

A Study of California Nurses Placed on Probation

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Introduction and Methods

The California Board of Registered Nursing (BRN) is responsible for protecting the health and safety of the public by regulating registered nurses (RNs) in the state. Nurses put on probation by the BRN have been disciplined for behavior that could jeopardize patient health or safety. Thus, analyzing characteristics of these RNs and their likelihood of recidivism can inform BRN policies regarding this population of nurses, and address concerns over the presence of these nurses in hospitals and other health care settings. The BRN commissioned the University of California, San Francisco (UCSF), to research characteristics of these nurses and the outcomes of their probation. This report represents the first effort to describe the demographic characteristics of California RNs on probation, as well as the offenses that lead to probation and recidivism.

This study was modeled after work conducted by the National Council of State Boards of Nursing (NCSBN).¹ The BRN used the data extraction form used in the NCSBN study to collect data on all nurses who were on probation in California in 2004 or 2005 (n=282). The probation data include demographics, location of pre-licensure nursing education, history of legal or disciplinary action prior to the probation under study, change in employment during probation, grounds for probation, outcomes of probation and recidivism. A second set of nurses was selected as a control group; this is a group of 298 RNs who had no probation history as of 2005. They may have had a previous criminal history that did not result in probation by the BRN. The control group was randomly selected so that they have the same numbers of nurses as the disciplined nurses in terms of age and initial RN education.

The BRN assigned unique identification numbers to all nurses in the sample in order to protect their identity. UCSF received the unidentified data collection forms from the BRN and proceeded with the data entry and analysis. All data are presented in aggregate.

Descriptive, chi-square, and probit regression analyses were performed to examine the characteristics of disciplined nurses and the factors associated with probation status and outcomes. To compare demographics between the disciplined nurses and the overall

¹ Zhong, E.H., K. Kenward, et al. (2009) "Probation and recidivism: remediation among disciplined nurses in six states." *American Journal of Nursing* 109(3): 48-50, 52-7.

population of employed nurses with active licenses living in California, statistics were drawn from the 2006 BRN Survey of Registered Nurses. Analyses were conducted using the statistical analysis software Stata/SE 10.1.

Results

Results from this study are presented in two parts – (1) data describing nurses on probation during 2004 or 2005 and (2) factors associated with probation status and outcomes.

Characteristics of RNs on Probation

The following data describe 282 RNs who were on probation in California in 2004 (n=156) or 2005 (n=126). Some of the variables² considered for analysis had a large share of unknown values, which can lead to inaccurate assumptions. Therefore, those characteristics are excluded here and provided for reference in the Appendix. The data are compared with data from the 2006 Survey of RNs, to provide an appraisal of differences between nurses on probation and the total population of working nurses in California (n=224,905). Data from the control group of 298 RNs also are presented, to assess whether the control group has similar characteristics as the group of nurses on probation so that comparisons of rates of later probation are valid.

AGE

The average age of nurses when they were put on probation was 45.9 years. Ages of RNs on probation ranged from a low of 26 years to a high of 70 years. The age of nurses on probation was slightly lower than the average age of working RNs in 2006 (47.1 years)³. Table 1 shows the age distribution of nurses on probation, of the RNs in the control group, and of employed nurses in California. The age distribution of the control group is similar to that of RNs on probation.

Table 1. Age distribution

	RNs on probation	All employed CA RNs*	Control group (not on Probation)
Average age	45.9 years	47.1 years	45.5 years
<30 yrs	2.8%	7.6%	4.7%
30-39	20.9%	20.1%	17.8%
40-49	42.9%	27.0%	42.6%
50-59	28.8%	31.6%	30.5%
60+	4.7%	13.8%	4.4%
Total	282		298

* Data from CA BRN Survey of RNs, 2006. Survey data are weighted to reflect the population of employed RNs in CA.

² Race/ethnicity, marital status, number of NCLEX failures, number of RN licenses, employment status, prior mental illness

³ Data on all employed RNs in California were extracted from the California BRN Survey of RNs, 2006.

GENDER

In 2006, men represented 9.1% of the population of working RNs in California. However 25.9% of disciplined nurses were male as indicated in Table 2. The NCSBN study also found that men represented a greater share (14%) of nurses on probation than nurses in the general nursing population (5% of RNs, 6% of LPNs).⁴ Data from the California Department of Justice show that 78.9% of all felonies⁵ and misdemeanors⁶ in 2008 were committed by men. These findings suggest that men are more likely than women to commit crimes and may, therefore, be more likely to be assigned probation for committing those crimes.

