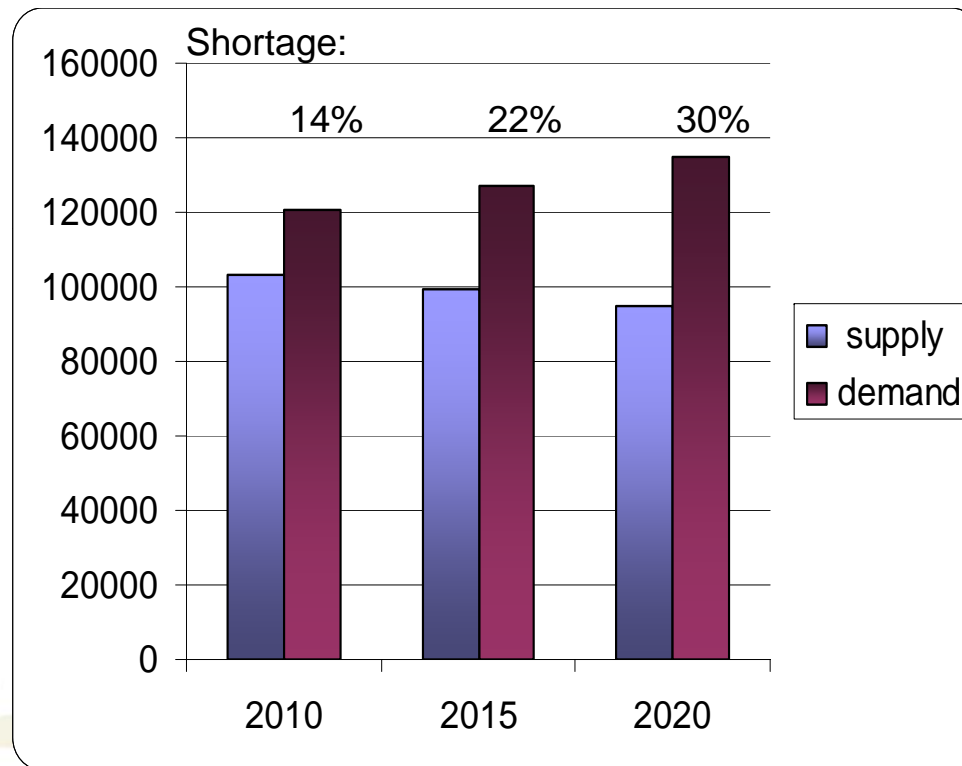
A highly ***engaged*** nursing workforce that is ***physically, emotionally, and spiritually*** at ***peak performance at every age*** in their career lifetime.



Nursing Shortage

- Between 1983 and 1998 the average age of working RNs increased by 4.5 years to 41.9.
- Thirty-five percent fewer full-time RNs are observed today when compared to similar age groups of RNs entering the workforce 20 years ago.
- Within 10 years, 40 percent of working RNs will be 50 years or older.
- As those RNs retire, the supply of working RNs is projected to be 20 percent below requirements by the year 2020.
- The primary factor that has led to the aging of the RN workforce appears to be the decline in younger people choosing nursing as a career during the last 2 decades. Unless this trend is reversed, the RN workforce will continue to age, eventually shrink, and not meet projected long-term workforce requirements.

Projected Supply and Demand Shortages of Registered Nurses in Pennsylvania: 2010-2020



Source: U.S. Department of Health and Human Services, July 2002

Nurse Health and Wellness Task Force

Overall Charge:

- Explore the health issues / conditions that affect the quality of life for nurses and the impact of nurse health on patient care, nursing satisfaction, and UPMC.
- Create transparency, dialogue and a compelling case around health issues that impact nurses.
- Assess the quality of work life for nurses around the issues of health, stress, worked hours, etc.
- Quantify the impact of poor health and days lost to occupational injuries on the operating budget.
- Launch programs that support the quality of work health that are lead by nurses for nurses.
- Recommend operational changes that support the quality of work life and overall health of nurses.

