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Registered but Not Working: Employment Patterns of Nurses Outside Ontario's Nursing Labour Market (1993-2006)

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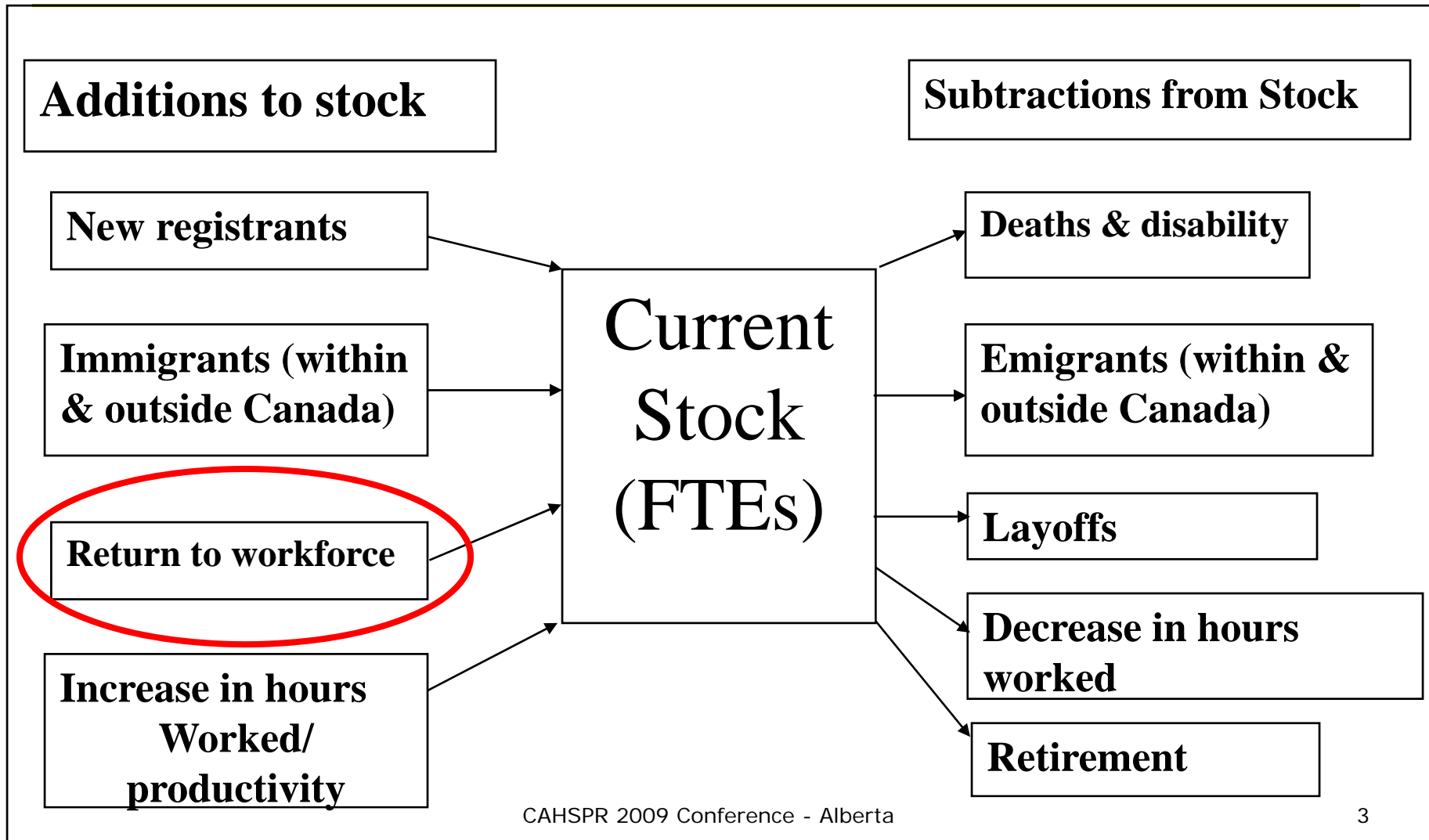
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The Nursing Context in Canada/Ontario

- ❑ Shortages reported in various healthcare sectors/ sub-sectors (a shortage of 60,000 by 2022)
- ❑ Nursing workforce is aging (average age 46 yrs) with large loses anticipated due to death and retirement over the next few years.
- ❑ Increased demand for nurses due to population increases and aging.
- ❑ Need to build surge capacity of nurses to deal with public health emergencies and pandemics
- ❑ What would constitute a quick relief to shortages?