Table 2. Gender Distribution

	RNs on probation		All Employed CA RNs	Control group (not on probation)	
	#	%	%	#	%
Men	73	25.9%	9.1%	73	24.7%
Women	209	74.1%	90.9%	223	75.3%

On average, male nurses on probation were younger than women (44.6 years versus 46.3 years) and had less experience in nursing (11.5 years versus 15.5 years). Table 3 shows that a greater share of men had a prior criminal history and received RN licensure by taking the NCLEX-RN in California. However, there was no statistically significant difference in men and women in terms of (1) Associate Degree in Nursing (AD) as their initial pre-licensure nursing education, (2) location of pre-licensure education, (3) prior discipline or diversion through the BRN, (4) grounds for probation, (5) hospital employment when the probationary incident occurred, (6) change of employers during probation, (7) chemical dependency requirements as terms of their probation, or (8) recidivism.⁷

⁴ Zhong, E.H., K. Kenward, et al. (2009) "Probation and recidivism: remediation among disciplined nurses in six states." *American Journal of Nursing* 109(3): 48-50, 52-7.

⁵ California Department of Justice, Criminal Justice Statistics Center. (2008). *Adult felony arrests by gender, statewide* [Data file]. Available from California Department of Justice website: http://stats.doj.ca.gov/cjsc_stats/prof08/00/3B.htm.

⁶ California Department of Justice, Criminal Justice Statistics Center. (2008). *Adult misdemeanor arrests by gender, statewide* [Data file]. Available from California Department of Justice website: http://stats.doj.ca.gov/cjsc_stats/prof08/00/4B.htm.

⁷ Results of chi-square analyses show that none of these variables are statistically significant at the 0.05 level.

Table 3. Differences between men and women on probation

Differences	Men		Women	
	#	%	#	%
Had a prior criminal history *	31	43.1%	44	21.6%
Licensed by NCLEX in CA*	65	89.0%	160	76.6%

*Chi-square results statistically significant at the $p < 0.05$ level.

NURSING EDUCATION

The majority of nurses on probation held an Associate's Degree (63.8%) as their pre-licensure nursing education. A slightly smaller share of working nurses in California (47.3%)⁸ had the same level of education.

Most working nurses in California (56.7%), including those on probation (62.1%), received their initial pre-licensure nursing education in California. Just over 11% of nurses on probation received their education abroad, while almost 18% of all employed nurses in California received their education outside of the United States. The large majority (69%, $n=22$) of internationally trained nurses on probation received their training in the Philippines. Although nurses receiving their training in the Philippines comprise the largest fraction of non-US trained nurses on probation in 2004 or 2005, they are underrepresented in the probationary population compared to their presence among all working nurses in California. Nearly 8% of nurses on probation received their education in the Philippines, while 11.6% of all employed nurses in California were educated in the Philippines⁹, as shown in Table 4.

⁸ Data on all employed RNs in California were extracted from the California BRN Survey of RNs, 2006

⁹ Data on all employed RNs in California were extracted from the California BRN Survey of RNs, 2006.

Table 4. Nursing education

Pre-licensure nursing education	RNs on probation		All employed CA RNs*	Control group (not on probation)	
	#	%	%	#	%
Diploma	15	5.3%	15.7%	25	8.4%
ADN	180	63.8%	47.3%	188	63.1%
BSN	69	24.5%	35.5%	69	23.2%
MSN	1	0.4%	1.6%	8	2.7%
Military	2	0.7%	--	3	1.0%
Other	1	0.4%	--	3	1.0%
Unknown	14	5.0%	--	2	0.7%
Total	282	100%	100%	298	100%
Location of pre-licensure nursing education					
California	175	62.1%	56.7%	130	43.6%
US – not CA	74	26.2%	25.6%	125	42.0%
International	32	11.4%	17.8%	42	14.1%
Philippines	22	7.8%	11.6%	20	6.7%
Unknown	1	0.4%	--	1	0.3%
Total	282	100%	100%	298	100%

* Data from CA BRN Survey of RNs, 2006. Survey data are weighted to reflect the population of actively licensed RNs in CA.

On average, probationary nurses educated in the Philippines were older than nurses educated in other countries or in the US (48.2 years versus 45.6 years) and had more experience in nursing (15.8 years versus 14.4 years). Earning pre-licensure nursing education in the Philippines was significantly associated with being on probation for a practice error.¹⁰ However, the findings also suggest that nurses educated in the Philippines who were assigned probation tended to comply with probation requirements and had lower rates of recidivism after being placed on probation than nurses educated elsewhere, as shown in Table 5. Although these results provide some insight into the group of nurses educated in the Philippines and on probation in 2004 or 2005, the small sample size (n=22) limits the generalizability of these results.

¹⁰ Chi-square analysis shows statistical significance at the 0.05 level.

Table 5. Differences between probationary RNs educated in the Philippines and those educated elsewhere

	Philippines		Not Philippines	
	#	%	#	%
Had previous criminal history*	2	9.1%	72	28.5%
Participated in BRN diversion program*	0	0%	51	19.7%
Worked in a hospital when put on probation*	10	45.5%	156	71.9%
Assigned chemical dependency evaluation and treatment for probation*	0	0%	162	62.8%
Completed probation*	19	86.4%	130	51.2%
Recidivated*	3	13.6%	103	40.6%

*Results of chi-square analysis significant at the 0.05 level.

