

Linkages between Certification and Outcomes for Patients, Systems or Nurses

- This article cites a study published in 2002 by the American Board of Physical Therapy Specialties (ABPTS) of the APTA shows that board-certified PTs reported a higher average income than noncertified peers (*How Employers View Specialist Certification*, in **PT Magazine**, January 2003). This article reports that studies have also found that physicians and employers believe that certified specialists achieve more effective clinical outcomes and often manage patients with more complex conditions. The article also reports that specialty certification is a good time-management tool for recruiters and managers, offering greater assurances that a candidate has a certain skill level. [Physical Therapists Stand Out with Specialty Certification](#). Mehallow, C. Accessed online 10/09.
- This position paper gives a good summary of many of the research studies that have positive outcomes related to certification. In addition they advocate for their specialty nurses (infusion nurses) to publicly display their credentials and introduce themselves as a certified infusion nurse. *Joint INS/INCC Position Paper: The Value of Certification in Infusion Nursing*. **Journal of Infusion Nursing**, September/October 2009.
- The 2009 survey on earning power of healthcare environmental services/housekeeping and facilities professionals indicates that certification adds to a manager's salary (from 7-10% over peers without certification) and pays for itself over time. The article describes how certification can make the positive difference in hiring and layoff decisions. (*Earning Power: 2009 Salaries Survey*. **Health Facilities Management**, July 2009. Vol 22, 2009)
- This nationwide study showed that certified nurses scored higher than noncertified nurses on the *Nurses' Knowledge and Attitudes Survey Regarding Pain* as well as the *Nausea Management: Nurses' Knowledge and Attitudes Survey*. Chart audits showed that certified nurses followed National Comprehensive Cancer network guidelines for chemotherapy-induced nausea and vomiting (CINV) management more often than noncertified nurses, though improvements are needed in this area. (*Effect of Certification in Oncology Nursing on Nursing-Sensitive Outcome*. **Clinical Journal of Oncology Nursing**, April 2009. Volume 13, Number 2.)
- This salary survey indicates that holding a specialty certification garnered nurses an average of \$12.81 more per hour, followed by working holidays (\$8.03) or weekends (\$3.79). (*Nurse Earnings Survey*, **RN**, July 2009, 28-31.)
- This 2008 follow-up survey (to the initial 2006 survey) includes the following key points:
 - The majority of RNs in this survey of critical care nurses are very satisfied with nursing as a career.
 - Issues remain in the work environment that can impede quality of care, patient safety, and RN job satisfaction and retention.
 - Perceived organizational support for nursing certification is significantly related to the health of critical care nurses' work environments, quality of care, RN career and job satisfaction, and RNs' intent to leave their current positions.