The Recruitment and Retention of Nurses

The Stock-Flow model for nurses in Ontario*



*Alameddine, Laporte and Deber (2006)

Objective

Analyze the employment patterns of nurses registered with the College of Nurses Ontario (CNO) but not working in the province's nursing labour market.

Methodology – Data Source

- ❑ In order to practice in Ontario, a nurse must be registered with the Ontario College of Nurses
- ❑ Ontario College of Nurses registration data for the years 1993-2006 were merged on a unique registration number
- ❑ The career paths of 215,687 nurses registered with CNO were followed for the period of the analysis
- ❑ year-to-year transition matrixes were generated by sector and sub-sector of employment, nurse type and age group.

Contents of College of Nurses of Ontario data base

The database includes

- basic demographic information (age, sex)
- Type of nurse (RN, RPN)
- Level of Education (Diploma, Bsc., Masters, Ph.D)
- Employment status (FT, PT, Casual)
- Employment sector/ sub-sector
- **Current employment category**

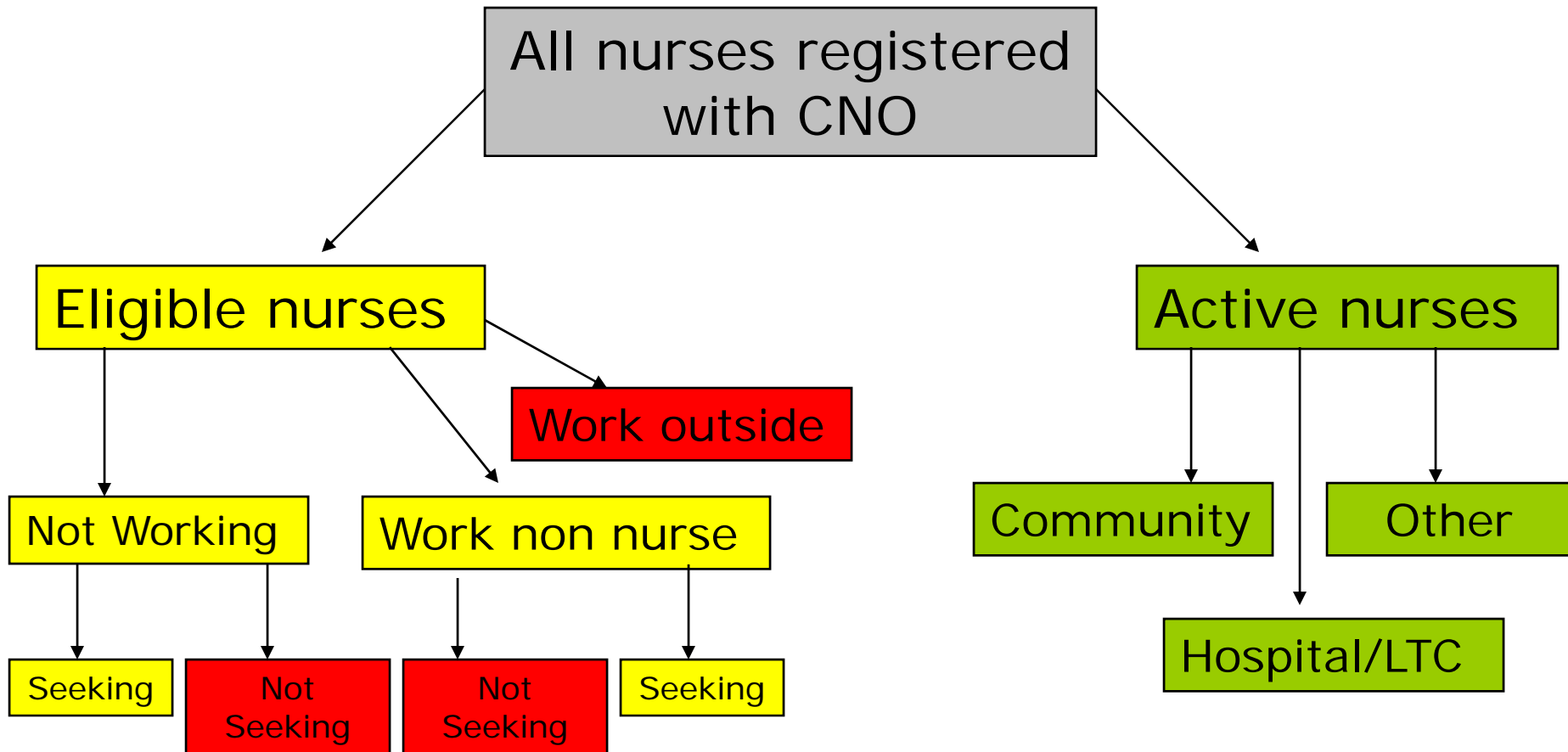
Categorizing the nursing pool

- We categorized the employment category of those registered each year into:
 - 1- **Actives**: Nurses that are **registered** and **working in nursing** in **Ontario**.
 - 2- **Eligible**: Nurses **registered in Ontario**, **but not working as nurses in the Province**.
- Ineligible Nurses were those in the longitudinal database who are retired or no longer registered; they are not included in this analysis.

Sub-categorizing the Actives

- **Hospital:** Acute, Chronic, LTC, Rehabilitation, Psychiatric & other (including agencies)
- **Community:** CCAC, CHC, Community mental health, community homecare agencies & public health.
- **Other:** Education, business, government, nursing station, physician office and self employed.