NURSING LICENSURE AND EXPERIENCE

About 69% of nurses on probation took the NCLEX-RN in California to qualify for RN licensure in the state, while 20.2% were licensed by endorsement, and 11.0% were licensed by the State Board Test Pool, as shown in Table 6. A larger share of RNs in the control group were licensed by endorsement than among RNs on probation.

Nurses on probation had been licensed as nurses for an average of 14.5 years, ranging from newly licensed to 40 years since initial licensure. The average working nurse in California had been licensed longer (19.9 years, SE=0.14) than nurses on probation.¹¹ Nurses in the control group had been licensed fewer years, with an average of 9.7 years, than those on probation.

A smaller share of advanced practice nurses are on probation (3.9%) than in the general population of employed nurses in California (12.0%). However, 22.7% of RNs on probation had been licensed as Licensed Vocational Nurses (LVNs), while only 10.0% of all working California RNs were licensed as LVNs.¹² Since RNs who have been licensed as LVNs may no longer have an active LVN license, the share of the RNs on probation who have been LVNs may be underrepresented. It should be noted that the NCSBN study sample included a larger percentage (36%) of LVNs than were identified in this study sample.

¹¹ Data on all employed RNs in California were extracted from the California BRN Survey of RNs, 2006.

¹² Data on all employed RNs in California were extracted from the California BRN Survey of RNs, 2006.

Table 6. Nursing licensure and experience

Nursing licensure and experience	RNs on probation		All employed CA RNs*	Control group (not on probation)	
	#	%		#	%
Mechanism of RN licensure					
NCLEX	194	68.8%	NA	177	59.4%
Endorsement	57	20.2%	NA	115	38.6%
State Board Test Pool	31	11.0%	NA	6	2.0%
Total	282	100%	NA	298	100%
Years licensed as RN					
<5	26	9.2%	11.4%	1	0.3%
5-9	61	21.6%	13.3%	85	28.6%
10-14	71	25.2%	14.3%	113	38.1%
15-19	43	15.3%	11.6%	34	11.5%
20-24	47	16.7%	12.0%	17	5.7%
25-29	19	6.7%	14.0%	29	9.7%
30+	15	5.3%	23.4%	18	6.1%
Total	282	100%	100%	298	100%
Other nursing certifications					
LVN	64	22.7%**	10.5%	61	20.5%
NP	8	2.8%	6.6%	17	5.7%
CRNA	2	0.7%	0.6%	3	1.0%
CNM	1	0.4%	2.0%	1	0.3%
CNS	0	0.0%	2.8%	2	0.7%
Public Health Nurse	19	6.7%	15.5%	28	9.4%

NA – Not available

* Data from CA BRN Survey of RNs, 2006. Survey data are weighted to reflect the population of actively licensed RNs in CA.

** RNs who have been licensed as LVNs may no longer have an active LVN license. Therefore, the share of these disciplined RNs who were LVNs may underrepresent RNs who are, or have been, LVNs.

EMPLOYMENT

About 60% of California nurses, including those on probation, were employed in a hospital setting at the time of probation, as shown in Table 7. Since the work setting was unknown for 13.4% of the nurses on probation, it is unclear as to whether there is a difference in employment setting between nurses on probation and the general population of working nurses in the state. However, 12.4% of nurses on probation were working for a nursing registry, while only 4.2% of employed California nurses were working for a registry.¹³ Incomplete sample data on registry status could mean the percentage of nurses working for a registry may be greater than 12.4%. Twenty-six percent of nurses on probation changed jobs while on probation, a factor found to be significantly related to recidivism in both this and the NCSBN study.

¹³ Data on all employed RNs in California were extracted from the California BRN Survey of RNs, 2006.

Table 7. Nursing employment at time of probation

Employment setting	RNs on probation		All employed CA RNs*
	#	%	
Hospital	167	59.2%	62.7%
Ambulatory care	14	5.0%	15.9%
Long-term care	27	9.6%	2.3%
Home health	9	3.2%	3.0%
Other	23	8.2%	16.3%
Unknown	42	14.9%	--
Total	282	100%	100%
Working for a nursing registry**	35	12.4%	4.2%
Incident occurred at work	201	71.3%	

* Data from CA BRN Survey of RNs, 2006

**Results of chi-square analysis significant at the 0.05 level.

PRIOR OFFENSES AND DISCIPLINE

Prior to their 2004/2005 probation, 26.6% (n=75) of nurses had a prior criminal history, 17.7% (n=50) had disciplinary action by the BRN, and 18.1% (n=51) had been in the BRN diversion program. Among nurses in the control group (who had no probation history prior to 2004/2005), only 9.7% (n=29) had a prior criminal history. An analysis of disciplined nurses in six states conducted by the National Council of State Board of Nursing found that 35% had a history of criminal conviction, while only 3% of nurses who had not been disciplined had such a history.¹⁴ It should be noted that data collected for this analysis may not have fully captured all enrollments in the BRN diversion program and the percentage may be greater than 18.1%. There was insufficient evidence on the history of mental illness among the nurses on probation to include these data in the analysis.

