

Tracking Same-Day Cancellations and Unplanned Admissions in the Outpatient Medicine Unit

AN EVIDENCE BASED QUALITY & IMPROVEMENT PROJECT
GUIDED BY THE 2017-2018 VA/OHSU EVIDENCE BASED FELLOWSHIP PROGRAM
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Project Directive:

Track same-day cancelations & unplanned admissions in the Outpatient Medicine Unit (OMU)...

...by creating a data tracking tool imbedded in existing nursing documentation so reliable data may be used to identify trends contributing to same-day cancelations and unplanned admissions.

- ▶ Using the Johns Hopkins Nursing Evidence Based Practice Model
- ▶ With Guidance of the VA/OHSU EBP Fellowship program



Patient

Place

Population

- ▶ Portland Outpatient Medical Unit (OMU) is an ambulatory medicine unit providing a variety of invasive diagnostic and/or treatment procedures for a wide variety of disease processes. Daily average of 35 patients including procedures and infusions.
 - ▶ Only procedure patients utilizing partnering service teams will be considered for this project since those have the greatest impact hospital wide.
- ▶ Portland Medical Center provides service to veterans in Oregon as well as the surrounding states of Idaho, Alaska, & Washington.



Problem:

- ▶ Reoccurrence of Same Day Cancelations (SDX) & Unplanned Admissions (UA) in the Outpatient Medicine Unit (OMU) prompted an evidence-based quality improvement project. An initial assessment of OMU documentation, relating to these situations, revealed there was not a reliable data tracking process in place.



Why is it important?

Delay in care



Financial Loss



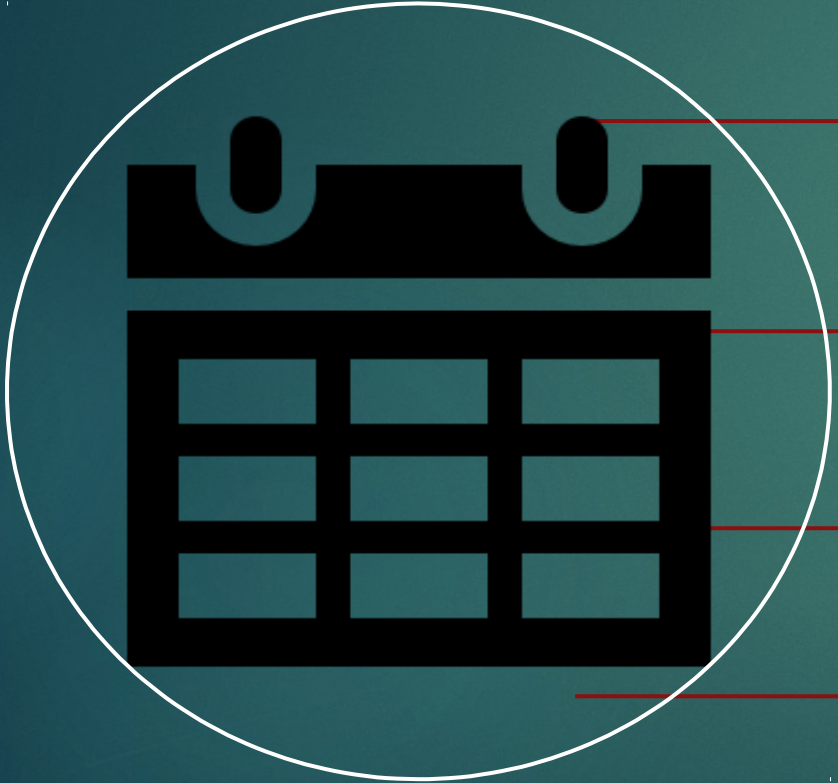
Delay in Patient Care

- ▶ OMU provides time-sensitive diagnostic and interventional medical procedures. Timely diagnosis lead to timely interventions.
- ▶ Veterans are historically difficult to schedule and coordinate appointments. Rescheduling delays their care.
- ▶ Many veterans travel from surrounding states such as Alaska, Idaho, Washington as well as all over Oregon to receive specialty care in Portland .