Closer to Home

- 12% of nurses leave the profession annually due to a back injury. ^{OSHA}
- \$1 of every \$3 spent for workers' compensation is due to musculoskeletal disorders. ^{OSHA}
- The annual cost to an employer like UPMC is in the millions of dollars.



RN Turnover and Time Loss Back Pain

Morgan and Chow, Nursing Economics, June 2007

ANA National Benchmark	Average Replacement Cost/RN	2005 Average National WB Cost for RNs per \$100 of Payroll	Average Cost per RN Related to WC
12% turnover due to back pain	\$50,000 - \$75,000	\$0.52	\$6,260 - \$9,390
38% time loss due to back pain	\$50,000 - \$75,000	\$0.52	\$19,190 - \$28,890
Total cost per RN			\$25,450 - \$38,280

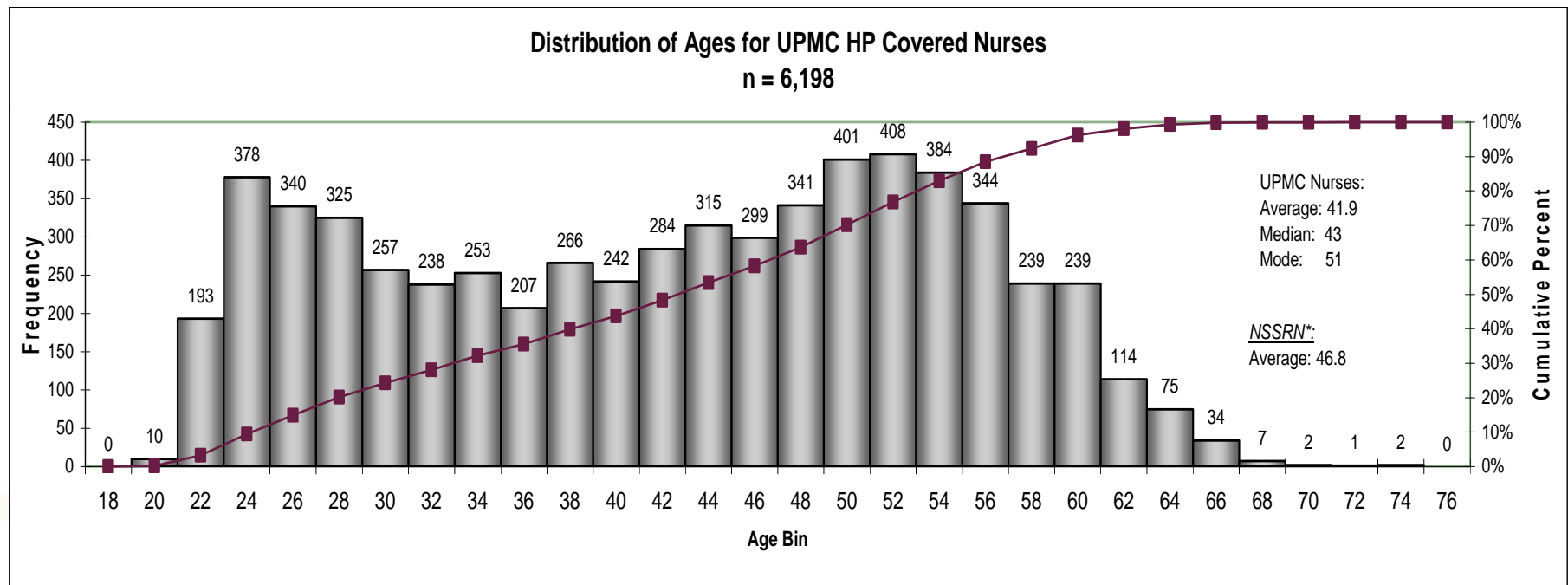
Absenteeism

- 23% of all UPMC employees are Nurses¹
- Nurses account for 22% of total absenteeism:
 - 20% of All Scheduled PTO hours
 - 25% of All Unscheduled PTO hours
 - 24% of All Short-term disability hours
 - **35% of All Workers' Compensation hours**

Nurses defined by Numa
All data from calendar year 2005
Short-Term Disability without Pregnancy Claims

