

PARENT EDUCATION IN THE NEONATAL INTENSIVE CARE UNIT:

A COLLABORATIVE EFFORT TO DESIGN AND IMPLEMENT A PROCESS EVALUATION ACROSS MULTIPLE SITES AND SOURCES OF DATA

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PRESENTATION OVERVIEW

- About the March of Dimes
- From the Literature
- Project Background
- Challenges Associated with Implementation and Evaluation
- Strategies Used to Enhance Collaboration
- Resulting Outcomes

WHO WE ARE AND WHAT WE DO

march of dimes



Community

Our programs help moms-to-be have full-term pregnancies and healthy babies.



Advocacy

We advocate to help moms and babies get care and services to improve their health.



Research

We research the serious problems that threaten our babies and work on preventing them.



Education

Our websites provide the latest pregnancy health information in English and Spanish.



Support

We offer information and comfort to families with a newborn in intensive care.

WHAT IS COLLABORATIVE EVALUATION AND RELATED APPROACHES?

Collaborative evaluation:

“Engages key program stakeholders actively in the evaluation process...seeks involvement from all program stakeholders during all stages of the evaluation. A collaborative stance can strengthen evaluation results and increase the use of evaluation findings.”
(O’Sullivan, 2004)

Model for Collaborative Evaluations

Identify the situation, Clarify the expectations, Establish a collective commitment, Ensure open communication, Encourage best practices, and Follow specific guidelines
(Rodríguez-Campos, 2012)

WHAT IS COLLABORATIVE EVALUATION AND RELATED APPROACHES?

Utilization-Focused Evaluation:

“Evaluations should be judged by their utility and actual use; evaluators should facilitate the evaluation process and design any evaluation with careful consideration of how everything that is done, from beginning to end, will affect use.” (Patton, 2013)

Utilization-Focused Evaluation (U-FE) Checklist

PROJECT BACKGROUND

March of Dimes NICU Family Support®

Goal:

Provide information and comfort to families with a baby in the neonatal intensive care unit

- Partnership with over 130 hospitals nationwide
- Parent/caregiver education is one of the main program components

CHALLENGES ASSOCIATED WITH IMPLEMENTATION AND EVALUATION

- Lack of standardization in the program
- Newly redesigned program that had never been evaluated before
- Need for alignment between program goals and evaluation goals
- Large number of sites
- Data collection using multiple sources
- Evaluation use

STRATEGIES USED TO
ENHANCE COLLABORATION

AND

RESULTING OUTCOMES

INITIAL DISCUSSIONS AND PLANNING

Parent education classes:

- A main program component for years, but...
- Prior to 2014, content and format determined by *Specialists*

Program managers started getting questions from stakeholders:

Specialists asked:

What topics, Who should lead, How to increase attendance?

Hospital Partners invested in the program asked:

Led based on best practices, What guidance provided, Benefits compared to another type of education?

So, program managers became interested in evaluation

- As internal evaluators, knew to approach us from the beginning
- Open to our suggestions and recommendations

RESULTING OUTCOMES: INITIAL DISCUSSIONS AND PLANNING

Part of the Team

Evaluators came together with Program Managers with an understanding that evaluation should be:

- Developed alongside program and content development
- Informed by programmatic decisions and vice versa

Need for Standardization

- Must have consistency across sites in order to evaluate
- **Priority shift** to development of a standardized parent education program

Developed Purpose Statements

For both the program and its standardized redesign, and the evaluation

RESULTING OUTCOMES: INITIAL DISCUSSIONS AND PLANNING

Parent Education:

To provide a framework to establish ***consistency in the implementation*** of parent education in NICUs

Evaluation:

Identify best practices around implementation of each standardized parent education class to guide future implementation and assure quality

INTEGRATION OF EVALUATION WITH PROGRAM COMPONENTS

Program Managers Design of New Curriculum

- Evaluation team review
- Suggestions and revisions made to facilitate evaluation