GROUNDS FOR PROBATION

Of the 282 nurses on probation during the study time period, 66.7% were on probation for offenses related to drugs or criminal misconduct, 28.7% committed practice errors, and 4.6% were on probation for a drug or criminal misconduct offense and had committed a practice error or were on probation for another type of offense (i.e. mental illness), as shown in Table 8. More

¹⁴ Zhong, E.H., K. Kenward, et al. (2009) "Probation and recidivism: remediation among disciplined nurses in six states." *American Journal of Nursing* 109(3): 48-50, 52-7.

than half of the nurses on probation (53.5%) committed drug-related offenses, and 7.4% had incidents of driving under the influence of alcohol or other substances. Patient harm was documented in 8.2% of the cases that led to probation, and patient death was reported in 5.3% of the cases. The majority (71.3%) of incidents that led to probation occurred while the nurse was at work.

Table 8. Grounds for probation

Grounds for probation	Number	Percent
Practice error	81	28.7%
Patient harm	22	27.2%
Patient death	15	18.5%
Drugs or criminal misconduct	188	66.6%
Drugs/alcohol	146	77.7%
DUI	19	10.1%
Criminal misconduct	50	26.6%
Concurrent practice error and drug/misconduct*	9	3.2%
Patient harm	1	7.7%
Drugs/alcohol	5	38.5%
DUI	2	15.4%
Criminal misconduct	2	15.4%
Other*	4	1.4%
Total	282	100%

* Including unprofessional conduct, bizarre behavior.

Of the nurses on probation in 2004 or 2005, regression analysis¹⁵ shows that those educated in the Philippines were more likely to have committed a practice error than nurses educated elsewhere ($p=0.002$). Nurses under 40 years of age ($p=0.016$), those with a criminal record ($p=0.038$), those who worked in a hospital ($p=0.005$) or had an unknown place of employment ($p=0.005$) when put on probation, or those who had been on diversion ($p=0.010$) were more likely to be on probation for drug or criminal misconduct offenses.

FACTORS INFLUENCING WHY NURSES ARE ON PROBATION

Regression analysis¹⁶ of the demographic data allows us to better understand the characteristics of those nurses who had a prior criminal history or BRN disciplinary action prior to the 2004/2005 probation (26.6%).

Nurses on probation were significantly more likely to have a prior criminal history if they were male, 40 years of age or older, or received their RN license more recently. Nurses who received their pre-licensure nursing education in the Philippines were significantly less likely to

¹⁵ Probit regression analysis reporting marginal effects was used for the analysis.

¹⁶ Probit regression analysis reporting marginal effects was used for this analysis.

have a prior criminal history. Among nurses who had not been placed on probation prior to 2004/2005, a previous criminal history was significantly more likely among those who were educated at the diploma or associate degree level.

Nurses were significantly more likely to have had prior BRN disciplinary action if they received licensure by taking the NCLEX-RN in California rather than by endorsement or if they had been licensed as an RN for longer period of time. For each additional year licensed as an RN, the nurse on probation was 1.9 percentage points more likely to have participated in the BRN diversion program ($p=0.000$). These data suggest that of nurses on probation, those who have been licensed RNs for a longer period of time are more likely to have had prior discipline than nurses who became licensed more recently.