- Improved leadership could result in lower turnover. ([*Critical Care Nurses' Work Environments 2008: A Follow-Up Report*](#) . **Critical Care Nurse**, 2009; 29: 93-102.)
- This research study and found that the unit proportion of certified staff registered nurses was inversely related to the rate of patient falls. Specialty certification and the competence of registered nurses are related to patient safety. Small numbers indicated a need for caution in interpretation and the need for research. ([*Competence and Certification of Registered Nurses and Safety of Patients in Intensive Care Units*](#). **American Journal of Critical Care**, 2009;18: 106-113.)
- Average nursing salaries in 2008 for nurses surveyed (4,553 nurses) were up. In the \$60,000-\$64,999 salary range the numbers of certified and non-certified respondents were almost even. More than 60% of nurses within the salary range of \$65,000 - \$120,000 reported they had a specialty certification. (*State of Nursing Salaries*. **Advance for Nurses**, March 4, 2009.)
- This article encourages Nurse Executives to support nursing specialty certification as an organizational workforce development strategy. A summary of the results of the ABNS 2006 white paper is contained; the article also mentions the Piazza study linking certification and perceptions of empowerment. (*Specialty Focus: Nursing certification as a workforce strategy*. **Nursing Management**, August 2008. Volume 39 Number 8.)
- This study suggests that physician cognitive skills, as measured by a maintenance of certification (MOC) exam are linked with higher rates of performing processes of care in Medicare patients e.g., care for diabetes and mammography screening. (*Association between Maintenance of Certification Examination Scores and Quality of Care for Medicare Beneficiaries*. **Archives of Internal Medicine**. Vol.168 No.13, July 14, 2008.)
- Nurses who hold professional certifications, work in emergency departments, and are members of a professional organization are more favorable toward family presence during resuscitation than are other nurses and they invite family presence more often. (*Nurses' Perceptions of Their Self-confidence and the Benefits and Risks of Family Presence during Resuscitation*. **American Journal of Critical Care**, March 2008, 17:101-111.)
- CCNS (Acute and Critical Care Clinical Nurse Specialist) highest average salary (\$74,875 for CCNS, next highest category \$71,053 for CNS). Nurses with specialty certification make more money than RNs only (approximately \$3,000-\$7,000 more per year reported in PA, NJ, and DE. (Salary Survey 2008.**Advance for Nurses**, 2008.)
- An acute care medical unit in Virginia (from a 750-bed academic healthcare organization) increased their certified nurses 60% in one year and experienced a decreased turnover rate (from 16.7% to 8.1%); a decreased vacancy rate (from 11% to 4.73%); and an increased patient satisfaction rating (excellent nursing care ratings from 88.2% to 90.4%) within that same year. RN satisfaction in the areas of teamwork, participation in unit decision making, and professional development also increased. (*Recognizing Excellence: Unit-Based Activities to Support Specialty Nursing Certification*. **MedSurg Nursing**, December 2007, Vol. 16. No. 6.)
- A retrospective study of 15,427 admissions of northern Illinois residents who underwent segmental colon resection showed that American Board of Surgery (ABS) certification was associated with reduced mortality and morbidity, as was increasing years of experience since

the ABS certification. Colorectal surgery subspecialty certification, however, and site of residency did not significantly affect outcomes. (*Patient outcomes for segmental colon resection according to surgeon's training, certification, and experience. Surgery*, 2002. Vol. 132. Issue 4.)

- Other geographic concerns, including cost of living, and professional factors like supply and demand, specialties, certifications, and years of experience, also can affect hourly rates. Highest demand - higher pay - is often reserved for nurses, therapists, and technologists who have expertise in a variety of specialty areas and who have shown dedication to their professions by becoming certified. While hourly rates vary by institution as well as by region, travelers in certain specialties or subspecialties can expect to earn a few dollars per hour more than their counterparts, as reflected in paychecks, bonuses, differentials, or overall benefit packages. (*Dollars and Sense: A Closer Look at Healthcare Traveler's Earnings. Healthcare Traveler*, March 1, 2007.)
- Top perceived values of certification include enhanced feelings of personal accomplishment, personal satisfaction and a professional challenge, enhanced professional credibility, and evidence of professional commitment. Nurse managers' ratings indicate a high value placed on nursing certification. Top incentives offered by employers included reimbursement for examination fees, listing of certification credentials on name tag or business card, and reimbursement for continuing education. Top three barriers to certification for nurses who had never been certified included cost of the examination, lack of institutional reward, and lack of institutional support. Top three barriers to certification for nurses whose certification lapsed included no longer practicing in the specialty, inadequate or no compensation for certification, and inadequate recognition for certification. [American Board of Nursing Specialties – Specialty Nursing Certification: Nurses' Perceptions, Values and Behaviors.](#)
- Differences found between certified and non-certified nurses. Wound care certification makes a difference. A relationship between certification and increased topic knowledge has long been assumed. The present study showed little difference in knowledge scores by levels of nursing education, years in practice, or facility type. Differences were found between nurses certified as wound specialists by the Wound Ostomy Continence Nursing Certification Board (WOCNCB) and the American Academy of Wound Management (AAWM) and nurses not certified in wound care or any nursing specialty. Other certifications studied include med-surg, oncology, geriatrics, and nurse practitioner.

