Retention of Critical Skill Employees - Healthcare System Case

Facing a highly competitive labor market, a healthcare provider must better understand the nature of voluntary turnover among its critical skill employees.

The Healthcare Client

- A **Midwest** healthcare provider is one of the largest non-profit organizations in the U.S. and is comprised of a **regional network of hospitals and clinics**

  – 13 hospitals plus multiple community health locations

  – Services include inpatient and outpatient care, primary care, community health and wellness, workplace health, home health, community mental health, rehabilitation, long-term care and hospice

  – Net revenue of over $2.5 billion with approximately 4,500 licensed beds

  – Over 25,000 employees

- **Competition for critical skill employees** (e.g. emergency room nurses, technicians) **is increasing rapidly** as the supply of qualified employees is unable to keep pace with growing the demand for services

- Therefore, part of Client's **HR retention strategy is to develop an early warning diagnostic** (i.e., highly predictive model) to identify both individuals and organizational units that are at **high risk of voluntary terminations**

Featured Client Case # 24
Healthcare Retention

① *Project*
- Assess voluntary turnover among critical skill healthcare employees

② *Approach*
- Predict individual-level turnover and profile high-risk cost centers

③ *Analytic Results*
- Position in range (PIR) is the dominant predictor of voluntary turnover

④ *Recommendations*
- Testing new rewards elements will enable Client to understand impact on turnover

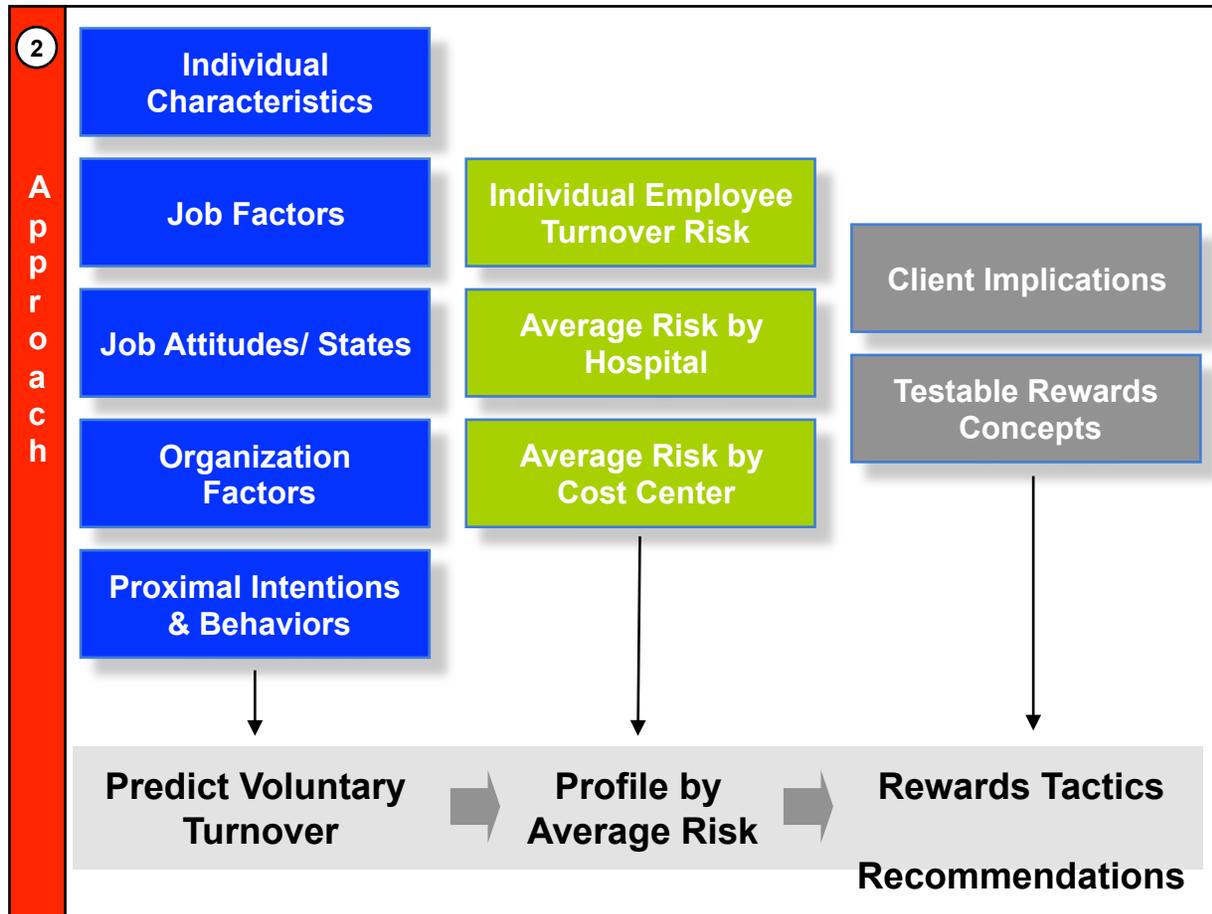# Retention of Critical Skill Employees - Healthcare System Case