Sub-categorization of Eligible Nurses



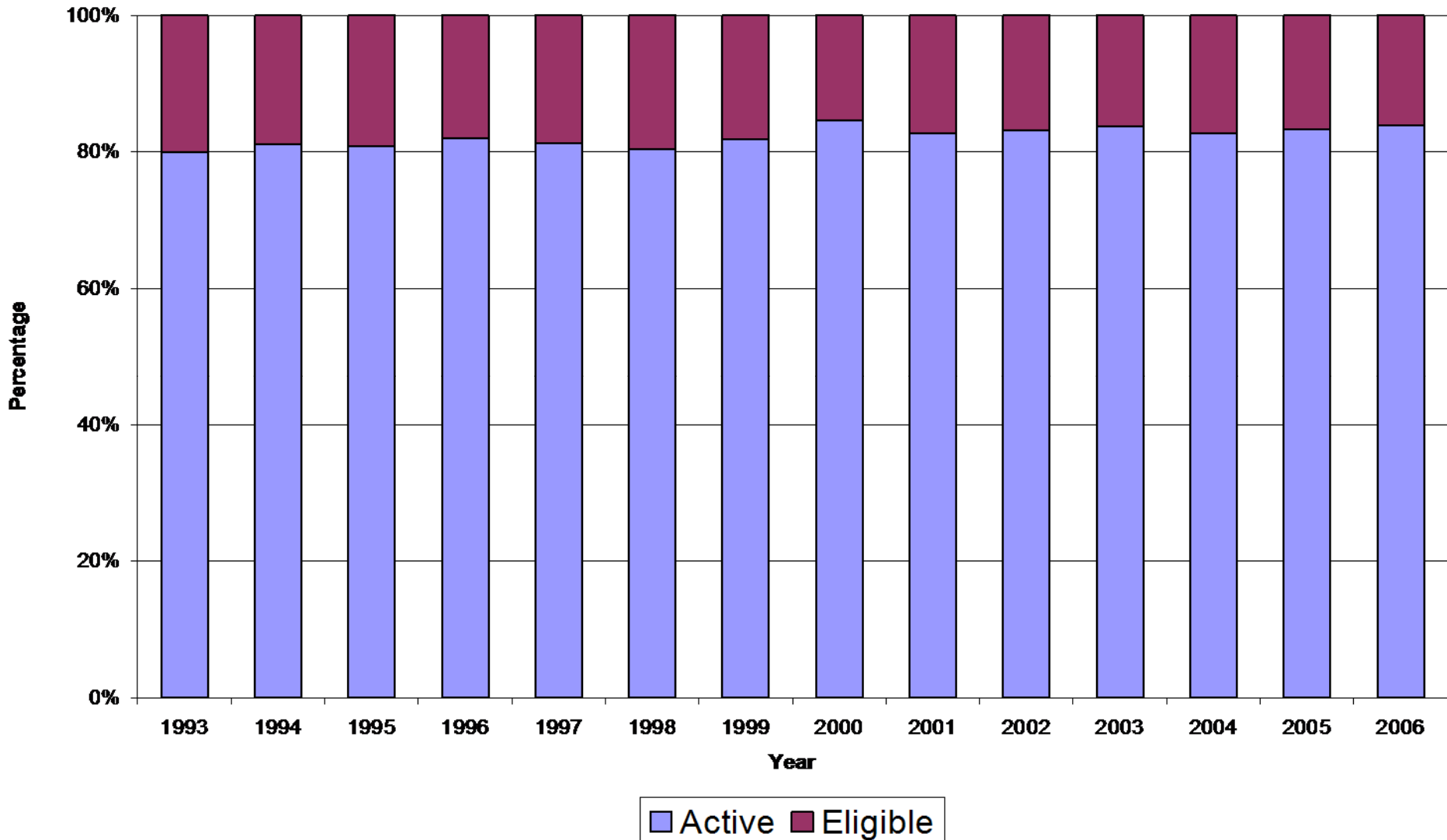
Research Questions

- ❑ What proportion of nurses remain sticky in each eligible categories (“Stickiness”)?
- ❑ What proportion of eligible nurses rejoins Ontario’s “Active” nursing workforce?