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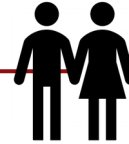
Challenges to scheduling include:



Travel



Lodging



Caregiver



Homelessness



Contact info



Time off work

OMU Staff Time

\$63/hr including benefits

Procedure Value

Average procedure valued at \$2,000 including fixed and variable costs

Overnight hospital stay

\$1700 including fixed and variable costs

\$\$\$

Financial loss

\$\$\$

Literature Review



- ▶ Peer-reviewed journals & clinical trials < 5 years old.
- ▶ key words: same day cancelations, missed opportunities, procedure delays, procedure cancelations, delays in care in an ambulatory setting.
- ▶ Valnet Library, ClinicalKey, & Pubmed search returned 32 peer-reviewed articles and clinical trials.
- ▶ Of those 32 articles, 6 were relevant.

Backed by Evidence



Evidence revealed two key factors found absent from OMU standards of care when compared to those of typical ambulatory surgery units:

- ❑ **Tracking Data**
- ❑ **Patient Readiness Process**

Very little literature exists related to specific studies regarding outpatient medicine units, but most closely comparable to that of ambulatory surgical units.

Differences between OMU and surgical services

Tracking Data

- **OMU does not track data unlike most surgical units.**
- **Evidence suggests regular data tracking identifies trends that negatively impact patient flow and unit utilization.**

Pre-procedure process

- **2.) No streamline “patient readiness” process exists for OMU.**
- **Evidence suggested the pre-op process include a documented patient readiness form and a reminder phone call 24-48 hours prior to scheduled appointment to reduce occurrences of same-day cancellations and unplanned admissions. The patient readiness process is currently the responsibility of the ordering service.**

The Evidence

“the impact of a simple but essential technique of communication with the patients closer to the scheduled date of operation reduced the rate of cancelation from 10% to 1.6%.” -*Singhal et al. Journal of Preoperative Practice*

“While certain same day cancelations are unavoidable, it has been reported more than 50% are preventable.”
- *Yu et al. BMC Surgery 2017*

“Same-day cancellations should be viewed as an opportunity for practice improvement” - *Smith et al. Journal of Thoracic and Cardiovascular Surgery 2014*

The Path to Reliable Data



- ▶ Initial assessment and extensive chart reviews revealed there was not a reliable data tracking process in place.
- ▶ A new pathway to tracking data was created using the Central Data Warehouse (CDW). Revisions were made to a existing nursing notes in Computerized Patient Carting System (CPRS) including a custom Structured Query Language (SQL) with specified parameters, and date ranges.
- ▶ Recurring monthly reports were generated and reviewed. The following data points were tracked: the servicing provider; type of procedure; pre-op appointment; reason for same-day cancelation; length of time in OMU; planned admission or discharge home; reason for unplanned admission; date of rescheduled procedure; average number of days before the procedure was rescheduled; adverse events related to the related diagnoses before the rescheduled date; lodging and travel consults; contrast allergy, length of stay.

Reliability Factor

Compliance is key for reliable data.

- **Education**
 - Visual print out with step-by-step instructions
 - Hands on training
- **Easy to use**
 - 2 clicks within an existing note
 - Identifies if same-day cancelation or unplanned admission along with the reason.
- **Investment**
 - Staff are committed to providing quality care to veterans.
 - Staff appreciate most efficient use of their time as well as their patients.