Evaluators Design of Data Collection Tools

- Program manager review
- Methods chosen carefully to fit context, recognizing sensitive nature of NICU parent population

RESULTING OUTCOMES: INTEGRATION OF EVALUATION WITH PROGRAM COMPONENTS

Five NICU Family Support standardized parent education topics:

- Caring for Your Baby in the NICU
- Caring for Your Baby at Home
- Infant Nutrition
- Close to Me[®] (*Skin-to-Skin/Kangaroo Care*)
- Caring for Your Family Means Caring for Yourself

Each topic area has:

Standards

Appropriate speakers

Learning objectives and key messages

Recommended activities, materials, and conversation ideas

Tools to Support the Speaker

Guidelines sheet, speaking points, and bibliography for further reading

Evaluation Tools

Session Report

Attendee Assessment Form

Speaker Evaluation Form

RESULTING OUTCOMES: INTEGRATION OF EVALUATION WITH PROGRAM COMPONENTS

From *Guidelines sheet*

Speaker: Appropriate speakers include:

- NICU Nurse
- NICU Family Support Specialist
- Nurse Practitioner
- Patient Educator
- Physician

From *Session Report*

*Select speaker primary role:
(mark only one choice)*

- Nurse
- Nurse Practitioner
- Patient Educator
- Physical Therapist
- Occupational Therapist
- Speech Therapist
- Social Worker
- Case Manager/Discharge Planner
- Lactation Consultant
- Nutritionist
- Physician
- NFS Specialist
- Other, please specify:

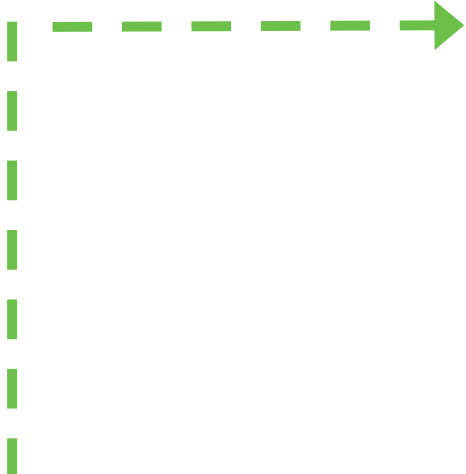
Check if provided to Speaker:

- Guidelines*
- Speaker Information Supplement*

Select speaker's highest degree:

- High school or less
- Some college but no degree
- Associate's degree
- Bachelor's degree
- Master's degree or above

RESULTING OUTCOMES: INTEGRATION OF EVALUATION WITH PROGRAM COMPONENTS



From *Speaker Evaluation Form*

Please rate how much you *agree or disagree* with the following statements about the *Caring for Your Baby in the NICU* parent hour.

- The objectives were clear.....
- I felt prepared to lead the session.....
- I understood the expectations for what information I was supposed to cover.....
- The materials provided were adequate.....

From *Attendee Assessment Form*

For this parent hour, how *satisfied or dissatisfied* are you with the....

- Presentation style of the speaker.....
- Speaker's skill explaining the information.....
- Overall quality of the class.....



RESULTING OUTCOMES: INTEGRATION OF EVALUATION WITH PROGRAM COMPONENTS

From *Guidelines* sheet

Learning objectives: As a result of participating in this Parent Hour, participants will be able to:

- Discuss proper hand hygiene
- Identify at least three ways they can be involved in their baby's care
- Identify at least three sources of support and guidance while in the NICU

Key messages:

- Class is part of March of Dimes NICU Family Support
- Discuss your hospital's policy on handwashing, including when to use soap/water and hand sanitizer
- Discuss other policies including visitation, family participation in rounds/change of shift, cell phone usage, etc.
- Families are a key member of the NICU team. They can be involved in their baby's care by holding, kangaroo care, bathing, changing diapers, asking questions and participating in rounds (if available)
- Resources for support include March of Dimes NICU Family Support Specialist, hospital social worker, chaplain, nursing staff, and Share Your Story.

