Symposium:
Using Nurse Staffing and Scheduling “Big Data” to Improve the Quality of Nursing Worklife

by
Beth A. Brooks, Ph.D., R.N., FACHE
Paul T. Skiem, MBA, LCS
Learning Objectives

• Report the quality of nursing worklife (QNWL) in hospitals in select countries.

• Describe how human resources department can collaborate with nurse leaders to select evidence-based strategies to improve nursing worklife.

• Explain how labor optimization can be used for nurse staffing to improve the QNWL.
Overview and Agenda

• Define Quality of Nursing Worklife (QNWL)
  • History, Theory and Conceptual Framework
  • Depict countries using the survey
  • Survey results from select countries

• Selecting Evidence-based Human Resources (HR) Strategies
  • Social sub-system
  • Identifying employee needs
  • Collaborating with nursing leadership

• Using Labor Optimization for Nurse Staffing
  • Technical sub-system
  • Logistics science and mathematical modeling
  • Optimize and implement new staffing model

• Questions and Conclusion
• Job satisfaction is an unsatisfactory construct to assess either jobs themselves or employees' feelings about work. (Taylor & Felton, 1993)

• As much as 30% of job sat is a function of personality. (Arvey, Bouchard, Segal, & Abraham, 1989; Judge, 1993)

• Consistently demonstrated high satisfaction does not impact employee performance or patient outcomes. (Goodell & Coeling, 1994; Iaffaldano & Muchinsky, 1985; Nadler & Lawler, 1983; Organ, 1988; Taylor & Felton, 1993)
Brief History of QNWL

- Socio-technical Systems Theory (STS)
- Early 1990s Canada discusses nurses’ work concerns
- In 2000, Quality of Nursing Worklife Survey©
- Diagnostic survey to improve QNWL and meet business goals
- Worklife improvements collaborative approach between management and staff
Conceptual Framework

Sub-scales

- **Worklife/Homelife**
  - Interface between the life experiences of nurses in their place of work and in the home.

- **Work Design**
  - Composition of nursing work and describes the actual work nurses do.

- **Work Context**
  - Practice settings, explores the impact of work environment on both nurse and patient systems.

- **Work World**
  - The effects of broad societal influences and changes on the practice of nursing.
Results

- Saudi Arabia
- China
- Iran
- Jordan
- Malaysia
- Taiwan
- Thailand
Selecting Evidence-based Strategies to Improve QNWL
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Socio-technical Systems Theory (STS)

• Two Sub-systems
  • Technical (Dr. Fitzpatrick)
  • Social

• Comprised of the people & relationships

• Reasons why employees choose organization
  • Attitudes toward
  • Expectations of it
  • Supervisory-subordinate relationships
  • Skill levels of employees
  • Nature of the subgroups
STS Theory: Social Sub-system

- Social sub-system has to meet a number of interrelated organizational challenges
  - Attain organization goals
  - Integrate the activities
  - Recruit, socialize and retain employees
- QNWL Survey can “diagnose” areas for improvement
Identifying Employee Needs

- Work World
  - Labor Supply & Demand
  - Competitive Compensation, Total Comp

- Worklife/Homelife
  - Work-life balance

- Work Context
  - Learning & Development
  - Improving Communication

- Work Design
HR Collaboration with Nursing Leaders

- **Work World**
  - Competitive Compensation
  - Total Compensation
  - Workplace safety

- **Worklife/Homelife**
  - Day care
  - Redesign of PTO program
  - Health & wellness programs
HR Collaboration with Nursing Leaders

- **Work Context**
  - Improving communication
  - Conflict resolution
  - Inter-professional team “issues”
  - Professional development

- **Work Design**
  - Technical sub-system (Dr. Fitzpatrick)
Conclusion

• Questions

BethBrooks@thebrooksgroupllc.net
PaulSkiem@thebrooksgroupllc.net