Results

From April 2018-April 2019 (13 months)

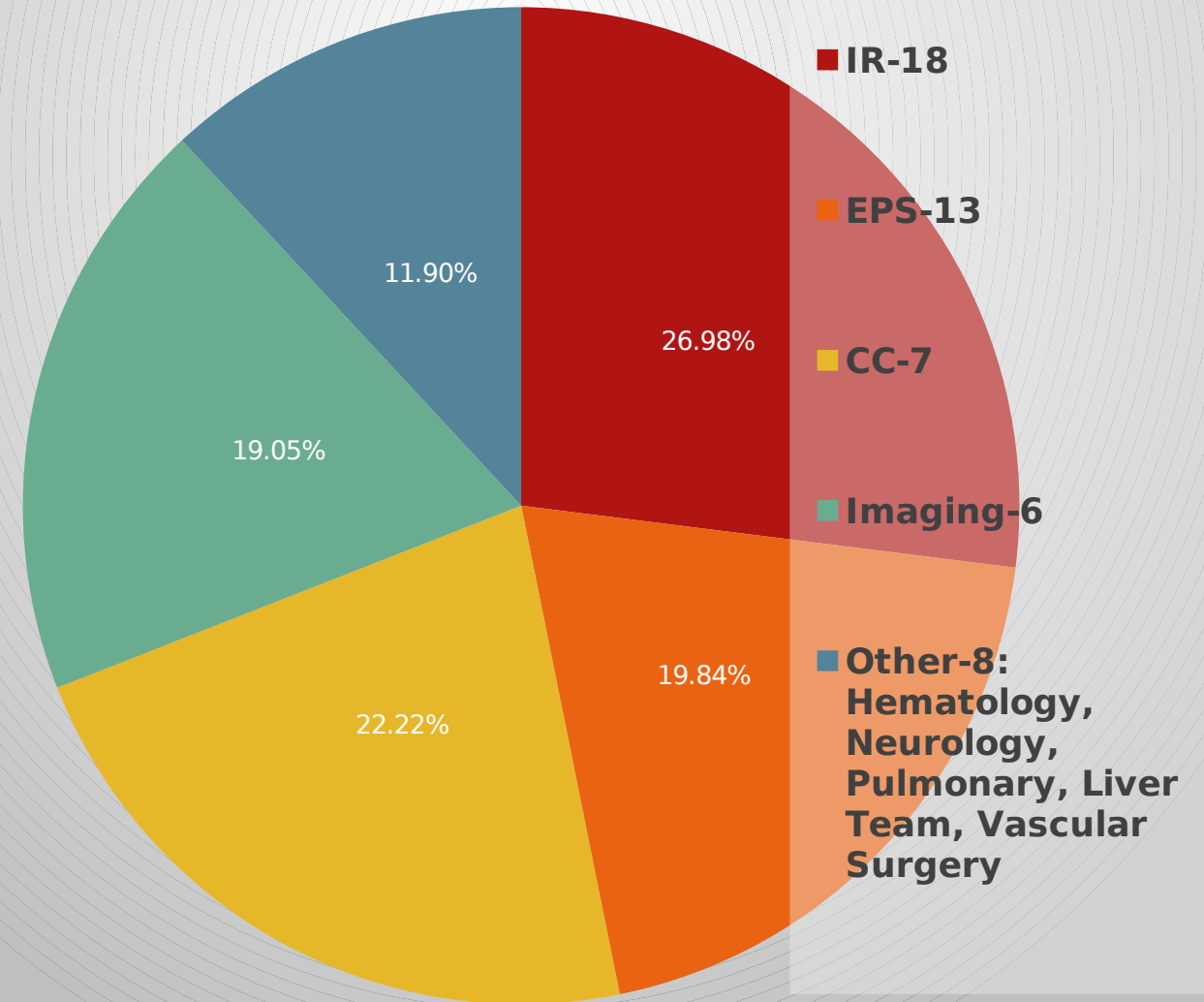
Out of 2,465 procedures scheduled in OMU:

- ▶ 52 same-day cancelations (2.1%) due to “change in patient health” 46% of occurrences.
- ▶ Average 16 day delay before procedures were rescheduled.

