



# Florida Perinatal Quality Collaborative

at The Lawton and Rhea Chiles Center for Healthy Mothers and Babies

## Evaluation Survey of Golden Hour Project Participants

### Overview

This report documents the findings of a survey to assess the effectiveness of, and the extent to which the Golden Hour Project facilitated hospitals' ability to manage the delivery room during births of infants <31 weeks gestation or birth weight less than 1500 grams.

The survey consisted of questions about project team composition; perceptions of team work, project implementation, preparation, and data collection; and assessment of assistance provided by the FPQC. All questions pertained to hospital activities and no personal questions of individuals were included. Survey information was compiled using Qualtrics Online Survey Software, which is maintained on a secure, HIPAA-compliant server. Invitations to take the survey were e-mailed to 34 individuals identified as members of the Golden Hour team among the 9 participating hospitals.

Major findings from the survey include:

- The most difficult component of the project to implement was debriefing.
- Respondents felt least confident to implement the debriefing component, both prior to and after the Golden Hour project.
- All respondents reported improvement in their hospital's ability to handle delivery room management issues by participating in the Golden Hour project

### Detailed Results

#### *Demographics*

A total of 15 individuals completed the survey. At least one person from 8 of the 9 Golden Hour hospitals responded to the survey. The majority (40%) of respondents were physicians and the next largest group of respondents (20%) were quality managers.

**Table 1. Profession of Survey Respondents**

Answer	Response	%
Physician	6	40%
Quality Manager	3	20%
Staff Nurse	2	13%
Other	2	13%
Nurse Manager	1	7%
Hospital Administrator	1	7%
<b>Total</b>	<b>15</b>	<b>100%</b>

### *Previous Delivery Room Management Experience*

Participants were asked if their hospital had quality improvement plan in place to address any of the Golden Hour recommended components in the year prior to the FPQC's Golden Hour project (Table 2).

**Table 2. Pre-Golden Hour Project Hospital Delivery Room Management Plan**

Answer	Response	%
Achieving target NICU admission temperature 36.5-37.5 C	9	69%
Achieving compliance with NRP oxygen saturation targets	7	54%
Exclusive roles for resuscitation team members	6	46%
Consistently performing delayed cord clamping	5	38%
Debriefings after resuscitation events	3	23%

### *Project Implementation Readiness*

Participants were also asked how prepared their hospital NICU teams were to monitor the components in the delivery room. The majority felt quite prepared to handle exclusive resuscitation team roles, thermoregulation, and oxygen saturation, but felt only somewhat or not prepared to monitor debriefing and delayed cord clamping in the delivery room (Table 3)

**Table 3. Pre-Golden Hour Project Preparedness**

Component	Not Prepared	Somewhat Prepared	Quite Prepared	Extremely Well Prepared
Exclusive resuscitation team roles	13%	27%	53%	7%
Thermoregulation	0	33%	47%	20%
Oxygen saturation monitoring	0	27%	60%	13%
Debriefing	53%	33%	13%	0
Delayed cord clamping	40%	27%	20%	13%

Table 4 shows respondents perception of the level of difficulty in implementing key components of the Golden Hour project. The most difficult component to implement was debriefing (47% of respondents categorized it difficult), while the easiest to implement was oxygen saturation monitoring (80% of respondents categorized it easy or very easy). None of the respondents found any of the components very difficult to implement.

**Table 4. Level of Implementation Difficulty of Golden Hour Components**

Component	Very Difficult	Difficult	Neutral	Easy	Very Easy
Exclusive resuscitation team roles	0	7%	33%	33%	27%
Debriefing	0	47%	13%	40%	0
Thermoregulation	0	20%	7%	60%	13%
Oxygen saturation monitoring	0	7%	13%	53%	27%
Delayed cord clamping	0	27%	27%	33%	13%

Asked about barriers to implementing the Golden Hour components (Table 5), 33% of respondents indicated no issues, but the remainder cited issues such as other hospital priorities/lack of time (27%) and issues with documentation (20%), and others, as preventing full implementation.

**Table 5. Barriers to Implementation of Golden Hour Components\***

Answer	%
No issues	33%
Other hospital priorities / Lack of time	27%
Issues with documentation	20%
Other	20%
Not enough staff to implement large changes	13%
Lack of physician engagement	7%
Cost of supplies or equipment	7%
Lack of staff belief or interest in a proposed change	7%
Lack of staff/clinician training	7%
Hospital administration barriers	0%

\* Respondents could check all elements that applied.

