Magnet®/NDNQI® Myths

HEATING UP NURSING QUALITY

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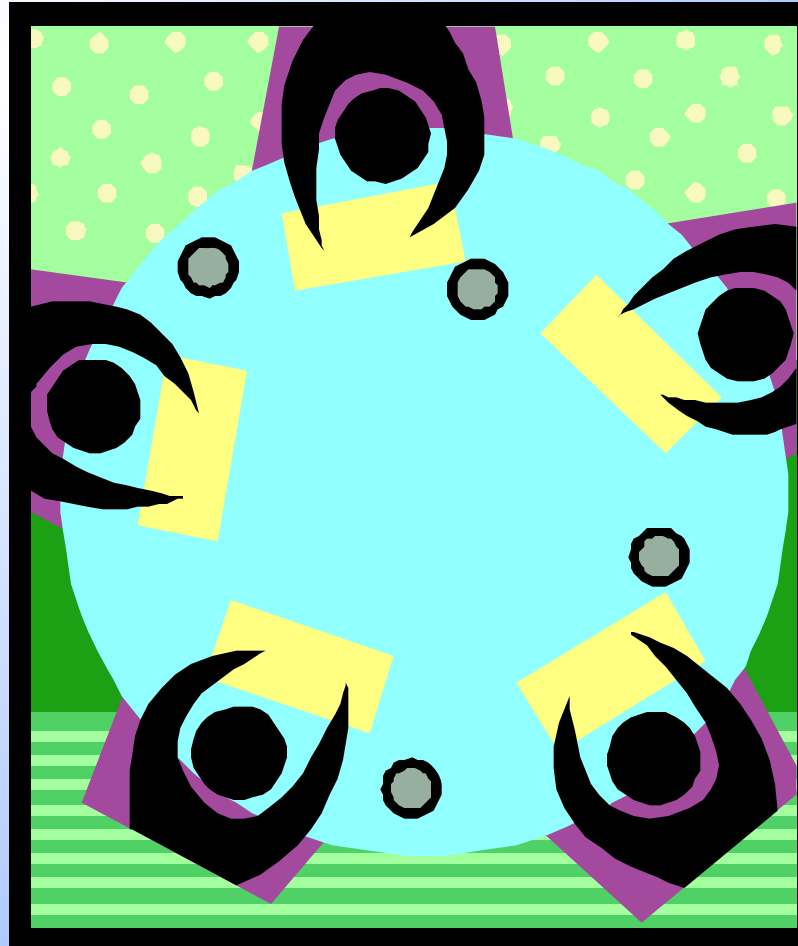
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OBJECTIVES

1. Identify Magnet myths and respective truths to data reporting requirements.

2. Identify NDNQI myths and respective truths to data reporting requirements.

HISTORY OF NDNQI

- ANA's 1994 Initiative: To investigate the impact of healthcare restructuring on safety and quality of patient care related to

  - Reduction in direct care RNs

  - Unlicensed staff replaced RNs

  - Decreased length of patient stay

  - Cost-cutting measures

HISTORY CONTINUED

- 7 SNAs assisted with initial pilot studies on nursing-sensitive indicators for acute care settings in 60 hospitals.

- NDNQI established in 1998 as part of ANA's Safety and Quality Initiative.
  - 39 hospitals – 1st year
  - 1725+ hospitals – today

MEASURES

- **Nursing-Sensitive Indicators**
  - To demonstrate that RNs make a critical difference in providing safe, high-quality patient care
  - To capture patient care outcomes most affected by nursing

HISTORY OF MAGNET

- **1983** - The American Academy of Nursing's (AAN) Task Force on Nursing Practice in Hospitals conducted a study of 163 hospitals to identify and describe variables that created an environment that attracted and retained well-qualified nurses who promoted quality patient/resident/client care.

- Forty-one (41) of the 163 institutions were described as "magnet" hospitals because of their ability to attract and retain professional nurses.

- The characteristics that seem to distinguish "Magnet" organizations from others became known as the "Forces of Magnetism".

HISTORY CONTINUED

- **1994** - The University of Washington Medical Center in Seattle became the first ANCC-designated Magnet organization.