We first focused our attention on identifying key drivers of individual-level turnover, then we expanded our investigation to cost centers within the system.

Project

- Client project was designed to address **four objectives**

  - Determine **key drivers of turnover** (special focus on critical skill employees) and predict risk of leaving for individual employees

  - Identify **high risk locations and cost centers**

  - **Profile these high risk locations and cost centers** to better understand the characteristics of the working conditions, job functions, and demographics

  - **Develop recommendations** for new rewards tactics to test that will mitigate turnover among critical skill employees

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At the most basic level, we analyzed a variety of variables that included employee characteristics and behavior as well as job and organizational factors.

2 Approach			
Individual Characteristics			
Job Factors	**Individual Employee Turnover Risk**		
Job Attitudes/ States	**Average Risk by Hospital**	**Client Implications**	
Organization Factors	**Average Risk by Cost Center**	**Testable Rewards Concepts**	
Proximal Intentions & Behaviors			

Predict Voluntary Turnover → **Profile by Average Risk** → **Rewards Tactics**

Recommendations

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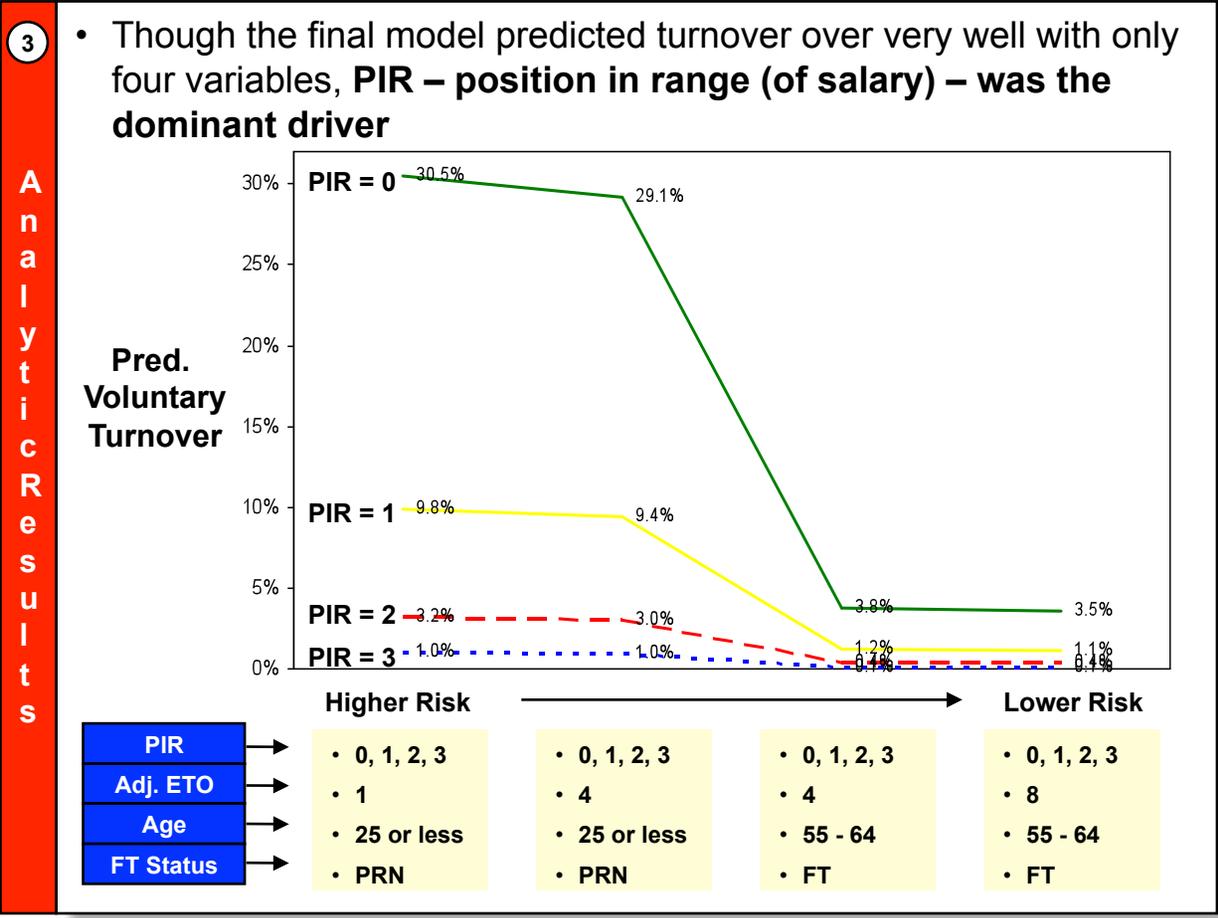
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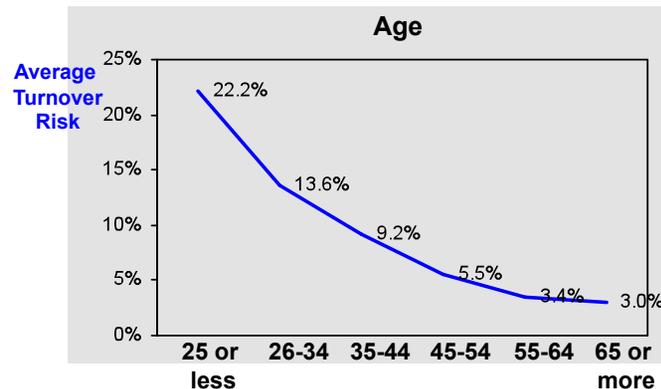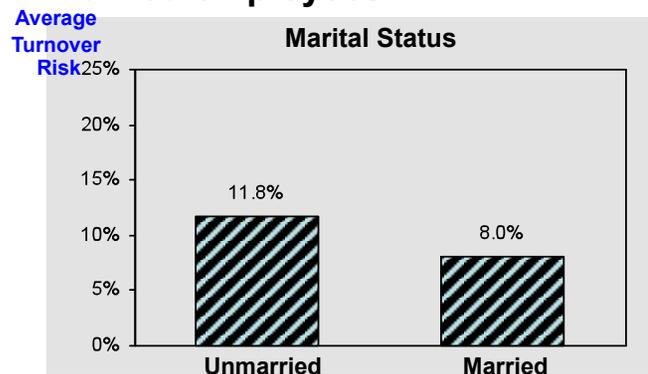
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With only four variables – i.e. position in range of salary (PIR), adjusted earned time off (ETO), age, and employment status – we were able to predict voluntary turnover with a very high degree of effeciency.[1]

