RNFOO Nursing Innovation Grant – Final Report (12 Months)

Project Title: Multimedia Approach to Post-Partum Education & Discharge (MAPPED)
Grant: RNFOO Nursing Innovation Grant (NIG)
Reporting Period: Year 1 (Final Report)
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Organization: The Ottawa Hospital – Mother-Baby Unit (Civic Campus)

TL;DR

With support from the RNFOO Nursing Innovation Grant, the MAPPED project successfully developed and implemented a bilingual (English/French) multimedia postpartum discharge education program at The Ottawa Hospital. Six evidence-informed micro-learning videos were integrated into routine care using a QR-code model and implemented across **both the Civic and General Campus Mother-Baby Units**.

Evaluation demonstrated **improved patient experience** across all discharge-education domains, with CPES Top Box score increases ranging from **+2% to +33%**. Post-discharge education-related advice calls decreased from **11 calls in the first week of implementation to zero calls in the final week**. Findings were disseminated nationally at the **CAPWHN Conference** and locally at the **TOH Patient Safety Conference**, with RNFOO funding acknowledged.

The project is now embedded in practice, requires minimal ongoing resources, and has generated interest from hospitals across Ontario and Canada, demonstrating sustainability, scalability, and impact on patient safety and equitable access to education.

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1. Executive Summary

The Multimedia Approach to Post-Partum Education & Discharge (MAPPED) project was developed to address gaps in standardized, accessible postpartum discharge education, particularly for families experiencing limited continuity of care following hospital discharge. With support from the RNFOO Nursing Innovation Grant, MAPPED has progressed from concept to full implementation, evaluation, and knowledge dissemination.

Over the reporting period, a bilingual (English/French) series of evidence-informed postpartum education videos was created and embedded into routine clinical practice on the Mother-Baby Unit at The Ottawa Hospital (Civic Campus and General Campus). The project leveraged adult-learning principles and iterative Plan-Do-Study-Act (PDSA) cycles to refine both content and delivery. Evaluation data demonstrate improved patient access to standardized education and early signals of impact on post-discharge advice calls and patient experience related to discharge teaching.

MAPPED findings have been disseminated locally and nationally, including presentations at the Canadian Association of Perinatal and Women's Health Nurses (CAPWHN) Conference and The Ottawa Hospital Patient Safety Conference, with explicit acknowledgement of RNFOO funding.

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2. Project Objectives

1. To develop standardized, evidence-informed postpartum discharge education using multimedia learning strategies.
2. To improve patient access to consistent discharge education during the limited postpartum inpatient stay.
3. To reduce uncertainty and safety-related post-discharge advice calls to the Mother-Baby Unit.
4. To evaluate the impact of multimedia education on patient experience and system outcomes.
5. To support knowledge dissemination and scalability across perinatal care settings.

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3. Implementation Progress

3.1 Development of Educational Materials

With RNFOO funding, a complete bilingual postpartum education video series was produced, consisting of:

- **6 English videos**
- **6 French videos**

Video topics were informed by literature, frontline nursing input, and common post-discharge concerns. Content was developed collaboratively with interdisciplinary stakeholders, including nursing education, physicians, midwives, subject-matter experts, patient advisors, and communications teams.

3.2 Clinical Integration

Implementation occurred on the Mother-Baby Unit using a staged PDSA approach:

- QR code stickers placed inside patient education booklets
- QR code magnets added to in-room whiteboards and shared clinical spaces
- Multiple visual access points to reinforce education throughout admission

Based on early engagement data, the order of videos within the playlist was modified to better align with patient learning needs and the discharge workflow.

3.3 Expansion and Spread

Following successful implementation at the Civic Campus, MAPPED has since been implemented at **both the Civic and General Campus Mother-Baby Units** at The Ottawa Hospital, using the same QR-code-based delivery model. This expansion reflects the feasibility, acceptability, and sustainability of the intervention across multiple clinical sites.

In addition to internal spread, the MAPPED video series has generated interest beyond The Ottawa Hospital. **Other hospitals across Ontario and Canada have reached out to inquire about the videos**, their implementation model, and potential adaptation for use in their own postpartum units. These inquiries highlight the scalability of the intervention and the broader relevance of standardized, multimedia-based discharge education.

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4. Evaluation and Outcomes

Evaluation activities focused on both patient-experience and system-level indicators.

4.1 Patient Experience

Canadian Patient Experience Survey (CPES) data were analyzed, with emphasis on questions related to:

- Clarity and usefulness of discharge education
- Patient confidence following discharge

Summary of Findings:
Canadian Patient Experience Survey (CPES) Top Box (9–10/10) scores demonstrated an overall upward trend across all measured discharge-education questions during the implementation period.

- Q43 (Information about physical recovery): **+4%**
- Q44 (Information about emotional changes): **+33%**
- Q47 (Information about caring for baby): **+11%**
- Q53 (Information about caring for self): **+2%**
- Q56 (Symptoms to watch for in baby): **+17%**
- Q58 (Information about follow-up appointments and tests): **+16%**

Each successive Plan-Do-Study-Act (PDSA) cycle was associated with higher patient experience scores. Although minor fluctuations were observed between cycles, the overall trajectory reflected sustained improvement in perceived adequacy and clarity of discharge education.

4.2 Post-Discharge Advice Calls

Unit-level data during implementation periods were reviewed to assess trends in postpartum advice calls related to education and safety concerns.

Summary of Findings:
During the first week of MAPPED implementation, **11 education-related postpartum advice calls** were recorded. By the final week of data collection, advice calls had decreased to **zero**. While formal statistical testing was not performed, this downward trend suggests that standardized, on-demand multimedia discharge education may reduce the need for post-discharge clarification and support safer transitions from hospital to home.

4.3 Learning from PDSA Cycles

Ongoing evaluation informed refinements to video sequencing, QR-code placement, and staff education strategies, supporting sustained integration into practice.

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5. Knowledge Dissemination

5.1 Conference Presentations

- **Canadian Association of Perinatal and Women's Health Nurses (CAPWHN) Conference**
  MAPPED was presented at a national conference, highlighting implementation strategy, evaluation data, and implications for postpartum patient education. RNFOO Nursing Innovation Grant support was formally acknowledged in the presentation.

- **The Ottawa Hospital Patient Safety Conference**
  MAPPED was presented as a patient-safety-focused quality improvement initiative, with explicit acknowledgement of RNFOO funding.

5.2 Organizational Spread

The project has generated interest across clinical and educational teams within The Ottawa Hospital and externally, with discussions underway regarding broader adoption and sustainability.

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6. Recognition and Awards

The Ottawa Hospital Nursing Quality Improvement Award – Awarded for the MAPPED project, recognizing innovation and impact in patient education and safety.

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7. Sustainability and Future Directions

MAPPED has been embedded into routine discharge workflows on the Mother-Baby Units at both the Civic and General Campuses and requires minimal ongoing resources to maintain. The QR-code-based model supports sustainability by allowing patients to access education on demand while reinforcing consistent nurse-led teaching.

Future directions include:

- Continued monitoring of patient experience and post-discharge advice-call trends
- Evaluation of impact on additional clinical outcomes related to patient safety and readmissions
- Expansion of language availability to strengthen equitable access for diverse populations
- Exploration of broader implementation and partnership opportunities with external hospitals

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8. Acknowledgement of Funding

This project was made possible through funding from the **Registered Nurses' Foundation of Ontario (RNFOO) Nursing Innovation Grant**. The support provided by RNFOO was instrumental in the development, implementation, evaluation, and dissemination of this nursing-led innovation.

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