- **2008** - The Commission on Magnet introduced a new vision, and a new conceptual model that grouped the 14 FOMs into five key components:

  1. Transformational Leadership
  2. Structural Empowerment
  3. Exemplary Professional Practice
  4. New Knowledge, Innovations, & Improvements
  5. Empirical Outcomes

- Current number of Magnet facilities is 378

MAGNET GOALS

- Identify excellence in the delivery of nursing care to patients,

- Promote the quality of health care services in an environment that supports professional nursing practice, and

- Provide a mechanism for the dissemination of best practices in nursing services.

- Myth = "an unfounded or false notion"
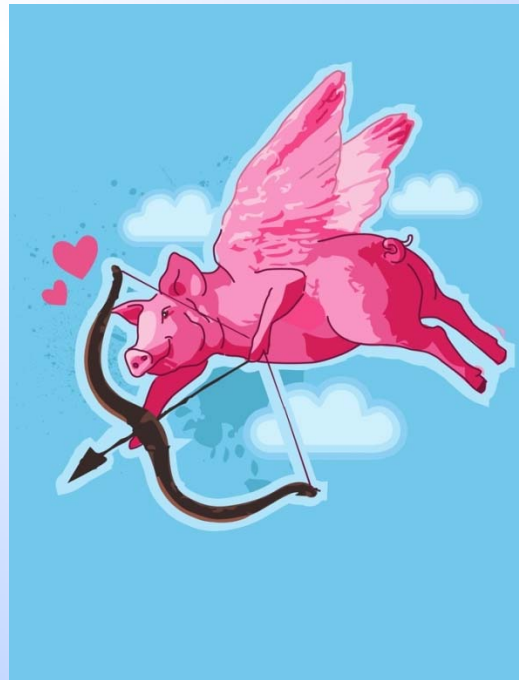
- Hospitals on the Magnet journey must participate in NDNQI.

- Magnet does **not** require the use of any particular national database vendor for comparison of nurse sensitive indicator data.

- Organizations are free to choose any vendor for nurse satisfaction, clinical indicator, and patient satisfaction data tracking and benchmarking.

NDNQI FACT

- Hospitals join voluntarily for a variety of reasons:

  - Magnet journey
  - Reporting to CMS
  - Quality improvement
  - Focus on best practices

  - Set targets
  - Monitor interventions
  - Resource allocation
  - Budget planning

NDNQI FACT

- 1574 hospitals submitted 3Q 2010 data
  - 372 with Magnet designation (24%)

- 849 hospitals participated in 2010 RN Survey
  - 216 with Magnet designation (25%)

- The mean (average) is the only acceptable way of presenting comparison data in Magnet Documents.

MAGNET FACT

- Organizations can choose either the mean or median, if provided by the database vendor, as benchmarks for nurse sensitive indicator data.

- The choice allows for the best presentation of the organization data compared to the benchmark.

NDNQI FACT

- NDNQI provides the mean and median in the comparison data tables.

- NDNQI provides national median in dashboards and user-specific graphs.

- Due to highly skewed data, especially in many of the outcome indicators, the median is better for quality improvement initiatives.

Measures of Central Tendency

- Mean
  - Arithmetic average
  - Add values and divide by total #

- Median
  - Middle observation
    - ✓ Avg of middle two observations if *n* is even
    - ✓ [50% above] and [50% below]
    - ✓ 50th percentile

Which measure is best?

- Depends on shape of distribution
  - Skewed? stretched to one side, not symmetric
- **Mean** is good for
  - Symmetric distributions
- **Median** is good for
  - Skewed distributions

- **Group A – 10 values**

  9

  8

  7

  6

  6 ____

  5

  5

  4

  3

  1

  54

Mean (average)

- **5.4**

Median (middle)