Age Distribution of Nurses

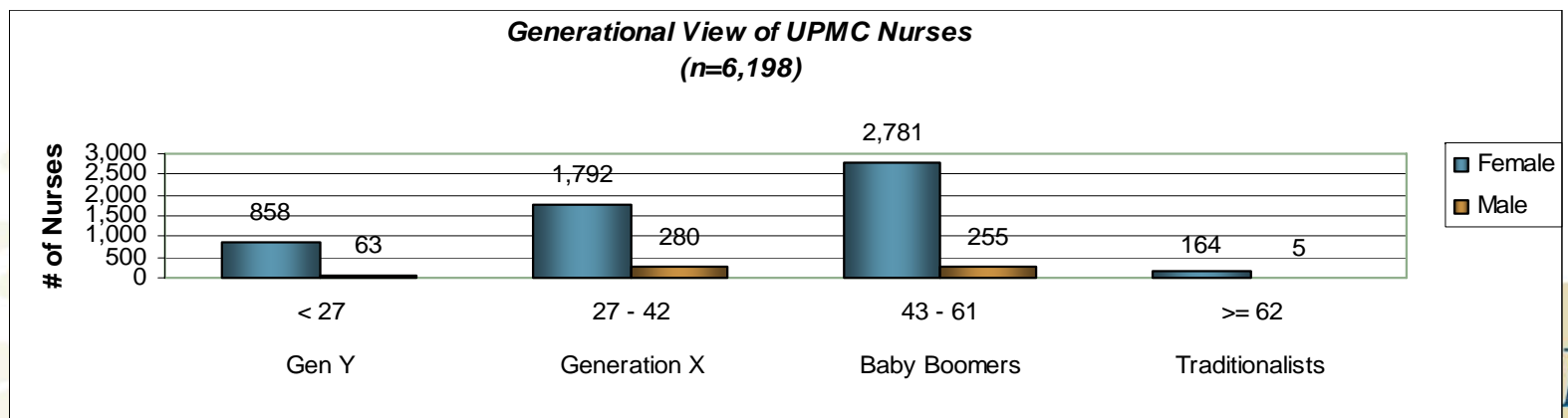
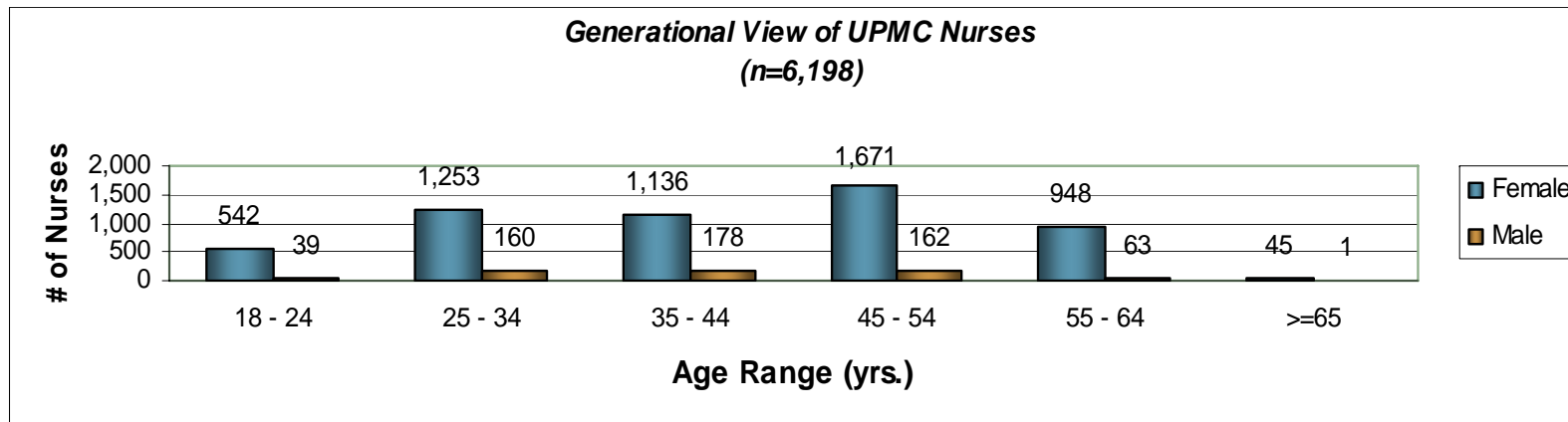
The current ages among UPMC Health Plan covered nurses shows a bimodal distribution.