- ❑ Does the proportion returning vary by nurse type and age group?
- ❑ Where do nurses go when they move out of their eligible category?

Results

Active versus Eligible nurses 1993-2006

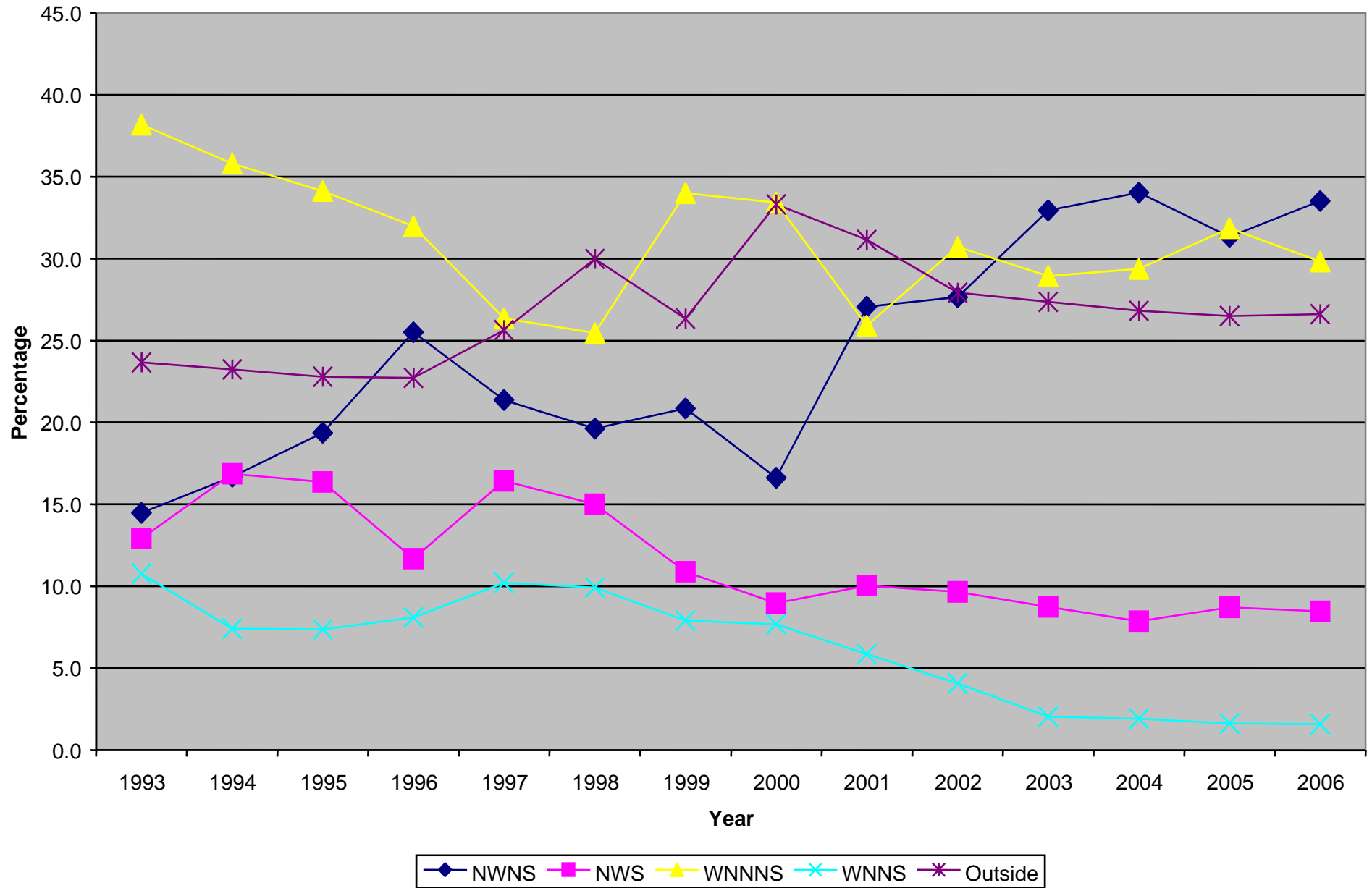
Percent distribution of CNO registered nurses by Active and Eligible status (1993-2006)