Recommended activities:

- Tour of NICU
- Practice hand washing
- Explain Parent Care Kit contents
- Provide demonstration of Share Your Story website

Recommended materials:

- Refer families to NICU Family Support admission materials
 - NICU: a guide a glossary (28-2261-08), or
 - In the NICU for a Shorter Stay: A guide for parents (28-2640-12)
- Close to Me SM fliers (28-2431-09)
- Share Your Story fliers (28-2267-08)
- NICU Family Support calendars

RESULTING OUTCOMES: INTEGRATION OF EVALUATION WITH PROGRAM COMPONENTS



From Session Report

Learning Objectives

Check if covered during the session:

- Discuss proper hand hygiene
- Identify at least three ways they can be involved in their baby's care
- Identify at least three sources of support and guidance while in the NICU

Key Messages

Check if covered during the session:

- Class is part of March of Dimes NICU Family Support
- Discuss your hospitals policy on hand washing, including when to use soap/water and hand sanitizer
- Discuss other policies including visitation, family participation in rounds/change of shift, cell phone usage, etc
- Families are a key member of the NICU team. They can be involved in their baby's care by holding, kangaroo care, bathing, changing diapers, asking questions and participating in rounds (if available)
- Resources for support include March of Dimes NFS Specialist, hospital social worker, chaplain, nursing staff, and Share Your Story

Recommended Activities

Check if conducted during the session:

- Tour of NICU
- Practice hand washing
- Explain Parent Care Kit contents
- Provide demonstration of Share Your Story website

Materials

Check if used during the session:

- Recommended:
- NICU: a guide a glossary (#28-2261-08)
 - In the NICU for a Shorter Stay: A guide for parents (#28-2640-12)
 - Close to Me fliers (#28-2431-09)
 - Share Your Story fliers (#28-2267-08)
 - NICU Family Support calendars

Locally-Produced Materials:

- Specify: _____

If checked, rate how much each enhanced the session:

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1 = Did not enhance session at all → 5 = Enhanced session a great deal

From Attendee Assessment Form

How much did you *learn* about each of the following topics during this parent hour?

- The recommended way to clean your hands.....
- This NICU's rules on family participation and visiting...
- Ways to be involved in your baby's care in the NICU.....
- Where to go for support.....
- Overall** on caring for your baby in the NICU.....

FIELD TRAINING

All training elements were *co-led* by the program managers and the evaluation team, and all instructional materials were written to promote implementation of the curriculum with evaluation as an *integrated* component

- Workgroup Pilot
- Webinar Series
- Getting Started Guide
- Management Tool
 - Spreadsheet for tracking classes, speakers, attendance and IDs

RESULTING OUTCOMES: FIELD TRAINING

Buy-In From Sites

Clear expectations around:

- Program implementation
- Purpose and importance of the evaluation

Open Line of Communication

- Evaluators to sites and vice versa

Successful Shift to a Standardized Curriculum

Following one year of implementation:

- 92.7% of sessions planned with a recommended speaker
- Speakers received tools to help them lead the class 89.0% of the time
- All Learning Objectives covered at 91.3% of classes
- Any recommended curriculum item used at 79.5% of classes

DATA QUALITY MONITORING

Two main goals

- Ensure all sites are compliant in program implementation and data reporting
- Minimize errors in ID assignment that would prevent three data sources from linking to one another

Process

Data examined on a quarterly basis and shared with program managers in order to:

- Communicate with all sites individually summarizing participation using evaluation data compared to administrative program data already collected

RESULTING OUTCOMES: FIELD TRAINING AND DATA QUALITY MONITORING

Identification of Issues Early

Prompted us to:

- Offer additional webinars with reminders driven by common mistakes
- Work one-on-one with sites when necessary for revisions to data

Creation of a Linked Dataset

To be used in analysis for the identification of best practices around implementation of parent education:

- One year of implementation (*Sessions held July 2014 – June 2015*)
- Data received from 72 hospitals distributed across:
 - 46 states, District of Columbia, and Puerto Rico
- Three data sources