- **5.5**

Skewed

- **No**

Symmetrical

Mean =5.40
Std. Dev. =2.366
N =10
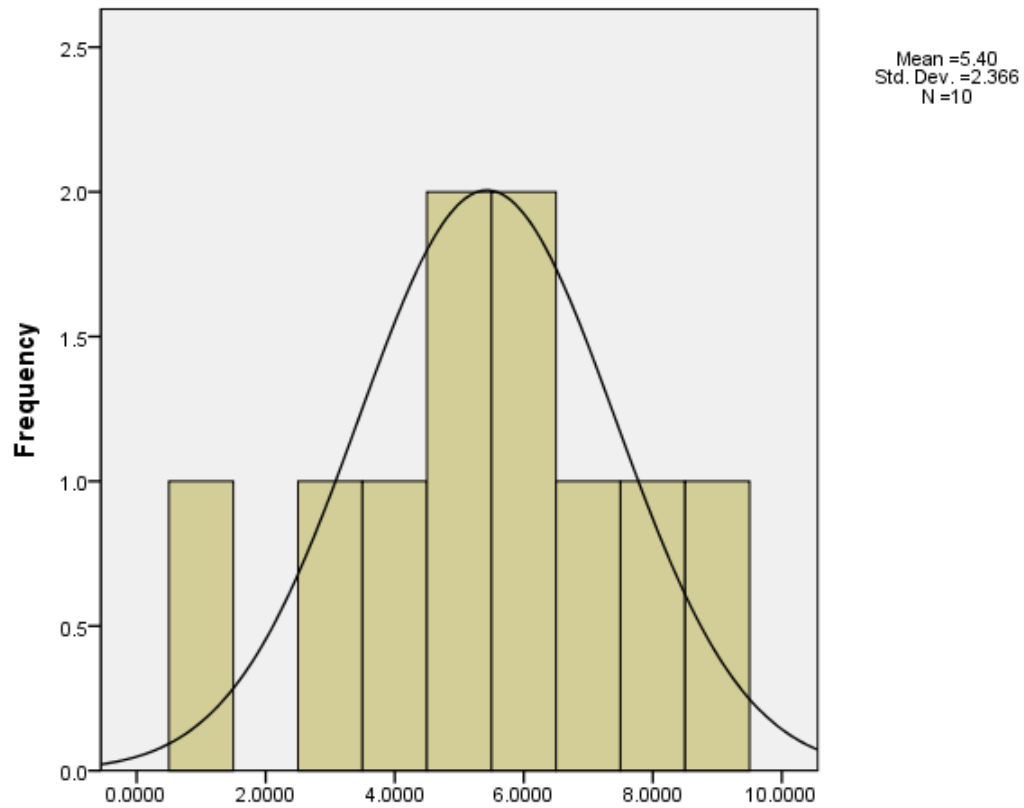
- **Group B – 10 values**

  9
  6
  2
  0
  0 ‾‾‾‾
  0
  0
  0
  0
  <u>0</u>
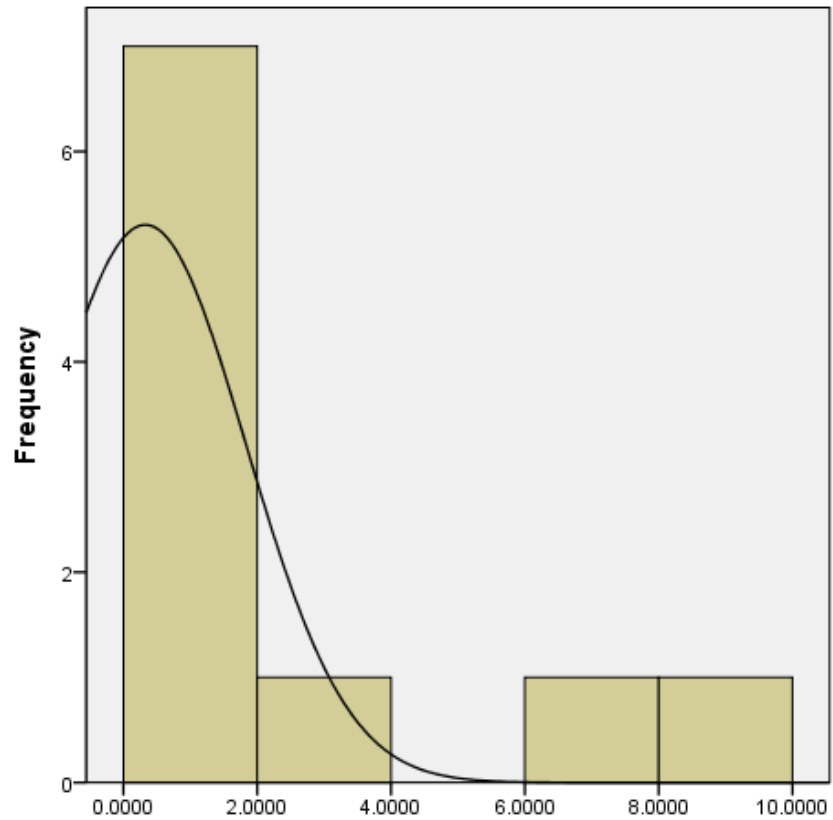 17