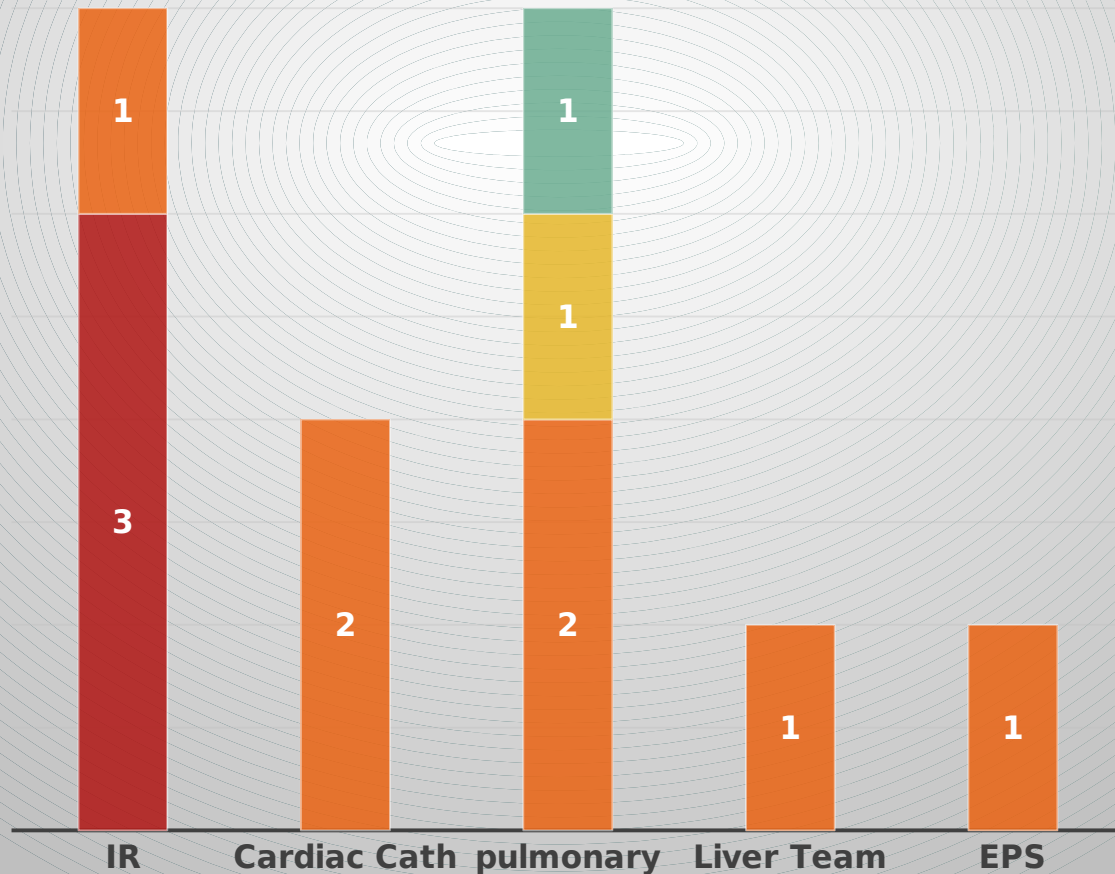
Three Service teams occurred most frequently:

- ▶ Interventional Radiology (IR)
- ▶ Cardiac Cath (CC)
- ▶ Electrophysiology Service (EPS).