RESULTING OUTCOMES: FIELD TRAINING AND DATA QUALITY MONITORING

72 Hospitals

Sessions Held:
1,608

Attendees:
6,059

Speakers:
349

Attendee Responses
Received: 4,521

Response rate: 74.6%

Speaker Responses
Received: 244

Response rate: 69.9%

Linked Dataset (all three forms)

66 Hospitals

Sessions Held: 951

Number of Attendees: 3,878;

Attendee Responses: 3,117

Response rate: 80.4%

Speaker Responses: 213

Data Excluded:

Session forms, 40.9%; Attendee forms, 31.1%;
Speaker forms, 12.7%

Linked Dataset (two forms only)

70 Hospitals

Sessions Held: 1,352

Number of Attendees: 5,383;

Attendee Responses: 4,374

Response rate: 81.3%

Speaker Responses: 0

Data Excluded:

Session forms, 15.9%; Attendee forms, 3.3%;
Speaker forms, 100.0%

DATA SHARING AND REPORTING

Monthly Meetings

- Evaluation team and program managers
- Sometimes also included additional field managers

Used as a venue to:

- Present and discuss preliminary data
- Talk about relevant implementation issues in relation to the data

Flexible Analysis and Reporting Plan

Developed in conjunction with program and evaluation goals, and:

- Feedback from program managers to drive direction of analysis and reporting needs
- Evolution over time based on initial and continued sharing of results

RESULTING OUTCOMES: DATA SHARING AND REPORTING

Defined Outcomes: Three Primary Variables

Increased Attendance
Perceived Parent Learning and Knowledge Change
Increase in Parenting Confidence

Identify the factors that are associated with better outcomes

Descriptive Results

- Average number of attendees per session: 4.1

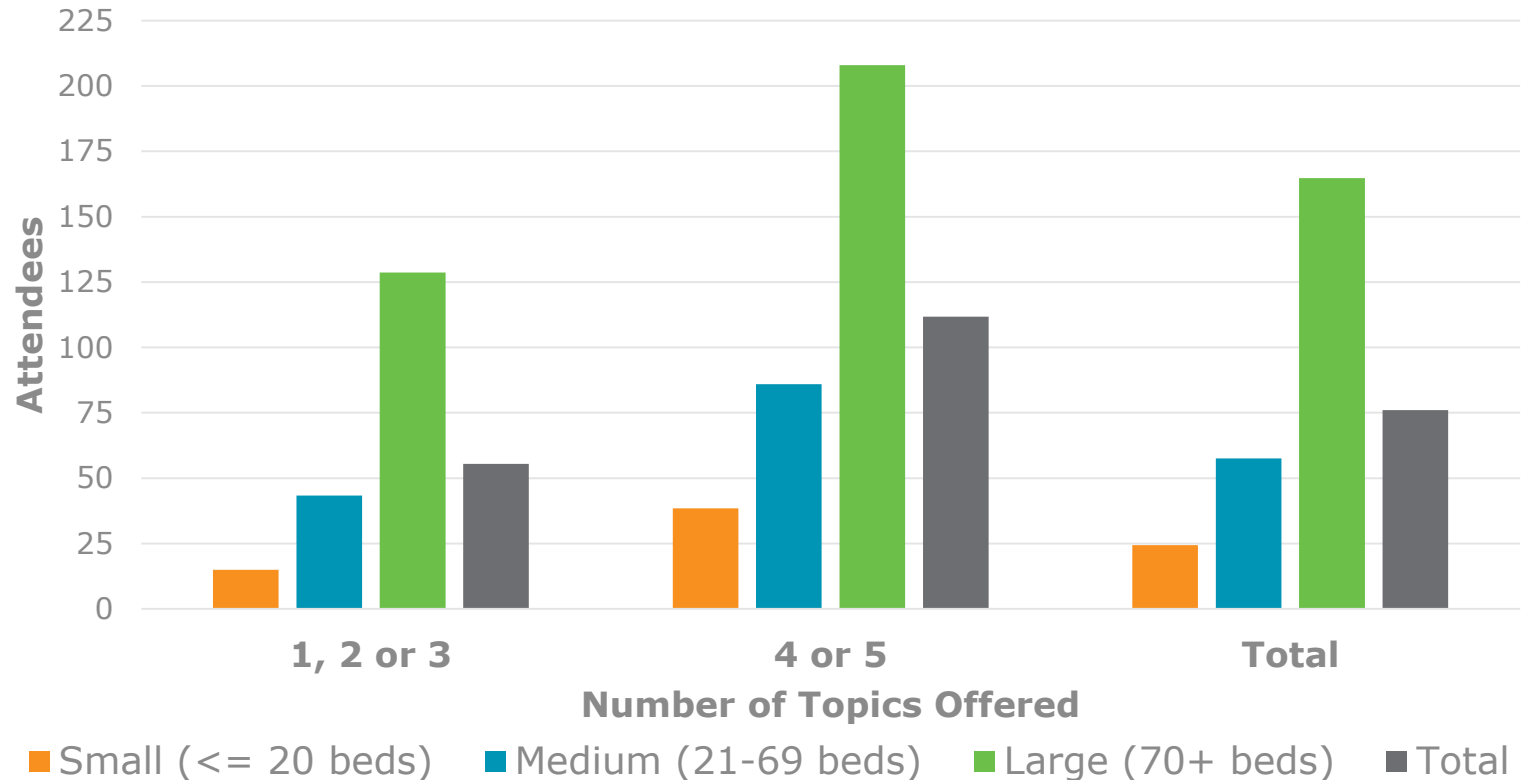
Attendees reported:

Learning a lot overall on the topic: 77.5%

Increased confidence as parent or caregiver: 84.9%

RESULTING OUTCOMES: DATA SHARING AND REPORTING

Average Total *Attendance* for One Year
by Unit Size & Number of Topics Offered



Source: Full Session Report (Unmerged) One Year Dataset.
Excludes exempt sites and attendance outliers. n = 55 sites.

RESULTING OUTCOMES: DATA SHARING AND REPORTING

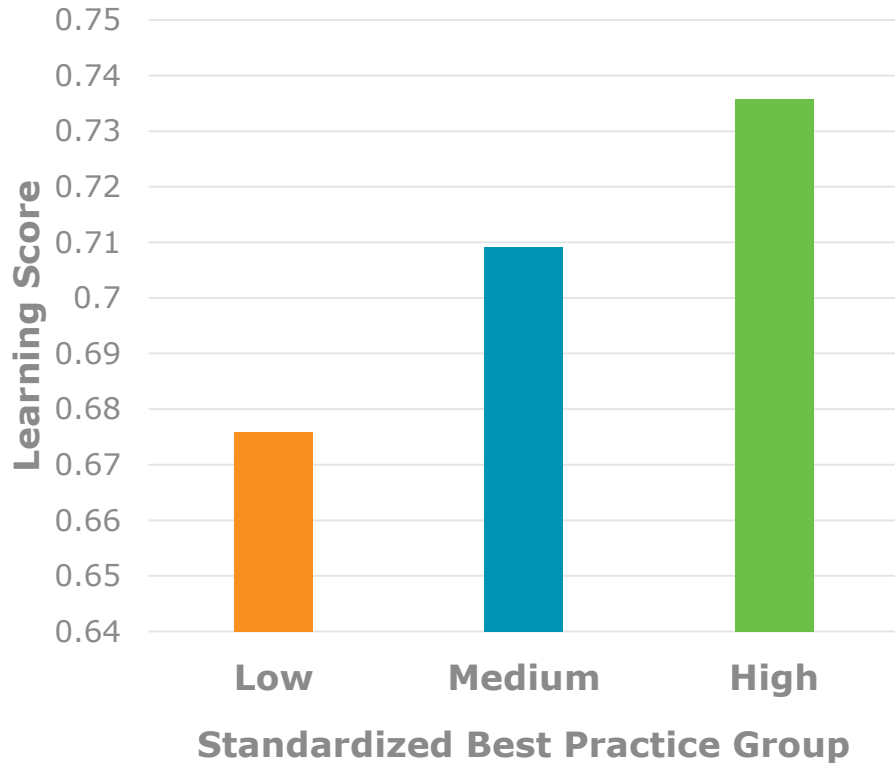
Categorizing Classes by Level of Standardization