Eligibles – How many do we have? (1993-2006)

Year/ Elig, category	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<i>NW-NSeek</i>	3468	4464	5100	6527	5205	4794	5207	3246	5565	5962	7031	7070	6518	7485
<i>NW-Seek</i>	3091	4510	4310	2989	3999	3668	2718	1749	2065	2083	1865	1632	1812	1893
<i>WNN-NSeek</i>	9140	9581	8986	8182	6418	6219	8486	6525	5328	6625	6176	6104	6627	6661
<i>WNN-Seek</i>	2579	1986	1939	2072	2487	2425	1976	1501	1205	879	438	400	339	352
<i>WorkOut</i>	5668	6220	5999	5814	6244	7326	6574	6503	6408	6020	5840	5572	5512	5944
<i>Total</i>	23946	26761	26334	25584	24353	24432	24961	19524	20571	21569	21350	20778	20808	22335

Percent distribution of Eligible nurses by Eligible category (1993-2006)



How many nurses remain (sticky) in their eligible category

- Stickiness is defined as the transition probability that a nurse stays in a given employment category*

Weighted Proportion for 'Sticky' Eligibles

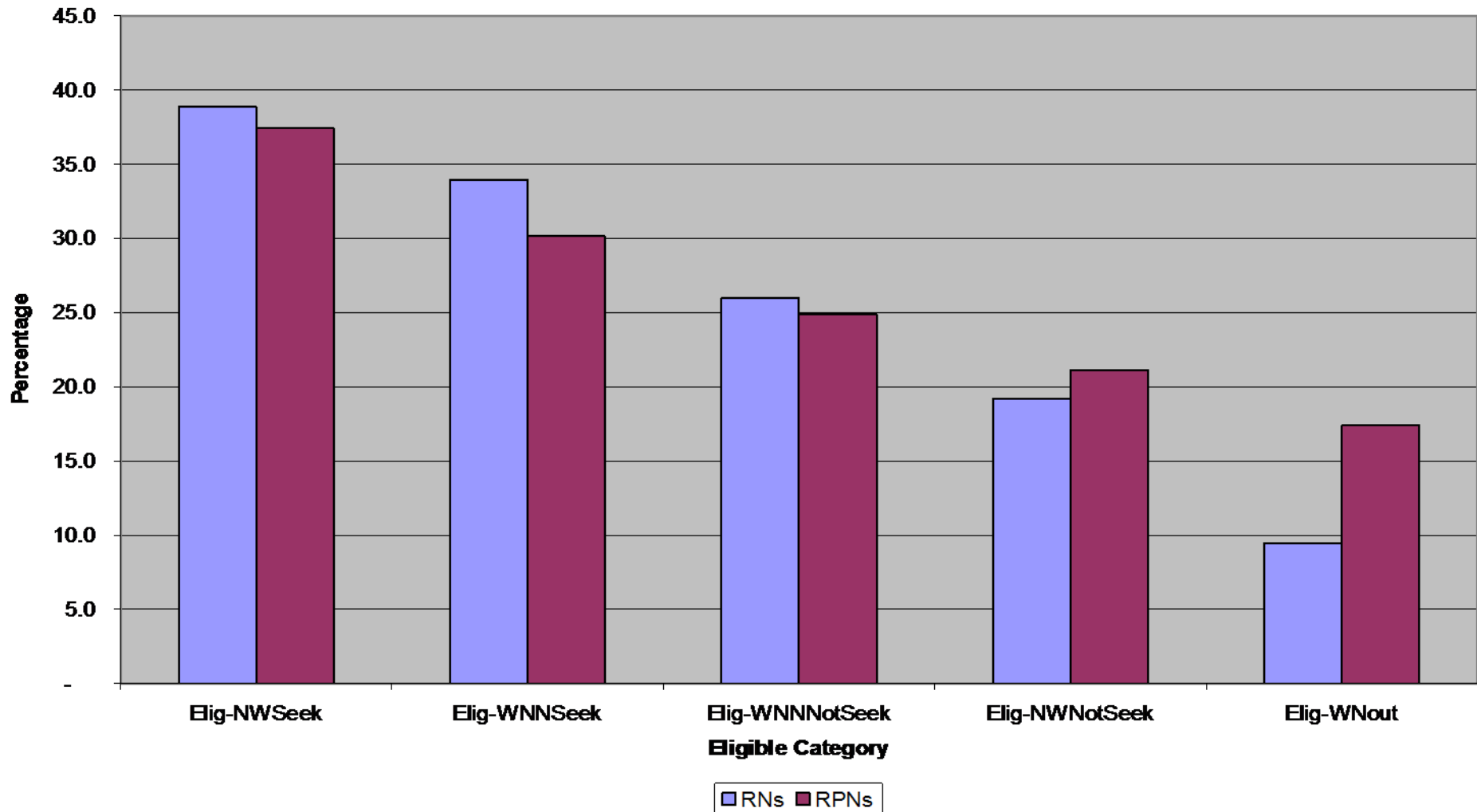
Elig. cat./nurse gp.	RN	RPN
WorkOut	85.3	73.4
WNN-NSeek	62.4	62.5
NW-NSeek	67.1	56.6
NW-Seek	39.9	38.6
WNN-Seek	33.8	41.1