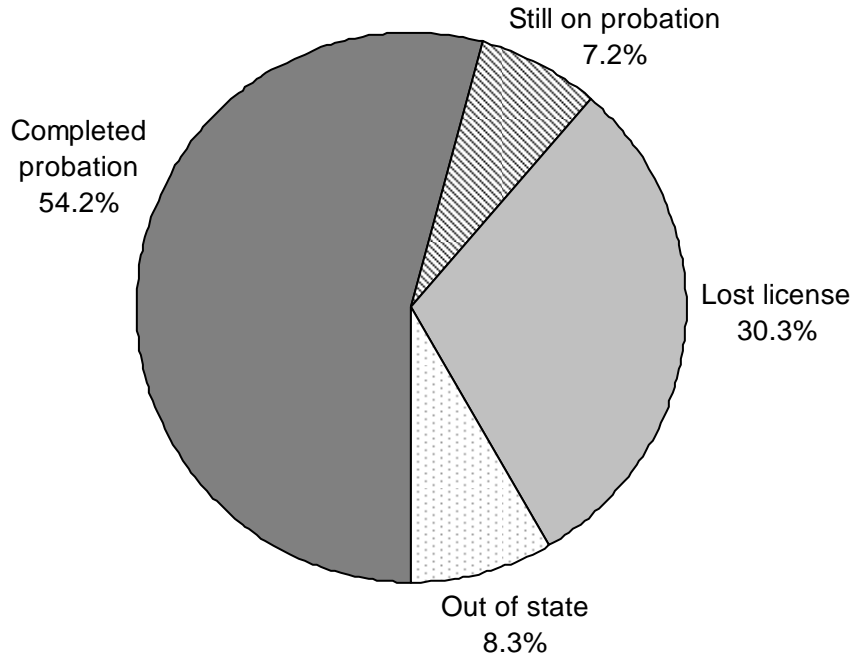
Probation Outcomes

COMPLETING PROBATION

The BRN aims to help nurses complete probation successfully and return to nursing practice. While some nurses follow this path or choose to leave nursing after completing probation, others fail probation or have their probation extended if they violate the terms of their probation, move out of state, lose their license, or are under new investigation.

The five nurses who died while on probation do not have an outcome for their probation and are excluded from all analyses involving the outcome of probation. Of the remaining 277 nurses, more than half (54.2%) completed probation, 7.2% were still on probation when their files were reviewed for this study, 30.3% lost their license either by revocation or voluntary surrender, and 8.3% had moved out of state, as shown in Chart 1.

Chart 1. Outcomes of Probation



Of the 150 nurses who completed probation, 97.3% returned to nursing practice. Incidents of patient harm and patient death were rare in this study, and as such strong statistical claims cannot be made about those data. However, previously disciplined nurses returning to nursing practice accounted for more of the incidents of patient harm (91.3%) and patient death (73.3%) than did initial incidents that led to probation.

The majority of nurses who committed practice errors completed probation (68.8%), while less than half of the nurses who were on probation for other reasons completed probation, as shown in Table 9.

Table 9. Grounds for probation by probation outcome

Probation outcome	Grounds for probation					
	Drugs/misconduct		Practice error		Other*	
	#	%	#	%	#	%
Completed probation	90	48.9%	55	68.8%	5	38.5%
Still on probation	17	9.2%	3	3.8%	0	0.0%
Lost license	67	36.4%	11	13.8%	6	46.2%
Out of state	10	5.4%	11	13.8%	2	15.4%
Total	184	100%	80	100%	13	100%

* Due to small sample size, this category represents RNs on probation for both practice errors and drugs/misconduct, as well as RNs who had another offense.

FAILING PROBATION

Successful completion of probation entailed meeting the one or more components of the assigned probation requirements as listed in Table 10. Almost half (48.0%) of the nurses who did not complete probation¹⁷ failed to complete the chemical dependency evaluation and treatment components of their probation. The majority of RNs in this category were initially put on probation for drugs or criminal misconduct. A large share of RNs with drug or misconduct offenses also failed to submit reports to the BRN from their employer, themselves and others (40.9%) and to complete the mental health evaluation and treatment components of their probation (29.1%), as shown in Table 10. The most common reasons why nurses with practice errors failed probation were failing to complete the education requirements (36.0%) and failing to submit reports from their employer, themselves or others (40.0%). More than 27% of the nurses who did not complete probation also failed the cost recovery component of probation. Due to the small sample size of probationary RNs who committed both a practice error and a drug or misconduct offense and those with other offenses, the reasons why these nurses failed probation are not compared with the other groups of probationary RNs.

¹⁷ RNs who did not complete probation are defined as those who lost their license, are still on probation or are out of state.

Table 10. Top reasons why RNs on probation did not complete probation*

Failed probation requirements**	Grounds for probation							
	Drugs/ misconduct		Practice error		Other***		Total	
	#	%	#	%	#	%	#	%
Complete education requirements	23	24.5%	9	36.0%	0	0.0%	32	25.2%
Mental health evaluation & treatment compliance	32	34.0%	4	16.0%	1	12.5%	37	29.1%
Chemical dependency evaluation & treatment compliance	59	62.8%	1	4.0%	5	62.5%	65	51.2%
Physical evaluation	22	23.4%	2	8.0%	1	12.5%	25	19.7%
RN available for interviews with BRN	12	12.8%	1	4.0%	0	0.0%	13	10.2%
Reports from employer, self or other	41	43.6%	10	40.0%	1	12.5%	52	40.9%
Cost recovery	27	28.7%	8	32.0%	0	0.0%	35	27.6%
Maintain active CA RN license	1	1.1%	2	8.0%	0	0.0%	3	2.4%
Obey all laws	22	23.4%	1	4.0%	2	25.0%	25	19.7%
Work as an RN	10	10.6%	2	8.0%	0	0.0%	12	9.5%
Total	94		25		8		127	

*RNs who did not complete probation are defined as those who lost their license, are still on probation or are out of state.