A n a l y t i c R e s u l t s — **3**

- Though the final model predicted turnover over very well with only four variables, **PIR – position in range (of salary) – was the dominant driver**

Pred. Voluntary Turnover

PIR = 0 — 30.5% — 29.1%
PIR = 1 — 9.8% — 9.4% — 3.8% — 3.5%
PIR = 2 — 3.2% — 3.0% — 1.2% — 1.1%
PIR = 3 — 1.0% — 1.0% — 0.7% — 0.4%

Higher Risk →→→→→ Lower Risk

PIR →	Adj. ETO →	Age →	FT Status →
• 0, 1, 2, 3	• 0, 1, 2, 3	• 0, 1, 2, 3	• 0, 1, 2, 3
• 1	• 4	• 4	• 8
• 25 or less	• 25 or less	• 55 - 64	• 55 - 64
• PRN	• PRN	• FT	• FT

[1]We predicted turnover with a c statistic (explained variance) of .84.

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Deeper analysis revealed that some differences existed across employee demographics, e.g. family status, age, gender, race.

3 | **A n a l y t i c R e s u l t s**

- Marital status and age analysis indicated **that younger and unmarried employees are far more likely to leave than older, married employees**

Average Turnover Risk

Marital Status

- Unmarried: 11.8%
- Married: 8.0%

Average Turnover Risk

Age

- 25 or less: 22.2%
- 26-34: 13.6%
- 35-44: 9.2%
- 45-54: 5.5%
- 55-64: 3.4%
- 65 or more: 3.0%

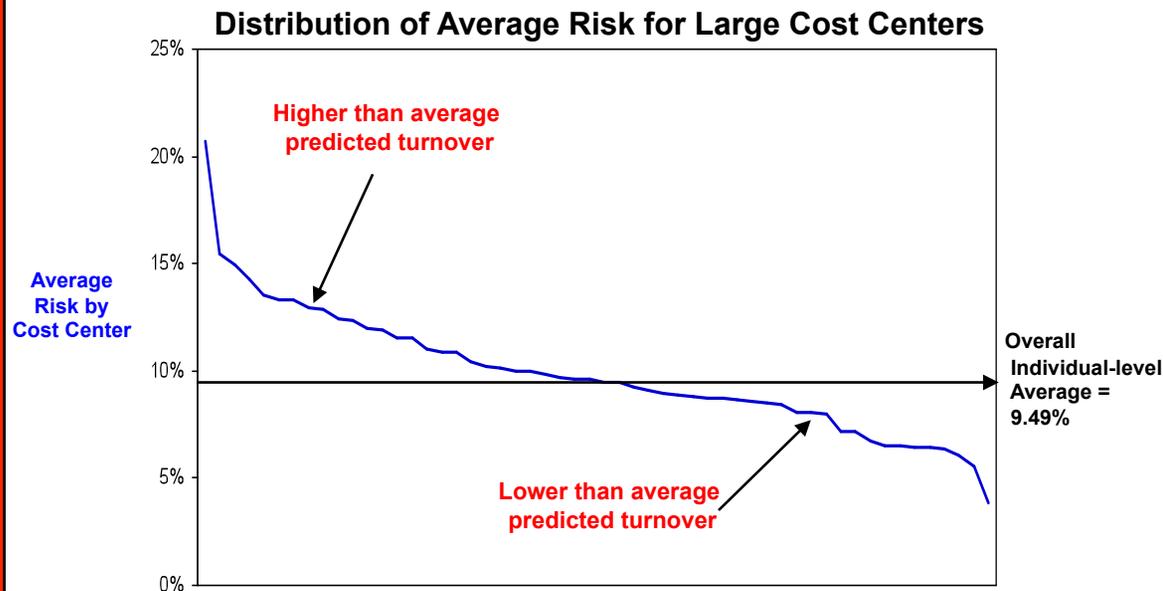**Featured Client Case # 24**
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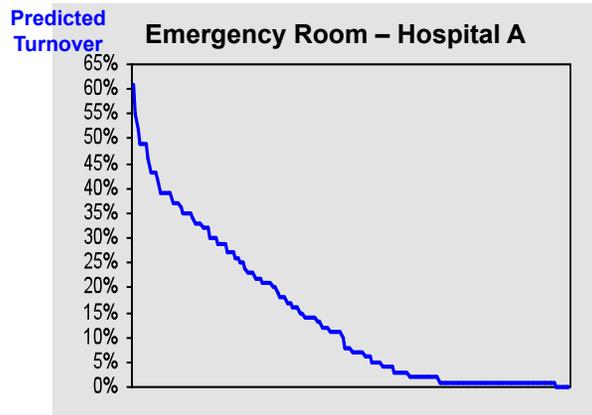# Retention of Critical Skill Employees - Healthcare System Case

