Patient Transport – One Hospital’s Approach To Improve Both Services and Productivity

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OUTLINE

- BACKGROUND
- GOALS
- APPROACH
- ANALYSIS

- CHANGES
- IMPLEMENTATION
- PATH FORWARD
CHRISTIANA HOSPITAL

- LEVEL 1 TRAUMA CENTER
- OVER 40,000 ANNUAL ADMISSIONS
- AVERAGE DAILY CENSUS OVER 600
PATIENT ESCORT

- CENTRALIZED
- DISPATCHED & “DEDICATED” AREAS
- RESPONSIBLE FOR
  - PATIENT TRANSFERS
  - DISCHARGES
  - OXYGEN
  - ERRANDS
PATIENT ESCORT

- STAFF (FTE)
  - MANAGER
  - SUPERVISORS - 3
  - DISPATCHERS - 9
  - ESCORT STAFF - 75

- TRIP VOLUME
  - ANNUAL - 404,000
  - WEEKLY - 7,800
  - WEEKDAY – 1,300
PATIENT ESCORT

- REQUESTS FOR MORE "DEDICATED STAFF"
- AFFECTS PERFORMANCE OF OTHER DEPARTMENTS
- RESPONSE TIME COMPLAINTS
- PRODUCTIVITY PERCEIVED AS LOW
PROJECT GOALS

- ESTABLISH PATIENT ESCORT OPERATIONS THAT EFFICIENTLY RESPOND TO VARYING CHANGES IN WORKLOAD VOLUME

- ADJUST STAFFING LEVELS TO IMPROVE PRODUCTIVITY AND REDUCE DEPARTMENT OPERATING EXPENSES
APPROACH

- SUPPORT FROM ALL DEPARTMENTS
- IDENTIFY DEMAND PATTERNS
- IDENTIFY OBTACLES
- REVIEW DISPATCH PRACTICES
- DEVELOP NEW STAFFING ASSIGNMENTS AND DISPATCHING PRACTICES
DEPARTMENTS INVOLVED

- PATIENT ESCORT
- MANAGEMENT SYSTEMS
- RADIOLOGY
- REHAB SERVICES
- HEART CENTER
- EMERGENCY DEPARTMENT
- CATH LAB
- NUCLEAR MEDICINE
DATA COLLECTION

- TWO WEEK COLLECTION PERIOD
- DISPATCH SOFTWARE DOWNLOAD
- MANUAL LOGS FOR “DEDICATED” AREAS
- SHADOWING ESCORT STAFF
DATA ANALYSIS CHALLENGES

- VOLUME
- MANUAL LOGS
- DATA DOWNLOAD
- MERGING MANUAL AND AUTOMATED DATA
- “VIRTUAL” WEEK CREATION
- GROUPING TRIPS
- CREATING VISUAL PICTURE OF WORKLOAD DEMANDS
CHRISTIANA TRIP/STAFFING DISTRIBUTION

( MONDAY - FRIDAY )

PERCENTAGE

DEDICATED

DISPATCH

STAFFING

TRIPS

SHS 2005
CHRISTIANA PATIENT ESCORT WEEKDAY TRIPS

PERCENT OF TRIPS

HOUR OF DAY

SHS 2005
CHRISTIANA PATIENT ESCORT DEDICATED TRIPS

HOUR OF DAY

MON  TUE  WED  THU  FRI
0  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23

0-20  20-40  40-60  60-80

SHS 2005
CHRISTIANA PATIENT ESCORT TO/FROM TRIP DISTRIBUTION
CHRISTIANA TRIPS FROM IP NURSING UNITS TO CLINICAL 1ST FLOOR
MONDAY-FRIDAY

HOUR OF DAY

6TH FL C-D(CH)
6TH FL A-B(CH)
5TH FL C-D(CH)
5TH FL A-B(CH)
4TH FL C-D(CH)
4TH FL A-B (CH)
3RD FL C-D(CH)
2ND FL C-D(CH)
2ND FL A-B(CH)