Mean (average)

- **1.7**

Median (middle)

- **0**

Skewed

- **Yes**

Skewed

Mean =1.70
Std. Dev. =3.199
N =10

Measures of Spread

- Percentile (%tile)
  - % of distribution of the values
    - ✓ Min = 0%tile
    - ✓ Median = 50%tile
    - ✓ Max = 100%tile

- Interquartile range
  - 75%tile – 25%tile
    - ✓ 25% of values above 75%ile
    - ✓ 25% of values below 25%ile

Group C – 20 values

9	0
7	0
3	0
2	0
1	0
1	0
1	0
0	0
0	0
0	0

75%ile (upper)
- **1**

25%ile (lower)
- **0**

Mean
- **2.4**

MYTH #3

- Data in Magnet Documents must be aggregated at the hospital and/or system level.

NDNQI NATIONAL DATABASE OF NURSING QUALITY INDICATORS

MAGNET FACT

- Organizations should present data in the documents that are "reported" by the database vendor.

- Organizations should not present internally aggregated data that was not originally reported by the database.

- For Sources of Evidence EP3EO, EP32EO, and EP35EO, the organization has the choice to present either unit, unit group, or organizational level data, depending what is provided by the vendor.

ANA AMERICAN NURSES ASSOCIATION

NDNQI FACT

- NDNQI reports quarterly data at the unit and unit type level.

- The RN survey report provides unit, unit type and hospital level data.
  - Hospital level data = an average of all units

- NDNQI offers a system data file product for a separate purchase.
  - System comparison group

- Hospitals must show statistical significance when reporting their data in Magnet Documents.

- If the database vendor provides statistical significance information, then the organization should include it with the data reported for Organizational Overview (OO) items # 12, 23, and 26.

- If statistical significance information is not provided by the vendor, then a statement as such should be included with the applicable OO items.

- NDNQI does not present statistical significance in hospital reports due to the statistical power of the large database.
  - Tiny differences from the mean can produce statistical significance – clinically meaningless
- NDNQI provides a percentile ranking of the comparison data.
- Changes in percentile ranking are clinically meaningful.

MYTH #5

- Hospitals must present pressure ulcer data using incidence as the unit of measure (pressure ulcers/ 1000 patient days) in Magnet Documents.

MAGNET FACT

- Organizational Overview item # 23 requires, "nosocomial pressure ulcer prevalence and/or incidence" data.

- Source of evidence EP32EO requires, "nosocomial pressure ulcer prevalence and/or incidence " data.

MYTH #6

- Falls with injury, Stage 1, 2 etc. Hospital Acquired Pressure Ulcers (HAPU) data are acceptable to present for Source of Evidence EP32EO.

![MAGNET FACT - NDNQI National Database of Nursing Quality Indicators / American Nurses Association]

- Required data For EP32EO:
  - All Falls
  - All HAPU

NDNQI FACT

- Patient falls: NDNQI collects data on
  - Falls with injury
  - Falls without injury
- Hospitals provided 2 rate tables and dashboards
  1. Total falls (includes assisted and unassisted falls)
  2. Injury falls (includes injury levels of minor, moderate, major and death)

NDNQI FACT

- Pressure Ulcers: NDNQI provides
  - 5 rate tables
    1. Percent with PU (includes community acquired PU)
    2. Percent with HAPU (all stages)
    3. Percent with HAPU Stage II and above
    4. Percent with UAPU (all stages)
    5. Percent with UAPU Stage II and above
  - 3 dashboard graphs
    1. Percent with PU
    2. Percent with HAPU *
    3. Percent with UAPU *

    * = User-specified graphs

MYTH #7

- Organizations must compare a National benchmark for EVERY indicator listed in Organizational Overview (OO) item #23.