**Probation requirements were excluded from the table when less than 5% of the nurses in any category failed that requirement.

***Due to small sample size, this category represents RNs on probation for both practice errors and drugs/misconduct, as well as RNs who had another offense.

The most common cause of probation failure was RNs not completing chemical dependency evaluation and treatment. Of the 162 nurses initially assigned chemical dependency evaluation and treatment as part of their probation, 94.4% were on probation due to drug or criminal misconduct offenses. Three of these nurses died while on probation. Of the remaining 159 nurses, 44.0% completed probation, 9.4% were still on probation when their files were reviewed for this study, 40.3% lost their license, and 6.3% had moved out of state, as shown in the chart below. Chi-square analysis indicates that RNs with chemical dependency requirements of their probation had lower probation completion rates than nurses without these probation requirements ($p < 0.001$).

Chart 2. Outcomes of Probation for Chemical Dependency Probationers



Of the 89 chemical dependency probationers that did not complete probation, 66.3% failed the chemical dependency requirements, 38.2% failed the reports component, and 34.8% failed the mental health evaluation and treatment requirements of their probation, as shown in Table 11. Since almost all nurses with chemical dependency requirements of their probation were on probation for a drug or misconduct offense (93.3%), the reasons why these RNs failed probation are not categorized by the grounds for probation.

Table 11. Top reasons why chemical dependency probationers did not complete probation*

Failed probation requirements** (n=89)	Number	Percent
Complete education requirements	18	20.2%
Mental health evaluation & treatment compliance	31	34.8%
Chemical dependency evaluation & treatment compliance	59	66.3%
Physical evaluation	23	25.8%
RN available for interviews with BRN	9	10.1%
Reports from employer, self or other	34	38.2%
Cost recovery	23	25.8%
Obey all laws	19	21.3%
Work as an RN	9	10.1%
Voluntarily surrendered license	28	31.5%

*RNs who did not complete probation are defined as those who lost their license, are still on probation or are out of state.

**Probation requirements were excluded from the table when less than 5% of the nurses in any category failed that requirement.

FACTORS IMPACTING THE COMPLETION OF PROBATION

Chi-square analysis was performed to examine if RNs who completed probation successfully had different employment, education, disciplinary history, or grounds for probation than RNs who failed probation. Table 12 shows that there was a statistically significant relationship between failing probation and (1) changing employers during probation, (2) prior discipline from the BRN, (3) participation in the BRN diversion program, (4) receiving pre-licensure nursing education in the United States or (5) having chemical dependency evaluation and treatment requirements as part of probation. The analysis also suggests that nurses who committed practice errors had significantly better completion rates than those who were on probation for other reasons.

Table 12. Factors impacting the completion of probation

Factors	Group	Completed probation		Failed probation		Chi-square (p)
		#	%	#	%	
Changed employers during probation (n=220)	Yes	35	48.6%	37	51.4%	16.0**
	No	112	75.7%	36	24.3%	
Prior discipline by the BRN (n=275)	Yes	19	38.0%	31	62.0%	6.7**
	No	131	58.2%	94	41.8%	
Diversion (n=277)	Yes	20	39.2%	31	60.8%	5.6*
	No	130	57.5%	96	42.5%	
Location of pre-licensure RN education (n=276)	CA	96	55.8%	76	44.2%	11.4**
	US – not CA	29	40.3%	43	59.7%	
	International	24	75.0%	8	25.0%	
Chemical dependency probationers (n=277)	Yes	70	44.0%	89	56.0%	15.4**
	No	80	67.8%	38	32.2%	
Grounds for probation (n=277)	Practice error	55	68.8%	25	31.3%	10.6*
	Drugs/ misconduct	90	48.9%	94	51.1%	
	Practice error & drugs/misconduct	4	44.4%	5	55.6%	
	Other offense	1	25.0%	3	75.0%	

*p<.05 **p<.01

Regression analysis¹⁸ of these factors and their relationship to completing probation shows that nurses who committed practice errors were 24.1 percentage points more likely to complete probation than nurses on probation for drugs/misconduct or other reasons (p<.05). These data suggest that nurses who commit a practice error are likely to complete probation.

Recidivism

Recidivism was defined as (1) the failure of the disciplined nurse to comply with probation requirements, (2) a subsequent complaint received by the BRN, including a relapse of the behavior for which the nurse was put on probation in 2004 or 2005, or (3) a subsequent arrest or conviction. Records of all nurses in the sample were reviewed for recidivism in 2010, and recidivism was confirmed if any aspect of the aforementioned definition occurred since the nurse was put on probation. Nurses who recidivated were categorized into one of the aforementioned recidivist groups based on the severity of the action since being put on

¹⁸ Probit regression analysis reporting marginal effects was used for this analysis.

probation. The groups are listed in order of increasing severity. Therefore, an arrest or conviction is more severe than a subsequent complaint, which is more severe than violating a term of probation. If a complaint was received by the BRN that was not actionable or was outside the jurisdiction of the BRN – and the nurse had no other incident since being put on probation – that nurse was not classified as a recidivist.