### *Teamwork and Communication*

Asked about activity level of hospital team members in driving their Golden Hour project (Table 6), 93% of respondents indicated that physicians were active or very active, 86% said the same of staff nurses and respiratory therapy, 72% of nurse managers, and the rest were fairly active. In the ‘other’ category, nurse practitioner and resuscitation RN were listed as very active.

**Table 6. Activity Level of Project Team Members**

Question	Not At All Active	Somewhat Active	Active	Very Active
Staff Nurses	0	13%	53%	33%
Physicians	0	7%	33%	60%
Hospital Administrators	29%	14%	21%	36%
Other	0	0	0	100%
Respiratory Therapy	0	13%	53%	33%
Nurse Managers	0	29%	43%	29%
Quality Manager	13%	21%	29%	36%

Asked to rate the level of communication among their hospital team members, 78% rated it either very good or excellent (Table 7). When asked if Golden Hour quality improvement data reports were shared with members of the entire team throughout the initiative 86% of respondents indicated yes, and 14% indicated no. And when asked how useful they found those reports, 100 percent found them to be useful or very useful.

**Table 7. Level of Communication of Golden Hour Team Members**

Answer	Level of Communication
Poor	0%
Fair	7%
Good	14%
Very Good	71%
Excellent	7%
Total	100%

Asked to rate the amount of communication received from FPQC on the Golden Hour project, 100 percent of respondents felt that the amount was just right.

When asked about the types of communication used by hospital teams to share project results with their NICUs (Table 8), the majority of respondents indicated use of face-to-face meetings dedicated to the Golden Hour project (86%), during routine communications (e.g. staff meetings, shift huddles) (86%), and e-mail communication (71%). ‘Other’ communication method was division and section meetings for physicians.

**Table 8. Types of Communication used by Golden Hour Team Members**

Answer	Response	%
Face-to-face meetings dedicated to the Golden Hour project	12	86%
During routine communications (e.g. staff meetings, shift huddles)	12	86%
E-mail communication	10	71%
White boards or other static postings	8	57%
Newsletters or other periodic communications	5	36%
Dynamic postings that update frequently (e.g. electronic picture frames, computer screen savers)	1	7%
Other (please describe):	1	7%

To gauge whether hospitals utilized TeamSTEPPS training (from webinars or FPQC opportunities) to assist the teamwork component of the Golden Hour project, 57% of respondents indicated they had not, while 43% of respondents indicated they had. One respondent noted that they encouraged charge nurses and management staff to attend.

Respondents were also asked how often they communicated with Golden Hour project teams from other hospitals. Frequency of communication by each type is indicated in Table 9.

**Table 9. Frequency of Golden Hour Communication with Other Hospitals**

Answer	Never	Rarely	Sometimes	Often
Email communication	7%	57%	29%	7%
Telephone	20%	36%	43%	0
Face-to-face meeting	23%	31%	54%	0
Listserve	54%	31%	23%	0

#### *Involvement with and Assistance from FPQC*

A series of questions in the survey sought to assess how involvement in the Golden Hour project collaborative and the assistance provided by the FPQC helped hospitals implement the project. At the end of the project, respondents were asked how prepared their NICU was to handle delivery room management for an infant <31 weeks or <1500 grams. Zero percent of respondents felt not prepared. Respondents felt the most prepared (quite or extremely well prepared) to handle thermoregulation and oxygen saturation (100%), and exclusive resuscitation team roles (93%). Respondents felt least prepared to handle debriefing.

**Table 10. Post-Project Preparedness for Delivery Room Management**

Answer	Not Prepared	Somewhat Prepared	Quite Prepared	Extremely Well Prepared
Exclusive resuscitation team roles	0	7%	50%	43%
Thermoregulation	0	0	36%	64%
Oxygen saturation monitoring	0	0	29%	71%
Debriefing	0	29%	43%	29%
Delayed cord clamping	0	14%	36%	50%

Respondents were asked to assess the degree to which participation in Golden Hour affected their delivery room management preparedness. One hundred percent of respondents reported that participating in the Golden Hour project affected their preparedness some or a lot (Table 11).