52 Same Day Cancelations over 9 months



12 Unplanned Admissions



- other
- no driver
- change in patient health
- unable to complete recovery prior to close

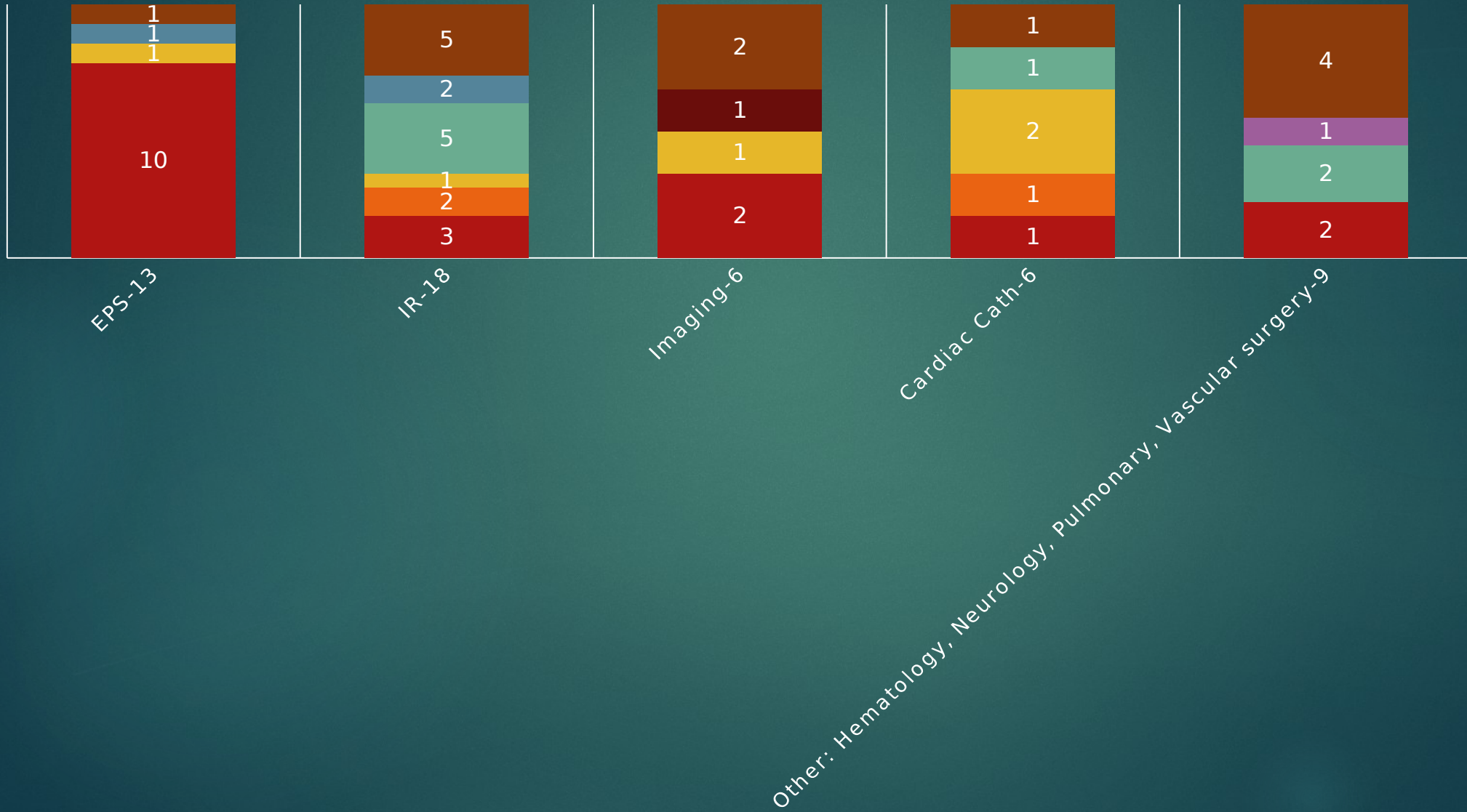
RESULTS

12 unplanned admissions. (0.5%) due to “change in patient health status” 58% of occurrences.

