

Improving Comprehension and Patient Experience on Family-Centered Rounds for Limited English Proficient Families

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A. Study Purpose and Rationale

Family centered rounds (FCR) has become standard of care for general pediatric practice in academic centers. Prior research in our hospital shows that 24% of families who participate in FCR select Spanish as their preferred language, although we do not have a standard practice for interpretation during rounds. Only 17% of these families had a certified interpreter during rounds, which most often is over the phone, 56% had a member of the medical team serve as a translator, and 27% had no interpreter.

Recent studies have evaluated the perspectives of families with limited English proficiency (LEP), and shown that families much prefer in-person interpretation compared to telephone interpreters (Anttila, 2017; Walker-Vischer, 2011). Providers in the Emergency Department were found to have more lapses in interpreter use when randomized to telephone interpreters compared to video interpreters, and families were more likely to accurately recall their child's diagnosis with video interpreters (Lion, 2015).

Additionally, when assessing comprehension of rounds, English and Spanish-speaking families are often equally able to identify the diagnosis, plan, discharge goals and medications, but Spanish-speaking families are less likely to report confidence in their knowledge (Subramony, 2012; Lion, 2013). In a recent study in our hospital, we similarly found the LEP families were less likely to report understanding compared to English proficient families, but LEP families were also significantly less likely to correctly recall their child's inpatient medications or discharge date compared to English proficient families.

Language barriers are likely an important factor in medical outcomes; one study found Spanish speaking families to be 2x more likely to have a serious medical event occur compared to English-speaking families (Cohen, 2005) Therefore, it is important to ensure family comprehension during FCR and to identify the best methods for interpretation for LEP families.

B. Study Design and Statistical Analysis

We propose to initiate a quality improvement project to improve comprehension on FCR by implementing use of video interpreters. We will compare comprehension, rounding procedures, family satisfaction and perceived level of comprehension between LEP families who receive interpretation via video interpreters, and those who receive the current standard of interpretation decided by the team. We will focus on Spanish-speaking families, which is the most common language spoken after English in our hospital. Secondary aims will be improvement of rounding procedures and family participation on rounds. We will also evaluate patient satisfaction to ensure that our patient population does prefer video interpretation compared to our current standards.

Comprehension will be defined by the family's answers to survey questions compared to the diagnosis, plan of care, medications and discharge date discussed on rounds that day. Rounding procedures include explanation of family-centered rounds, introduction of

team members, invitation to participate in rounds, and invitation to ask questions or participate in shared decision-making.

There are on average 20 Hospitalist Medicine patients daily, of which 25% (5 patients) are Spanish-speaking. During one year of data collection, which will occur on rounds one morning per week, we will be able to recruit 260 patients, or 130 per study group. In prior studies at our hospital, LEP families are “completely concordant” with residents/attendings ~50% of the time about their child’s diagnosis, and 25% of the time for other aspects of care including plan of care, medications and discharge date. With a power of 80% and alpha < 0.05, we will be able to detect a difference in comprehension of diagnosis to either <32% or >68%, and other aspects of medical care <11% or >42%.

Chi squared tests will be used to assess improvement in family comprehension and team’s rounding procedures

C. Study Procedure

There are two teams that comprise the Hospital Medicine service at CHONY, each with about 10 patients per day, of which ~25% are Spanish-speakers. Attendings typically are on service for two weeks at a time. An investigator will be present on rounds one morning per week. The investigator will observe rounds for Spanish-speaking families with current standard translation procedures on one team, and will observe rounds with a video translator on the other team. The team using the video interpreter will alternate each week, so that each attending on service is observed using standard interpretation and video interpreter once each per service time. The investigator will collect data during rounds including clinical information (diagnosis, medications, plan of care, discharge date), and rounding procedures (if the team introduced themselves, explained FCR, invited family to ask questions). After rounds, the investigator will return to the families and ask for their understanding of their child’s clinical information, and will be assessed for concordance with the information discussed on rounds that day. Families will also be asked their level of satisfaction with rounds and their perceived level of understanding of their child’s medical care.

D. Study Drugs

No study drugs, approved or investigational, will be used.

E. Medical Device

No medical devices will be used in this study

F. Study Questionnaires

Rounds Observation Tool:

- Name, DOB, MRN
- Translation Used? Y/N
- Translation Modality: Phone, In-Person, Team Member, Family Member, Video, Other
- Who on the team was introduced to the family: attending, resident, intern
- Was the family invited to participate in rounds during presentation? Y/N

- Was the family invited to ask questions during rounds? Y/N
- Child's diagnosis:
- Plan of care:
- Medications:
- Anticipated Discharge Date:

Patient Survey:

- Child's name, DOB, MRN
- Respondent age
- How many times has your child been hospitalized in the past? First hospitalization, 1-3 times, 4+ times
- What is your highest level of schooling?
- What is your country of origin?
- Tell me about your experience on family-centered rounds today.
- How much of the information discussed on rounds did you feel that you understood? All, Most, Some, None
- How satisfied were you with rounds today? Completely, Somewhat, Not Satisfied
- How comfortable did you feel on rounds today? Completely, Somewhat, Not Comfortable
- What is your child's diagnosis?
- What is your child's plan for today?
- What medications is your child receiving?
- What day do you believe you will be going home?

G. Study Subjects

Study subjects will consist of a convenience sample of inpatients at Morgan Stanley Children's Hospital on the two Hospitalist Medicine teams.

H. Recruitment of Subjects

Recruitment of study subjects will take place one morning per week. Spanish-speaking families will be approached prior to rounds for consent. Rounds will be observed for all Spanish-speaking families, and those families will be approached within the hour after rounds for surveys about their understanding of rounds.

I. Confidentiality of Study Data

Study data will be stored in a password-protected secure database, accessed only by study investigators who have completed appropriate HIPPA and clinical research training. Subjects will be given a study number and subjects will be de-identified once data collection is complete.

J. Potential Conflict of Interest

There is no anticipated conflict of interest from any study investigators.

K. Location of the Study

The study will take place at Morgan Stanley Children's Hospital.

L. Potential Risks

The greatest potential risk for study subjects is loss of confidentiality. This risk will be minimized by patient de-identification and database protection as described above.

M. Potential Benefits

Patients in this study will not have direct benefits, although their participation will help improve our rounding and interpretation procedures for LEP families in a patient-centered way.

N. Alternative Therapies

There will be no therapies employed in this study.

O. Compensation to Subjects

Compensation will not be provided to subjects participating in this study.

P. Costs to Subjects

There will be no direct costs to subjects, except for time spent doing the surveys. These surveys will take ~15 minutes to complete, and subjects will be hospitalized at time of survey, so should be minimally disruptive.

Q. Minors as Research Subjects

Minors and their families will be the main participants in this study. However, we will not be altering care in any way and this study is of minimal risk to the patients. The major risk, as described above, is loss of confidentiality.

R. Radiation or Radioactive Substances

This study will not employ radiation or radioactive substances.

S. References

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