**Table 11. Effect of Participation in Golden Hour on Delivery Room Management Preparedness**

Answer	%
None	0%
Very Little	0%
Some	21%
A Lot	79%
Total	100%

Looking at the usefulness of Golden Hour project resources and tools provided by the FPQC, (Table 12), the monthly data reports (100%) were rated the most useful. The least useful resources were calls to discuss data reports and determine opportunities (36%), and the list serve (43%). The least useful resources were more likely to have respondents indicate that they were not aware of the resource.

**Table 12. Rated Usefulness of FPQC Golden Hour Resources and Tools**

Question	Not Aware	Aware, but did not utilize	Useless	Neutral	Somewhat Useful	Useful
Face-to-face meetings	7%	7%	0	0	29%	57%
Web-based meetings	7%	7%	0	0	43%	43%
Monthly data reports	0	0	0	0	21%	79%
GH DRM Toolkit for hospital implementation	7%	0	0	7%	36%	50%
Calls to discuss data reports and determine opportunities for improvement	7%	0	0	14%	29%	7%
Email communication with FPQC project lead	0	0	7%	7%	29%	57%
Quality improvement education in GH newsletters	7%	0	0	7%	36%	50%
To-do list in the GH newsletters	14%	0	0	21%	21%	43%
Shared DropBox site	21%	0	0	29%	43%	7%
Listserve	21%	0	0	36%	29%	14%

One hundred percent of respondents reported that they felt that the overall guidance and technical assistance during implementation of the Golden Four project ranged from good to excellent (Table 13).

**Table 13. Rating of the FPQC's Guidance and Technical Assistance during Golden Hour**

Answer	%
<b>Poor</b>	0%
<b>Fair</b>	0%
<b>Good</b>	36%
<b>Excellent</b>	64%
Total	100%

The survey also asked hospitals their opinion on the required data collection measures for the project, and 13 out of 14 respondents to this question indicated that the measures were just right. Respondents noted that there was “enough information to drive change and track progress on key drivers but not too much of a data burden”, “manageable”, and “thorough and to the point.” One respondent noted that staff nurses had to make time to input this information.

When asked what the FPQC could do to improve the program or to make it easier (Table 14), 71 percent answered that the FPQC was doing great. Twenty-one percent would like FPQC staff to schedule regular phone calls with hospital teams.

**Table 14. Things the FPQC Could do to Make Golden Hour Better or Easier**

Answer	%
<b>Nothing, the FPQC is doing great!</b>	71%
<b>Schedule regular phone calls with hospital team</b>	21%
<b>Improve E-mail communications</b>	14%
<b>Offer site visits</b>	14%
<b>Provide more tools</b>	7%
<b>Require fewer key components and data measures</b>	0%

When respondents were asked to assess the overall progress of their hospital’s Golden Hour project (Table 15) using the IHI Assessment Scale for Collaboratives, 21 percent reported that their hospital’s efforts yielded modest improvement to improvement, while 79 percent of respondents reported that their hospital’s improvement ranged from significant to outstanding.

**Table 15. Assessment of Progress in Implementing Golden Hour**

Answer	%
<b>Nothing has been done</b>	0%
<b>Planning has begun</b>	0%
<b>Development activity, but no improvement</b>	0%
<b>Changes tested, but no improvement</b>	0%
<b>Modest improvement</b>	7%
<b>Improvement</b>	14%
<b>Significant improvement</b>	36%
<b>Sustainable improvement</b>	36%
<b>Outstanding sustainable results</b>	7%
Total	100%

When asked an open-ended question about what the biggest benefit to their NICU was through participating in the Golden Hour project, respondents provided a variety of comments. Several indicated improved communication, the benefits of collaboration, and delayed cord clamping was mentioned multiple times. One respondent noted “Better success with delayed cord clamping with the Golden Hour project in place; more communication with OBGYN to allow this to happen”. Another respondent indicated the biggest benefit was “Building teamwork, collaboration among departments, L&D and NICU.”

#### *Limitations*

A limitation of the study was the small sample size. A further limitation may have been response bias. We heard from a variable number of representatives and hospitals, which may have biased results toward those who were passionate and/or highly engaged in the Golden Hour project. Findings may not be generalizable to the hospital that did not participate in the survey.

#### *Lessons Learned*

This evaluation survey indicated that the program participants did feel their participating led to improvement in delivery room management. Training and emphasis on debriefing is necessary, since teams felt least confident to implement that component both prior to and after the Golden Hour project. While FPQC support was rated highly, some respondents indicated more frequent communication via phone, email, and even site visit could help with project implementation.