Since being put on probation in 2004 or 2005, 61.7% of the disciplined nurses did not recidivate, while 38.3% did. These results are similar to those found in the NCSBN study, which shows that 39% of their sample recidivated.¹⁹ Of the California nurses that recidivated, 33.0% had a subsequent arrest or conviction and 23.6% had either a subsequent complaint that was received by the BRN or a relapse of behavior that led to the initial probation. Recidivism rates were higher for nurses on probation for drugs or criminal misconduct (45.7%) than for nurses on probation for practice errors (21.3%), as shown in Table 13.

Table 13. Recidivism by grounds for probation

	Grounds for probation							
	Drugs/misconduct		Practice error		Other*		Total	
	#	%	#	%	#	%	#	%
Recidivated	84	45.7%	17	21.3%	5	38.5%	106	38.3%
Did not recidivate	100	54.4%	63	78.8%	8	61.5%	171	61.7%
Total	184	100%	80	100%	13	100%	277	100%

* Due to small sample size, this category represents RNs on probation for both practice errors and drugs/misconduct, as well as RNs who had another offense.

FACTORS IMPACTING RECIDIVISM

Like the NCSBN study, Chi-square analysis shows a statistically significant relationship between recidivism and nurses who (1) had a prior criminal history or (2) changed employers during probation. This analysis also showed a significant relationship between recidivism and whether the nurse (3) had prior discipline from the BRN, (4) participated in the BRN diversion program, (5) received their pre-licensure nursing education in the United States, or (6) were given chemical dependency evaluation and treatment requirements as part of their probation, as shown in Table 14. These data also showed that nurses who committed practice errors had significantly lower recidivism rates than those who were on probation for other reasons. Unlike

¹⁹ Zhong, E.H., K. Kenward, et al. (2009) "Probation and recidivism: remediation among disciplined nurses in six states." *American Journal of Nursing* 109(3): 48-50, 52-7.

the NCSBN results, this analysis did not find gender or age to be significantly associated with recidivating.

Table 14. Factors impacting recidivism

Factors	Group	Recidivated		Did not recidivate		Chi-square (p)
		#	%	#	%	
Criminal history (n=271)	Yes	41	55.4%	33	44.6%	14.3**
	No	60	30.5%	137	69.5%	
Changed employers during probation (n=220)	Yes	32	44.4%	40	55.6%	8.5**
	No	37	25.0%	111	75.0%	
Prior discipline (n=275)	Yes	26	52.0%	24	48.0%	5.2*
	No	78	34.7%	147	65.3%	
Diversion (n=277)	Yes	27	52.9%	24	47.1%	5.7*
	No	79	35.0%	147	65.0%	
Location of pre-licensure RN education (n=276)	CA	68	39.5%	104	60.5%	6.4*
	US – not CA	32	44.4%	40	55.6%	
	International	6	18.8%	26	81.3%	
Grounds for probation (n=277)	Drugs/ misconduct	84	45.6%	100	54.4%	14.5**
	Practice error	17	21.3%	63	78.8%	
	Practice error & drugs/misconduct	4	44.4%	5	55.6%	
	Other offense	1	25.0%	3	75.0%	
Chemical dependency probationers (n=277)	Yes	78	49.1%	81	50.9%	18.4**
	No	28	23.7%	90	76.3%	

*p<.05 **p<.01

Regression analysis²⁰ of these factors and their relationship to recidivism shows that nurses who committed drug or misconduct offenses were significantly more likely, by 17.3 percentage points, to recidivate than nurses on probation for practice errors or other reasons. In addition, recidivism was significantly more likely if nurses (1) worked at a hospital when the probationary incident occurred, or, similar to results of the NCSBN study, (2).had a prior criminal history, or (3) changed employers during the probation period.

²⁰ Probit regression analysis reporting marginal effects was used for this analysis.

Summary

In comparison to the average working RN in California in 2006, nurses on probation were (1) younger and less experienced in nursing; (2) a greater share of them were men, earned an AD as their pre-licensure nursing education, had been licensed as LVNs, and worked for a nursing registry; and (3) a smaller share received their pre-licensure education outside of the United States and were licensed as advanced practice nurses.

Nurses on probation were more likely to have a criminal history if they were male, 40 years of age or older, or received their RN license more recently, while receiving pre-licensure education in the Philippines was a negative predictor of having a criminal history. The number of years since initial RN licensure was a positive predictor for previous BRN disciplinary action and participation in the BRN diversion program, indicating that older nurses on probation are more likely to have been disciplined before.