Individual implementation factors grouped together:

- Specialist should attend the class
- Speaker should receive the Guidelines
- A repeat speaker should be used
- All Key Messages should be covered
- Any recommended curriculum item should be used
- Topic-specific items (*particular material or activity should be used*)

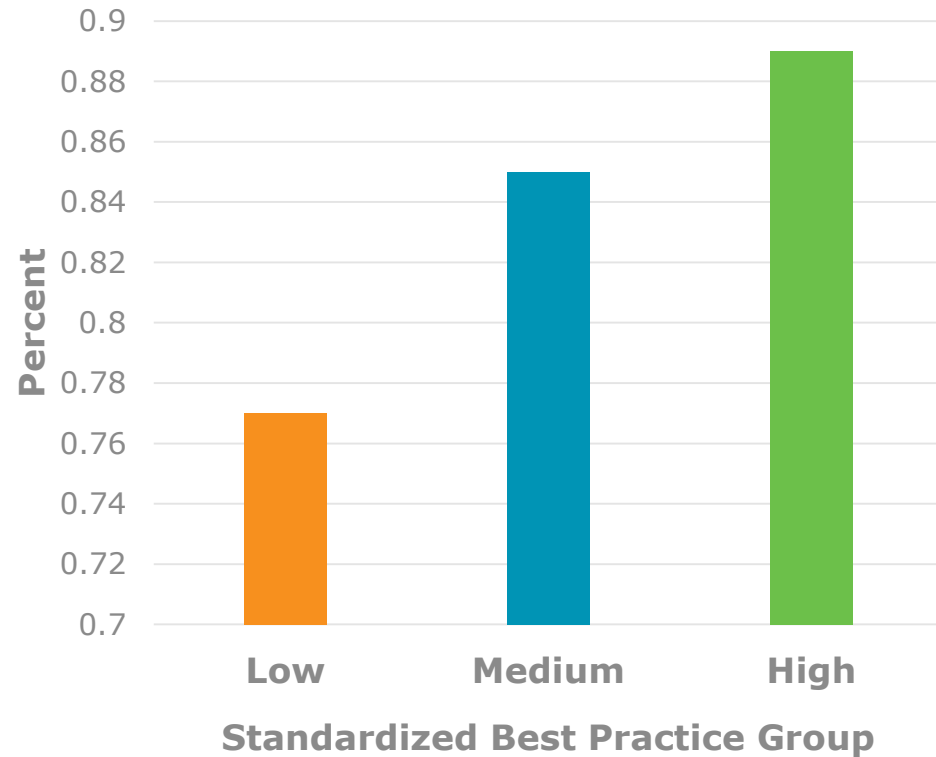
RESULTING OUTCOMES: DATA SHARING AND REPORTING

Average **Learning** Scores of Attendees by Session Attended



ANOVA, $p < .001$

Attendees Whose **Confidence** Increased by Session Attended



ANOVA, $p < .001$

Source: Merged (Session, Attendee, Speaker) One Year Dataset.
Uses Combined Learning Score. $n = 2,783$ attendees for learning; $3,068$ attendees for confidence.

CONCLUSIONS

This project demonstrates:

Incorporating needs of *stakeholders*

Overcoming *challenges* of data collection
across multiple sites and data sources

The feasibility and benefits of a fully *integrated* evaluation
aligning directly with *program goals*

Provision of meaningful *feedback* to program designers
for determining driving factors of success

Promoting evaluation *use* for
decisions about future implementation

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