There was a significant correlation ($P < .05$) among attending lectures or reading books or journal articles, using the Internet, and reading Agency for Healthcare Research and Quality guidelines. (*Certification and Education: Do They Affect Pressure Ulcer Knowledge in Nursing? Advances in Skin & Wound Care: The Journal for Prevention and Healing*, January 2007, Vol. 20; No. 1.)

- CCRNs at top of national survey of salary by credential. List of credentials includes CNOR, RN,C, OCN, and CCM. RNs averaged \$59,650; CCRNs averaged \$68,300. ([Advance for Nurses Salary Survey 2007](#)).
- Author Randy Claxton, RN, CCRN, NNP, MSN, cites a number of sources of quotes from certified nurses, to nursing administrators on the benefits of certification and calls for more research to link certification to outcomes. (*The Sky's the Limit: Certification – Get it Now. Men in Nursing*, December 2006.)

- “Certificants, noncertificants, and administrators agree, although to significantly different degrees, with intrinsic certification value statements as measured by responses to the PVCT. Nurses who are CNOR certified perceive greater value in certification than do those who are not certified. Among certificants, administrators who are CNOR certified perceive greater value in certification than do staff nurses who hold the credential.

“Respondents did not agree with the statement that certification increases salary. Although intrinsic values are important, barriers to certification most often listed were extrinsic (lack of reward and recognition). Nursing certification and health care organizations will need to find ways to provide extrinsic rewards if the goals of certification are to be achieved.” (*Perceived Value of Certification among Certified, Noncertified, and Administrative Perioperative Nurses* - **Journal of Professional Nursing**, July-August 2006.)

- Author Mary C. Smolenski, RN, EdD, APRN, BC, FAANP, CAE, of American Nurses Credentialing Center, provides a brief summary of eight reasons for nursing certification such as personal recognition, career progression, professional opportunities and networking, and reimbursement. (**Nursing Spectrum**, September 11, 2006.)
- Among all nurses, those who reported being certified in a specialty made \$9,200 more annually than nurses who weren't certified. (*Salary Survey*. **Nursing 2006**, October 2006 Vol. 36. No. 10.)
- Certified nurses in this study had increased access to job-related power and opportunity structures. Certification provides recognition of the nurses' knowledge and expertise in the specialty area, which in turn is empowering. Organizations that support and recognize this achievement may experience improved turnover and retention rates. (*Differences in Perceptions of Empowerment among Nationally Certified and Non-certified Nurse*. Piazza, et al; **JONA** Vol. 36, No. 3, May 2006.)
- American Association of Occupational Health Nurses (AAOHN) has released new findings that reveal a steady annual increase in the salaries and benefits received by AAOHN members in the past five years. More than 3,000 members responded to the survey in 2005, providing information on salary and benefits by considering factors such as certification level, education, job, title, number of years in a position, work schedule, company size and industry. Key findings include:
 - Average salary for AAOHN members is \$63,472. Based on the results, AAOHN reports that the estimated average salary has grown 3.9% annually since 2001.
 - Members with any type of occupational and environmental health nursing certification earn significantly more than those without such certification. (*Current Salary, Jobs; Professional Safety*. **AAOHN Profiles**, Vol. 51, Issue. 4, p 17, 4-1-2006.)
- Survey of Magnet hospital leaders to find what incentives they were offering to promote nurse certification.
 - 45/52 hospitals reimburse nurses for the cost of registration for the exam with proof of certification.
 - 14% of hospitals report that nurses receive a bonus for certification. Nine hospitals report a pay differential to certified nurses. 19 hospitals report certification is

encouraged or required as part of their clinical advancement programs with financial compensation.

- Nurses at 32 hospitals may display their certification letters on ID badges; in six of these hospitals, nurses may choose two credentials (RN and either another educational credential or certification credential).

Article also suggests the link between Magnet status and NDNQI may be able to link levels of education, certification, and patient outcomes. (*Certification and Magnet Hospitals: Will certification advance your career and improve patient outcomes?* **American Journal of Nursing**, July 2006. Volume 106 Number 7; Pages 74–76.)