***Alameddine, M.**, Laporte, A., Baumann, A. O'Brien-Pallas, L., Mildon, B., & Deber, R. (2006). Stickiness and inflow as proxy measures of the relative attractiveness of various sub-sectors of employment. *Social Sciences and Medicine* 63(9): 2310-2319.

Eligible categories:

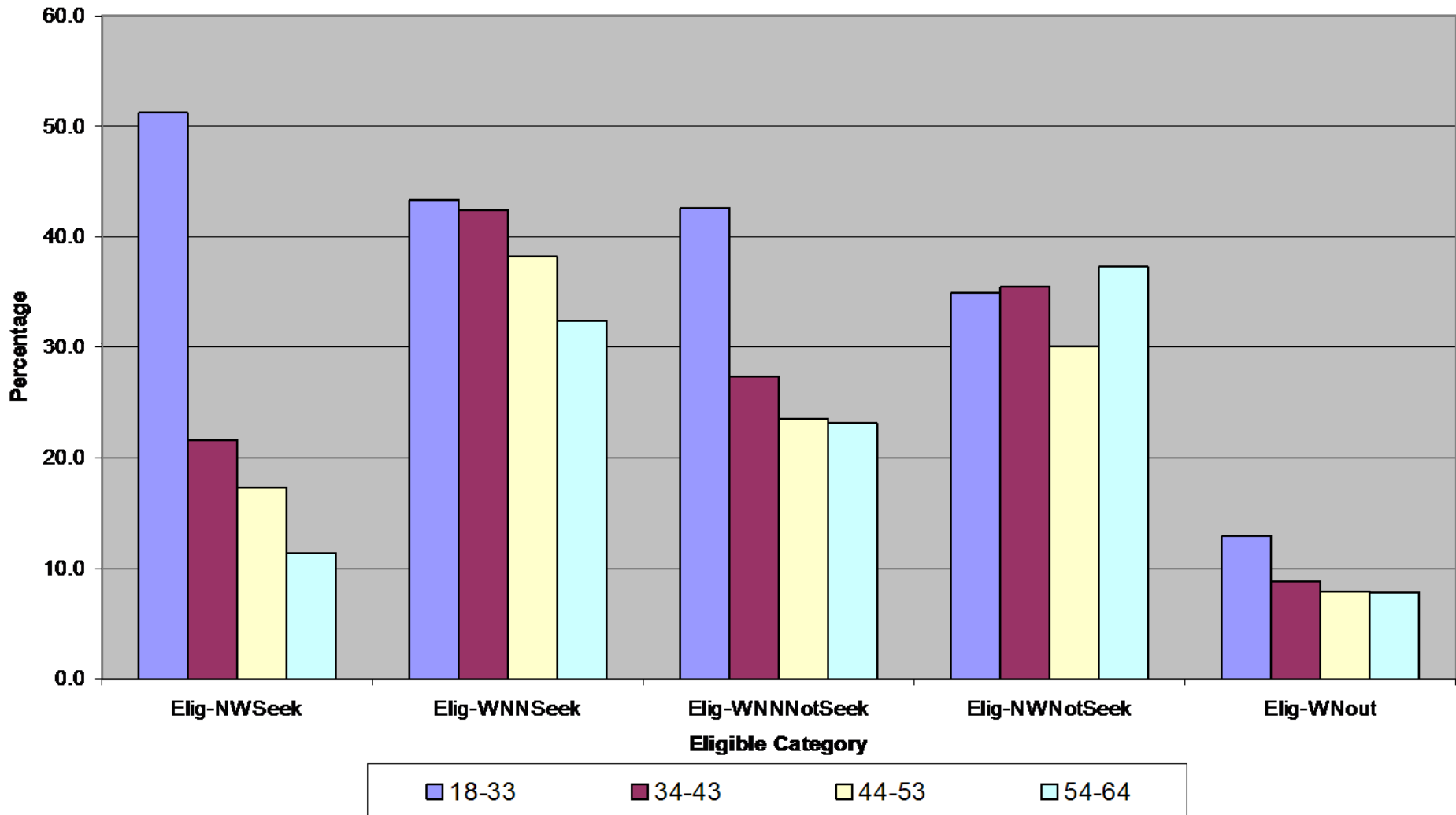
What proportion returns to Active Workforce?