*The National Sample Survey of Registered Nurses (NSSRN) data from March 2004.

Generational View of UPMC Nurses

- Approximately 49% of the UPMC Health Plan covered nurses are Baby Boomers.
- Generation X accounts for 33% and Gen Y is approximately 15% of nurses.



Lifestyle Risks Among Nurses

- In 2007, 5,839 nurses (94%) completed the *MyHealth* Questionnaire.
- Tobacco use, poor diet and stress are risk factors for Gen Y & Generation X. Obesity, physical activity, cholesterol and high blood pressure are higher risks for nurses over age 55.

Lifestyle Risk	Age Range (yrs.)						Total
	18 - 24	25 - 34	35 - 44	45 - 54	55 - 64	>=65	
Number of Nurses	564	1,315	1,247	1,726	944	43	5,839
Tobacco Use	12.6%	14.8%	12.8%	11.1%	9.9%	0.0%	12.1%
Obesity or Extreme Obesity	12.8%	21.1%	30.1%	34.8%	38.2%	27.9%	29.1%
Overweight	22.0%	27.3%	30.2%	29.4%	31.8%	39.5%	28.8%
Physical Inactivity	46.3%	52.0%	57.0%	54.8%	64.1%	62.8%	55.4%
Poor Diet	95.0%	94.4%	95.0%	93.9%	93.9%	93.0%	94.3%
Stress	20.0%	22.4%	18.4%	16.7%	15.5%	7.0%	18.4%
Blood Pressure	10.5%	12.5%	22.1%	33.8%	50.0%	53.5%	27.0%
Cholesterol	9.4%	14.9%	24.9%	35.2%	44.7%	48.8%	27.6%

Prevalence of Chronic Conditions

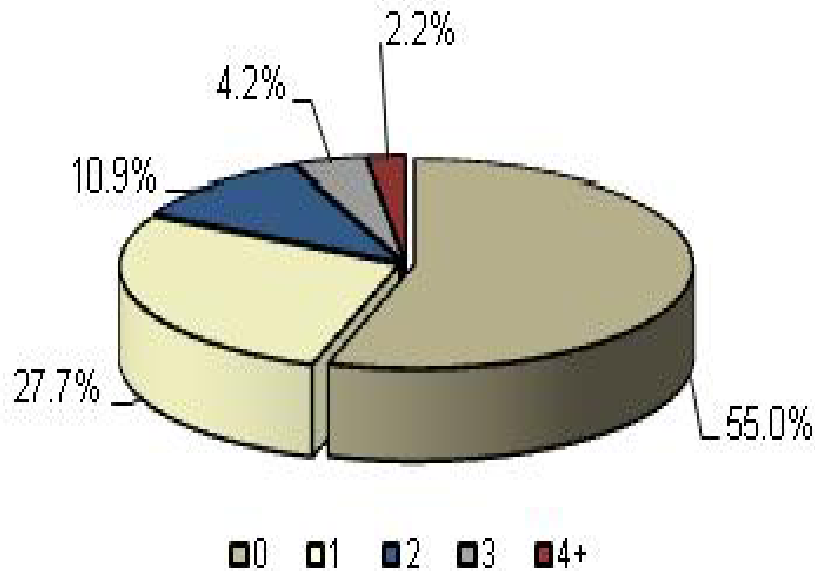
Chronic Condition	UPMC Health System - Nurses (6,096)	2006 UPMC Commercial Book of Business - Employees	% Difference	Condition Specific - Medical PHM	Total PHM
	% of Members	% of Members			
Hypertension (High Blood Pressure)	11.7%	11.5%	0.2%	0.37	000.71
Hypertension (High Cholesterol)	11.7%	11.5%	0.1%	0.00	000.54
Lower Back Pain	4.0%	3.5%	0.5%	0.70	004.10
Depression	1.9%	4.2%	2.3%	0.70	001.00
Arterio Sclerosis	4.2%	4.2%	0.0%	0.12	000.13
Stroke	4.2%	3.0%	1.2%	0.40	000.34
Other Health Conditions	4.1%	4.2%	0.1%	0.00	001.00
Admission	1.1%	1.2%	0.1%	0.34	000.17
Diabetes	1.0%	1.3%	0.3%	0.24	001.24
Respiratory Infection (COPD)	2.0%	2.0%	0.0%	001.17	000.21