MAGNET FACT

- Certain specialty and small inpatient units and outpatient areas will most likely **NOT** have available national benchmarks.

- May use:
  - Specialty guidelines
  - State, regional, consortium data
  - Internal data, historical trends

MAGNET FACT

- OO23 Data: Master list of all inpatient units and outpatient areas, data, and benchmark comparisons:
  - Large inpatient units (critical care, med-surg) – 4 indicators, Falls, HAPU, two from list provided.
  - Some inpatient units – 2 or 3 indicators if Falls, HAPU, or listed items not applicable.
  - Specialty areas (Peri-Op, Maternal Child) – 2 indicators which may be from specialty guidelines.
  - Small inpatient units – 1 indicator, specialty guidelines or relevant for the nursing care provided.
  - Outpatient areas – same as small inpatient units.

NDNQI FACT

- ■ NDNQI offers many national comparison groups in hospital reports:
  - All hospitals
  - Magnet status
  - Teaching status
  - Bed size
  - Case Mix Index
  - Location
    - o Census division
    - o Metropolitan/micropolitan/non-metro
    - o State

MYTH #8

- Organizations can use a national benchmark statistic from a database without being an active participant that submits data.

MAGNET FACT

- If a national benchmark is used, the organization must contribute to the database.

- Written documentation must provide (2) years of data from the organization with comparison to the benchmarks *reported* by the database.

Graphic Display & Table of Data

Total Patient Falls in ICU

	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09	4Q09
ICU	1.6	1.5	1	0.88	0.84	0.82	0.78	0.82
Database Mean	0.8	0.7	0.85	0.9	0.7	0.75	0.77	0.82

Total Patient Falls per 1000 Bed Days

NDNQI FACT

- NDNQI comparison data are based on the units that contributed data.

- Hospitals that internally aggregate their data may not have used the same methodology to calculate their rates as the external database such as NDNQI.

- Hospitals that have submitted a Magnet application receive a discount on their annual invoice for 2 years.

MYTH #9

- All nurse sensitive indicator data (nurse satisfaction, clinical indicators, patient satisfaction) used in the Magnet Documents must be from the same database.

MAGNET FACT

- Each indicator may be from a different database vendor.

- The (4) Clinical indicators in EP32EO can be from different databases.

- Patient satisfaction data for the (4) required measures must all be from the same database.

NDNQI FACT

- NDNQI offers clinical indicators for many nursing units and a RN survey.

- NDNQI has plans to expand current indicators to additional unit types.

- NDNQI does not collect patient satisfaction data.

- All unit indicator data (OO23) must be included in Source of Evidence EP32EO.

MAGNET FACT

- Four (4) indicators required for EP32EO:

  - Falls (all)

  - HAPU (all)

  - (2) additional from the list provided in the manual

    - VAP, CAUTI, CLABSI, Restraints, Pediatric IV infiltrations, and other specialty-specific nationally benchmarked indicators.

      - Specialty indicators if other items on the list do not apply.

Clinical Indicator Data (EP32EO)

- Display (depending on the database):
  - single unit level (such as ICU, CCU, SICU)
  - clinical groups of multiple like-units (such as critical care, medical, surgical, medical-surgical, rehabilitation, and ambulatory)
  - organizational level

http://nursecredentialing.org/Documents/Magnet/2008-Manual-Updates.aspx

NDNQI FACT

- NDNQI encourages participating hospitals to report on as many indicators as eligible.

- This provides the hospitals with richer data for quality improvement and a more robust data set for research activities.

- NDNQI reports contain data for:
  - Individual units
  - Unit type group
  - Hospital level (RN Survey only)

REFERENCES

Magnet Website:

- http://nursecredentialing.org/Magnet.aspx
  - Manual Updates
  - FAQ

NDNQI Website:

- https://www.nursingquality.org/
  - FAQ