Weighted proportion of Eligible nurses rejoining the Active nursing workforce in Ontario by Eligible category and nurse group (1993-2006)



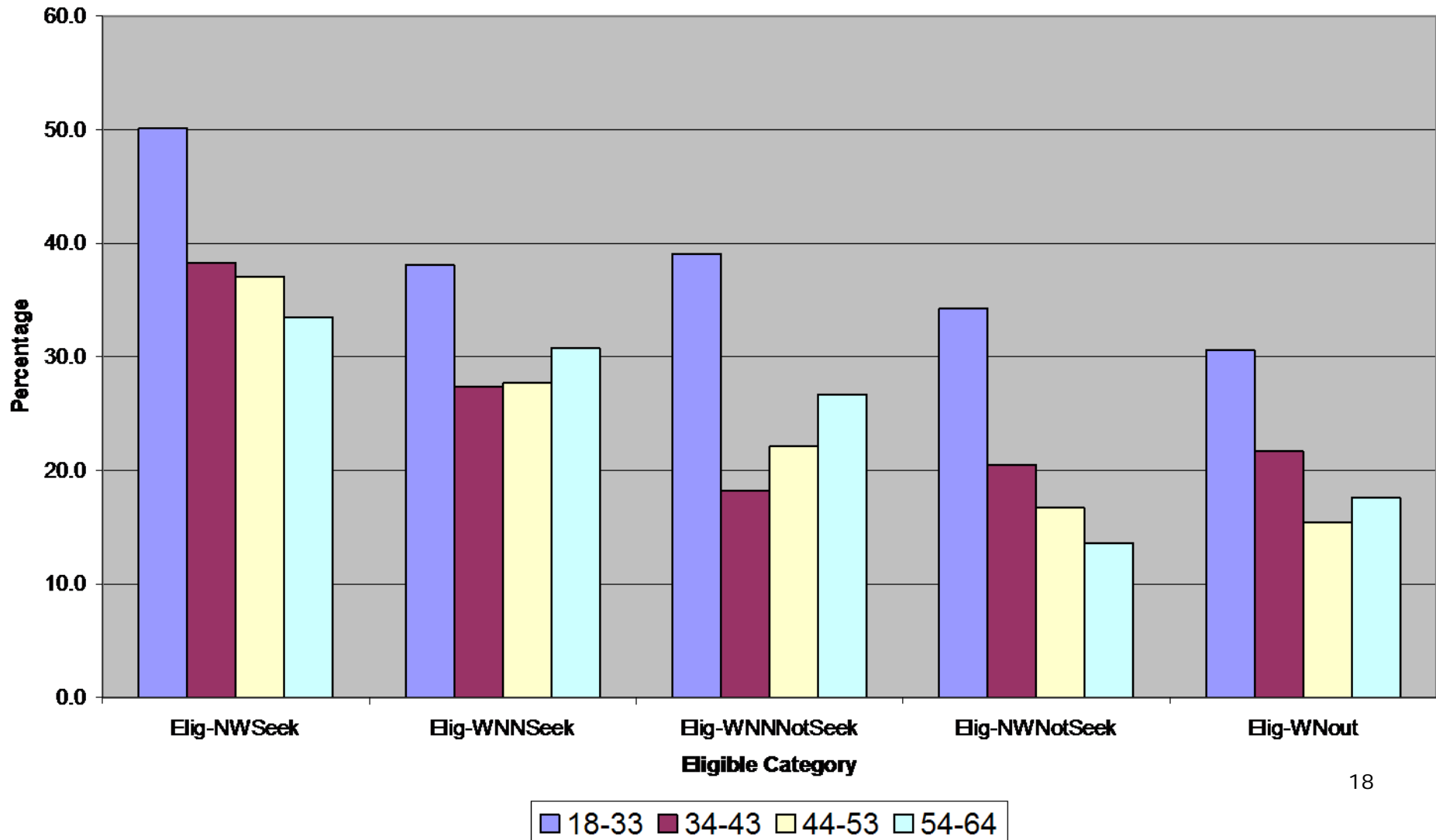
Is there a variation by age group? RNs

Weighted proportion of Eligible RNs rejoining the Active nursing workforce by age group and category (1993-2006)



Is there a variation by age group? RPNs

Weighted proportion of Eligible RPNs rejoining the Active nursing workforce in Ontario by age group and category (1993-2006)



When Eligible Ontario nurses return the Active workforce, where do they go?

- The vast majority will return to work in hospitals and LTC institutions.
 - This might be reflective of the size of the sector
 - Or due to the significant investments made in recruiting nurses to the hospital sector, particularly post 1999
- This is true for all eligible categories, particularly 'NW-Seek' and 'Outside'.

Findings: More Actives, Less Seeking

- Over the period of the analysis:
 - The proportion of Active nurses has increased (particularly after 1999)
 - The proportion of Eligible nurses in the “Seeking” categories has decreased, and the proportion in the “NW-NSeek” category increased.
 - This is Possibly because those seeking jobs were now able to find them.

Nurses might get discouraged if they do not find a job

- ❑ On average, around one third of nurses in the “Seeking” work categories are “sticky”. Of the two thirds that are not, from a quarter to more than three quarters moved to work outside Ontario or to the “not-seeking” Eligible categories a year after.