*For July 1, 2006 through June 30, 2007

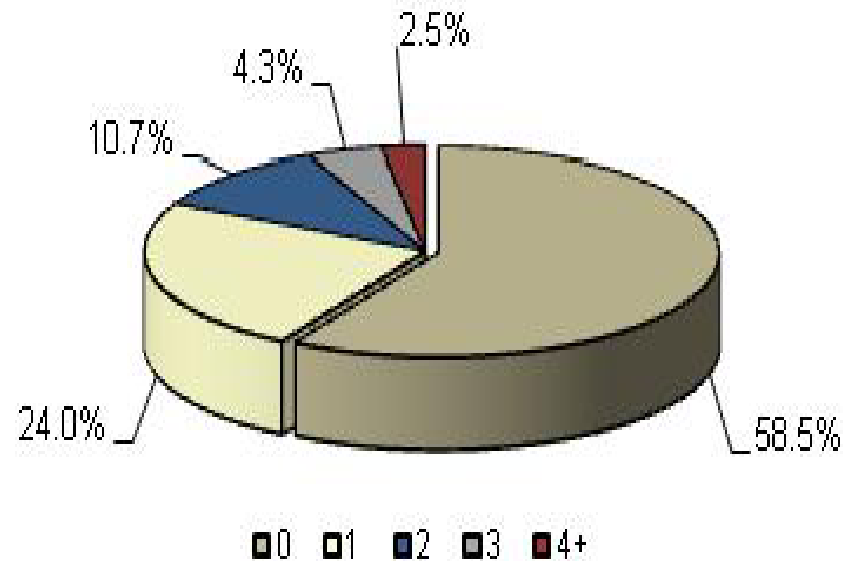
Prevalence of Chronic Conditions

17.3% of nurses have 2 or more chronic conditions. This is comparable to the entire commercial book of business (17.5%)