SHS 2005
CHRISTIANA PATIENT ESCORT TRIPS
FROM IP NURSING UNIT TO CLINICAL 1ST FLOOR MONDAY-FRIDAY

5TH FL A-B(CH) 21%
5TH FL C-D(CH) 15%
4TH FL A-B (CH) 6%
4TH FL C-D(CH) 12%
3RD A-B(CH) 0%
3RD FL C-D(CH) 6%
2ND FL A-B(CH) 6%
2ND FL C-D(CH) 9%
6TH FL A-B(CH) 15%
6TH FL C-D(CH) 10%
CHRIStIANA TRANSPORTER TRIPS PER HOUR
(Excludes ED Xray and Radiation Oncology)
DISTRIBUTION OF CHRISTIANA TRANSPORTER TRIPS PER HOUR

NUMBER OF HOURLY TRIPS

25TH PERCENTILE
75TH PERCENTILE
AVERAGE

HOUR OF DAY

SHS 2005
REHAB SERVICES
CHRISTIANA REHAB TRIPS BY HOUR OF DAY
MONDAY - FRIDAY TOTAL

SHS 2005
CHRISTIANA REHAB TRIPS
BY HOUR OF DAY

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HOURLY TRIPS TO AND FROM CHRISTIANA REHAB

PERCENT

TO IP NU
FROM IP NU

HOUR OF DAY

SHS 2005
CHRISTIANA DEDICATED REHAB TRIPS
BY HOUR OF DAY
DEDICATED REHAB ESCORT STAFFING AND TRIP PATTERNS

The graph shows the average hourly trips by dedicated staff and the number of dedicated staff over a 24-hour period. The blue line represents the average hourly trips by dedicated staff, while the red line represents the number of dedicated staff.

From the graph, it can be observed that:
- The average hourly trips by dedicated staff peak during the early morning hours (6-8 AM) and midday to early afternoon (11 AM-2 PM).
- The number of dedicated staff also peaks during these same hours, indicating a correlation between staff availability and the number of trips.

This data is crucial for understanding the staffing needs and trip patterns in dedicated rehab escort settings, allowing for better resource allocation and operational planning.
INITIAL OBSERVATIONS

- # TRIPS INCONSISTENT BETWEEN STAFF
- # TRIPS OVERALL LOWER THAN EXPECTED
- “DEDICATED” STAFF NOT AS BUSY
- ASSIGNMENT OF DEDICATED STAFF DOES NOT ELIMINATE DELAYS
- DEDICATED STAFF “SLOTS” ALWAYS FILLED
INITIAL OBSERVATIONS

- STAFF FINDING REASONS TO EXTEND CALLS
- STAFF FINDING WAYS TO “DISAPPEAR”
- DELAYS TO FIND EQUIPMENT – INFREQUENT
- ACTUAL TRANSPORT TIME FROM 3-5 MINUTES
INITIAL OBSERVATIONS

- DISPATCHERS NOT ABLE TO WATCH “BIG PICTURE”
- SIGNIFICANT VARIATION IN DEMAND BY HOUR OF DAY AND DAY OF WEEK
CHANGES NEEDED

- INCENTIVE TO TAKE CALLS
- SUPERVISION IN DEDICATED AREAS
- FLEX DEDICATED STAFF
- ADDITIONAL SUPERVISION TO MONITOR “BIG PICTURE’
IMPLEMENTATION

- INDIVIDUAL PERFORMANCE GOALS
- JOINT SUPERVISION FOR DEDICATED STAFF
- DISPATCHING DEDICATED STAFF
- DISPATCHERS ASSIGNED AREAS
- RENOVATION OF DISPATCHER WORK AREA
- ADDED 1 DISPATCHER
IMPLEMENTATION

- NEW DISPATCH CONTROL DESK
- RECOGNITION
CHRISTIANA PATIENT ESCORT
ON TIME PERFORMANCE

PERCENT ON TIME

Jul-03 Aug-03 Sep-03 Oct-03 Nov-03 Dec-03 Jan-04 Feb-04 Mar-04 Apr-04 May-04 Jun-04
TURNING POINTS

- DEPARTMENTS USING DEDICATED STAFF SEEING ACTUAL WORKLOAD
- SETTING # OF TRIPS PER SHIFT
- INCORPORATING GOAL IN PERFORMANCE STANDARDS
PATH FORWARD

- ESTABLISH APPROPRIATE STAFFING LEVELS FOR STAFF IN “DEDICATED” AREAS
- DISPATCH ALL STAFF BY RADIO