- Purpose was to explore how certain factors in the environment and personal characteristics interact to affect hospital nursing practice behaviors. Surveys were sent to 500 nurses in Michigan, with a 73% response rate. The study suggested that both empowerment and self-efficacy (belief in one's abilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over one's work) relate to professional practice behaviors. Specialty certification was a control variable. Of the control variables (type of nursing education, specialty certification, and years of work experience), only education and specialty certification were significantly related to professional practice behaviors. (*Predictors of Professional Nursing Practice Behaviors in Hospital Settings*, **Nursing Research**; Jan/Feb 2005; Volume 54, No 1.)
- Number of AACN Certification Corporation exam candidates has grown 44% over the last year. A recent survey was aimed at learning more about this increase. The survey was sent to 2,376 certificants who recently became CCRN and PCCN certified, with a response rate of 27%.
 - Both groups of CCRNs and PCCNs strongly agree with the statements that certification:
 - provides personal challenge
 - demonstrates pride and commitment to specialty
 - furthers knowledge and education.
 - Commitment to the specialty is the highest rated reason for becoming certified. Professional development and ability to measure skills and knowledge against a national standard were also highly rated in both groups.
 - Half the newly certified CCRNs worked for facilities that have clinical ladder systems as part of their professional development and advancement programs. 60% of the recently certified PCCNs work for hospitals with clinical ladders.
 - Recently certified PCCNs report twice as many of their hospitals recognize both specialty and subspecialty certifications than the newly certified CCRNs report.
 - 35% of nurses responding report obtaining a higher salary as a result of specialty certification. (*AACN Survey on Recently Certified CCRNs and PCCNs*; **AACN/AACN Certification Corporation – 2006**.)
- Study results suggest that certified nurses perform better than non-certified nurses, particularly in the areas of teaching/collaboration and planning/evaluation. There were inconsistent responses between the staff and supervision evaluations of nurse performance, with the

supervisor evaluation showing differences between certified and noncertified nurses. (*Does certification mean better performance?* **Nursing Management**, February, 1997.)

- Nurse managers rate highly on agreement with certification value statements. Highest barriers to certification were cost, lack of institutional rewards, and lack of institutional support. Top three incentives were reimbursing exam fees, displaying certification credential on nametag and/or business cards, and reimbursing for continuing education. No difference in absences found between certified and non-certified nurses. Not clear results on nurse retention. N=11,000. (*Value of Specialty Nursing Certification Study*; **American Board of Nursing Specialties – 2006.**)
- In a study by the American Board of Nursing Specialties (ABNS), 139 nurse managers shared their perceptions of nursing certification (**Nursing Management 2005**).
 - 86% indicated they'd hire a certified nurse over a non-certified nurse if all else were equal because of:
 - 1) proven knowledge base in a given specialty (85.8%) and
 - 2) professional commitment to lifelong learning (77.5%)
 - 30% assign more complex patients to certified nurses
 - 58% identified a difference in certified vs. non-certified staff performance (notably less than the 86% percent that prefer certified nurses)
 - 74% of institutions gave one or more incentives to promote and recognize certification
- 93% of units surveyed in **AACN's 2004 National Critical Care Survey** reported that nurse managers encourage RNs to obtain specialty certification.
- Class I Recommendation from **ACC/AHA Guidelines** states “nursing care should be provided by individuals certified in critical care, with staffing based on the specific needs of patients and provider competencies, as well as organizational priorities.” Level of Evidence: C. (*ACC/AHA Guidelines for the Management of Patients with ST-elevation Myocardial Infarction, 2004.*)
- **RN magazine's 2005** salary survey showed that 18% of nurses surveyed received an average of one dollar more per hour for having a specialty certification.
- In a separate survey conducted by **Nursing 2005**, certified nurses earned 15% more than their non-certified peers.
- [*American Association of Critical-Care Nurses' National Survey of Facilities and Units Providing Critical Care*](#) found that out of 300 units responding in which nurses were recognized for activities:
 - About three quarters of facilities recognized nurses for certification, mostly through public acknowledgment (42% of facilities) or bonuses (25%). (**American Journal of Critical Care**, January 2006.)