Aggregating turnover risk at the cost center level signaled that some cost centers are higher risk than others … the spread was approximately 4% to 21%.

3

A n a l y t i c R e s u l t s

- Before looking more closely at cost centers, we simplistically divided the "world" into those with **above average risk and those with below average risk of turnover**

Distribution of Average Risk for Large Cost Centers

Higher than average predicted turnover

Average Risk by Cost Center

Overall Individual-level Average = 9.49%

Lower than average predicted turnover

(Chart y-axis: 0%, 5%, 10%, 15%, 20%, 25%)

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We then profiled the cost centers to better understand how they compared to other high risk and low risk centers.

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③ Analytic Results

- Cost centers with **above average turnover require further investigation** to better understand both the **"WHO and the WHY"** it is high risk

Predicted Voluntary Turnover – Profile of High-risk Cost Center

Predicted Turnover

Emergency Room – Hospital A

Y-axis: 65%, 60%, 55%, 50%, 45%, 40%, 35%, 30%, 25%, 20%, 15%, 10%, 5%, 0%

Full-time Status	• 26.7% PT • 53.8% FT • 19.5% PRN	Previous Leave of Absence	• 65.1% No • 34.9% Yes
Sex	• 17.9% Males • 82.1% Females	Avg. Age	• 38.9 years
Avg. Adj. Earned Time Off	• 3.82	Avg. Position in Range	• 4.28
Job Title Examples	• Aide, Nurse/ orderly • LPN, IV Cert • Nurse, staff • Paramedic		• Practitioner, Nurse (PRN, PT) • Supv., nursing • Tech, patient care • Technologist, med imaging

Avg. predicted turnover = 14.3%
No. of employees = 195

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We developed recommendations that would position the Client for fully testing how new rewards elements would influence voluntary turnover behavior.

4 **Recommendations**

- **Recommendations for testing** included, for example:

Category Label	Implications for Formal Testing

• **Pay (Rewards/ Recognition)**	• While external market analysis provides the actual benchmarks, XYZ should consider testing employees' perceptions of "fair pay" and identifying pay-benefits equivalents, e.g.
	  – 10% above competitive market pay with no input in decision making
	  – 10% below competitive market pay with input in decision making

• **PIR**	• Need to better understand how an employee's PIR affects their perceptions of themselves, expected future employment, etc.
• **Adjusted ETO**	• Need to better understand how an employee's ETO accrual relative to cohorts affects perceptions, future employment, etc.
• **Benefits (Rewards/ Recognition)**	• Similar to pay, this is an opportunity to better understand employees' desire for and perceptions of benefits
• **Age (Demographics)**	• While this is not "testable" in and of itself, we may want to sample a disproportionate number of younger employees (i.e. ones who are at a higher risk of leaving)
• **Employment Status**	• Similar to age, it is not testable per se, but we may want to sample a larger proportion of employees who are higher risk (i.e. PT and PRN) and measure behavioral differences

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