UPMC Health System - Nurses
Members by Number of Chronic Diagnoses



2006 Commercial Book of Business
Members by Number of Chronic Diagnoses



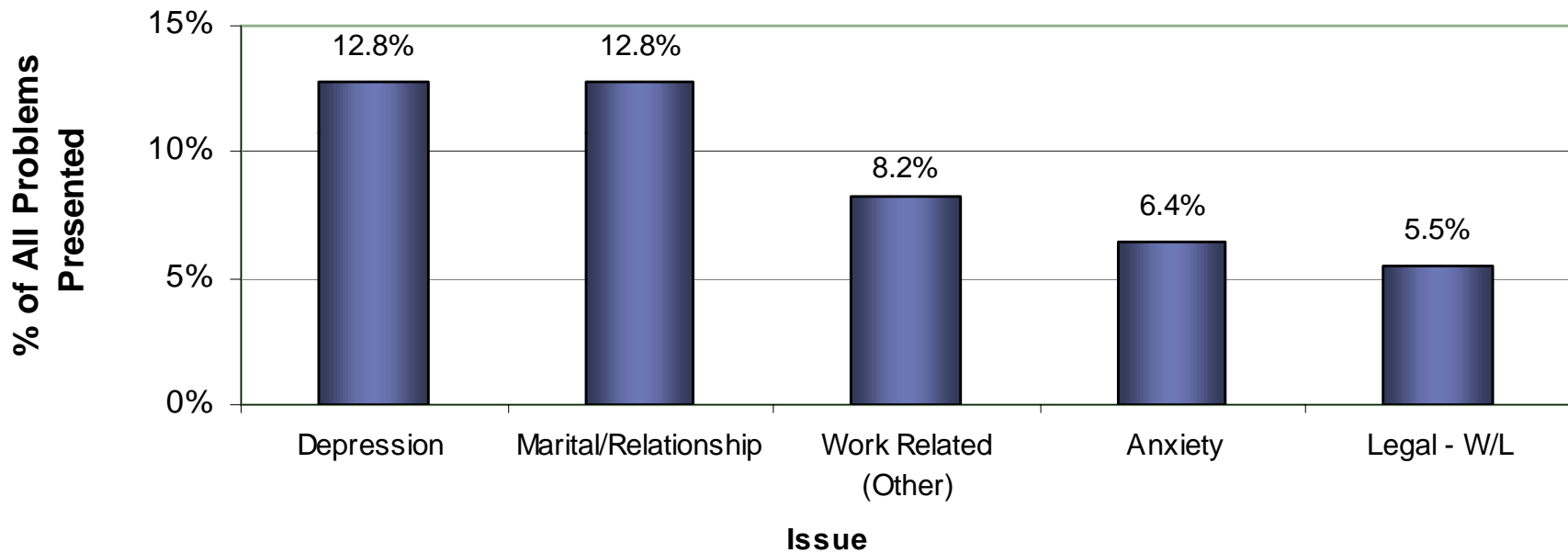
STD Utilization Drivers for Nurses 2007

Major Diagnostic Category	Active Claims								New Claims	
	Active Claims 2007	% of Group Active Claims	Total STD Paid 2007	% of Group Active Payments	Workdays Lost 2007	% of Group Workdays Lost 2007	LW/ 100 Ees (Annualized)	Equated FTE Loss Due to STD	Claim Incidence (Annualized)	New Claims
Musculo-skeletal/Connective	120	30.8%	\$ 279,594	33.4%	4,396	38.5%	150.6	16.9	3.2	93
Pregnancy	98	25.1%	\$ 227,859	27.2%	2,712	23.8%	92.9	10.4	2.6	76
Digestive	26	6.7%	\$ 33,420	4.0%	507	4.4%	17.4	2.0	0.7	21
Neoplasm	19	4.9%	\$ 58,817	7.0%	746	6.5%	25.6	2.9	0.5	15
Mental Disorders	22	5.6%	\$ 53,915	6.4%	781	6.8%	26.8	3.0	0.6	17
Nervous/Sensory	14	3.6%	\$ 26,176	3.1%	254	2.2%	8.7	1.0	0.4	13
Genitourinary	21	5.4%	\$ 30,214	3.6%	446	3.9%	15.3	1.7	0.6	18
Circulatory	14	3.6%	\$ 33,902	4.0%	394	3.5%	13.5	1.5	0.4	12
Respiratory	14	3.6%	\$ 18,770	2.2%	225	2.0%	7.7	0.9	0.5	14
Endocrine/Nutritional/Metabolic/Immunity	13	3.3%	\$ 22,399	2.7%	206	1.8%	7.1	0.8	0.4	12
Other	29	7.4%	\$ 52,341	6.3%	744	6.5%	25.5	2.9	0.8	24
Total	390		\$ 837,409		11,414		391.1	43.9	10.8	315

- UPMC Nurses annual new claim incidence is 27.1% higher than the UPMC total (10.8 compared to 8.5).
- Incidence drives lost workdays. UPMC Nurses lost workdays per 100 employees is 21.8% higher than the UPMC total (391.1 compared to 321.0).

Employee Assistance Program Utilization Drivers for Nurses

Top Issues Presented to EAP from UPMC Nurses



* For July 1, 2006 through June 30, 2007

Implications for the Clinical Environment

- The shortage of well educated, high caliber nurses continues to be an issue
- Nurse health affects the quality of patient care



2009 UPMC Priorities

- Diet and Weight Management
- Chemical Impairment
- Shift work and Health
- Energy Management