The majority of nurses on probation (67%) committed drug or criminal misconduct offenses, while 29% of nurses on probation committed practice errors, and 4% were on probation for both a practice error and a drug or misconduct offense and or another type of offense (i.e. mental illness). Over half of nurses (53.5%) placed on probation had a drug or alcohol violation; in a national analysis reported by the National Council of State Boards of Nursing (NCSBN)²¹, 25% of violations were drug related.

Nurses who earned their pre-licensure education in the Philippines were more likely to have committed a practice error than those educated elsewhere. However, the data also show that nurses who were educated in the Philippines are underrepresented among nurses on probation and tended to comply with probation requirements and had lower rates of recidivism than nurses educated elsewhere.

Nurses were more likely to be on probation for a drug or misconduct offense if they were under 40 years of age, had a prior criminal history, had been in diversion, or worked in a hospital or had an unknown place of employment when put on probation.

²¹ Zhong, E.H., K. Kenward, et al. (2009) "Probation and recidivism: remediation among disciplined nurses in six states." *American Journal of Nursing* 109(3): 48-50, 52-7.

More than half of the nurses on probation completed probation (54%), and almost all of those who completed probation returned to nursing practice (97%). Nurses who committed practice errors were more likely to complete probation than nurses on probation for other reasons. The majority of those who failed probation lost their license (66%) either by revocation or voluntary surrender. Nurses who were assigned chemical dependency requirements as part of their probation were less likely to complete probation than those without chemical dependency requirements.

The recidivism rate for nurses on probation was 38%, which is similar to the NCSBN study which shows that 39% of the sample recidivated.²² This rate can be compared with the rate of nurses who had not had disciplinary action before 2004/2005 later being placed on probation – which was 0% in the control group we identified for this study. Among those who were placed on probation in 2004/2005, recidivism rates were higher for nurses on probation for drugs or criminal misconduct (46%) than for nurses on probation for practice errors (21%). Nurses were more likely to recidivate if they (1) were on probation for a drug or criminal misconduct offense, (2) had a prior criminal history, (3) changed employers while on probation, or (4) worked at a hospital when the probationary incident occurred. Another analysis of 44 states reported by the National Council of State Boards of Nursing (NCSBN) found that recidivism rates averaged 21% across the 44 states, ranging from 0% to 43%.²³

Overall, these findings suggest that RNs are less likely to complete probation successfully and return to nursing practice if they have a criminal history, changed jobs while on probation, worked in a hospital when the probationary incident occurred, struggled with the chemical dependency requirements of their probation, or were on probation for a drug or criminal offense. These findings reflect similar associations between recidivism and (2) prior criminal history, and (3) changing employer during probation reported by the National Council of State Boards of Nursing (NCSBN). Addressing remediation techniques for these nurses could positively impact their abilities to successfully return to nursing practice.

²² Zhong, E.H., K. Kenward, et al. (2009) "Probation and recidivism: remediation among disciplined nurses in six states." *American Journal of Nursing* 109(3): 48-50, 52-7.

²³ Kenward, K. (2009) "An Analysis of NURSISYS® Disciplinary Data from 1996-2006." National Council of States Boards of Nursing Research Brief Volume 39.

Appendix

Additional Descriptive Data for RNs on Probation

Table 15. Demographics

Race/ethnicity	RNs on Probation	
	#	%
Hispanic	12	4.3%
Asian/Pacific Islander	13	4.6%
White	96	34.0%
Native American	1	0.4%
African American	11	3.9%
Other	1	0.4%
Unknown	148	52.5%
Total	282	100%
Marital status	#	%
Married	25	8.9%
Divorced, separated, widowed	21	7.5%
Single	11	3.9%
Unknown	225	79.8%
Total	282	100%

Table 16. Nursing education and experience

Nursing education and experience	RNs on Probation	
	#	%
#NCLEX failures		
0	130	46.1%
1	17	6.0%
>1	17	6.0%
Unknown	118	41.8%
Total	282	100%
Number of RN licenses	#	%
Single license	54	19.2%
Multiple licenses	94	33.3%
Unknown	134	47.5%
Total	282	100%

Table 17. Employment status at probation

Employment status at probation	RNs on Probation	
	#	%
Full-time	44	15.6%
Part-time	8	2.8%
Unknown	230	81.6%
Total	282	100%

Table 18. Personal record of disciplined nurse

Personal record of disciplined RN	RNs on Probation						Total
	Yes		No		Unknown		
	#	%	#	%	#	%	#
Prior mental illness/substance abuse	46	16.3%	14	5.0%	222	78.7%	282
Changed address during probation	112	39.7%	164	58.2%	6	2.1%	282
Changed jobs during probation	72	25.5%	153	54.3%	57	20.2%	282
Prior criminal history	75	26.6%	201	71.3%	6	2.1%	282
Disciplinary action taken in state of initial RN licensure	221	78.4%	61	21.6%	0	0%	282
Prior disciplinary action	50	17.7%	230	81.6%	2	0.7%	282