Service Teams include IR, Cardiac Cath, EPS, Pulmonary, and Liver Team

Reasons for Cancellations by Service

■ change in pt health=18
 ■ excessive wait time=3
 ■ pt changed mind=5
 ■ unfavorable labs=8
■ NPO=2
 ■ provider not available=1
■ no driver=1
■ Other=13



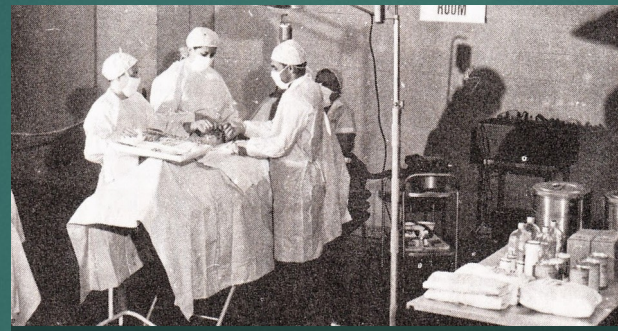
Related Costs



Staff Hourly Wage

Total of 152 hours spent on patient care. Staff average hourly wage including benefits = \$63/hour

\$9,626 loss of manhours



Procedure costs

Average procedure cost ranges from \$530-\$3,800. 52 same-day canceled procedures include fixed and variable costs:

\$127,400 Procedural Loss



Hospital Admission

Average overnight stay for post-sedation monitoring includes both fixed and variable costs \$1760/night. 12 unplanned admissions:

\$21,120 Loss in Unplanned Admissions.

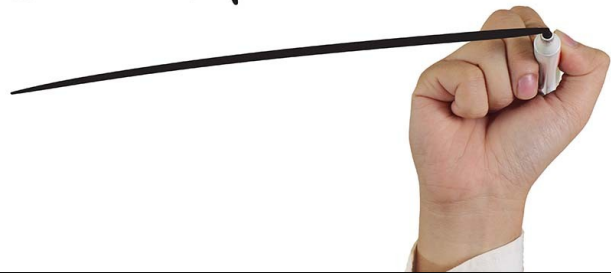
Recommendations

- ▶ Each service team to evaluate current “patient readiness” process and consider implementing or revising the following:
- ▶ A standardized “patient readiness” criteria form. This form should be documented in the patients chart and reviewed 24-48 hours prior to scheduled procedure ensuring the patient is “ready”. This may include lab work, EKG, medical clearances, adjusted medications, & lodging and travel consults,
- ▶ A reminder call is recommended 24-48 hours prior to the scheduled procedure to ensure “patient readiness”, review pre-procedural instructions regarding medication, NPO status, transportation, and answer last minute questions.

Plan

- ▶ Service teams were presented with data and recommendations in January 2019. No responses regarding the findings or recommendations as of yet.
- ▶ Continued gathering data, then present findings again in 6 months. Which brings us to date.
- ▶ Phase II of this project will evaluate the current “patient readiness” process. It is recommended each service document a standardized outpatient medicine unit “patient readiness” form in CPRS, and reminder phone calls 24-48 hours prior to the appointment. Support from OMU should be considered to service teams who lack the resources and/or support to do so.

LIMITATION



Tracking Data

-Pre-existing methods proved unreliable.

-Late revision from transfer note that proved to be integral to capturing unplanned admissions. This was added March 2019

Reliability Factor

-EPS actively working on quality improvement project using the LEAN method to decrease delay in start times during the first several months of base line data collection. Their interventions included a pre-op clinic that also decreased rate of OMU same-day cancelations and unplanned admissions.

-Cardiology and OMU worked to streamline patient pre-op education, which may have decreased rates of same-day cancelations.

Communication

-Terminology variations between disciplines

-Lack of face-to-face correspondence

-Difficulty identifying available resources

Time

-Extensive chart reviews

-Excessive turn around time for support

-Limited time available.

Disseminating Data

- ▶ Continue monthly chart reviews of reports
- ▶ Present findings to appropriate services After each regular data analysis
- ▶ 1st annual Nursing Research Day 2019, Portland VA
- ▶ Poster presentation at 10th Annual Oregon Nursing Research & Quality Consortium
- ▶ Present at Nursing Ground Rounds 2019



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