- ❑ The same was true when separate analyses were carried by nurse group and for the two seeking categories (NW-Seek & WNN-Seek.)

Not seeking may be a temporary status

- ❑ On average, close to two thirds of nurses in the “not seeking” eligible categories are “sticky”.
- ❑ Of those that leave, from one half to more than two thirds join the Active nursing workforce or shift to the “seek employment” work categories a year after.
- ❑ The same was true when separate analysis was carried by nurse group and for NW-NSeek and WNN-NSeek.

Conclusions

- ❑ ***Nurses may get discouraged if they cannot find work.*** Special attention should be given to eligible nurses seeking nursing employment, since a significant proportion of them leave their work categories to work outside Ontario or give up on seeking a nursing job.
- ❑ ***The “Not Seek” eligible categories might be a temporary status.*** There remains an opportunity to attract these nurses back into the “Active” pool.
- ❑ ***Hospitals are attractive to eligible nurses.*** Most eligible nurses that move to join the Active nursing workforce end up in hospitals followed by “Other” nursing work places
- ❑ **Targeted Recruitment strategies are necessary** in order to entice eligible nurses back into the “Active” nursing workforce.

Limitations

- ❑ The quality of the findings are as good as the quality of the data provided.
- ❑ Several challenges with CNO database:
 - Changes in the form
 - Missing values
- ❑ Analysis under-estimates loss of nurses, because it omits nurses who drop their registration with CNO

Acknowledgements

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