Building Confidence and Excellence: A Novel Fellowship for Nurse Practitioners in Cardiovascular Surgery

For a newly graduated nurse practitioner (NP), few first jobs are more daunting than stepping onto a post-operative cardiovascular surgery ward. The pace is relentless; the decisions are high-stakes; and the role is unusually autonomous. At St. Michael's Hospital in Toronto, the cardiovascular surgery team has built a pragmatic answer to that reality: a year-long, post-hire fellowship-style onboarding that blends protected academic learning, interprofessional rotations, and mentored practice on the ward.

The result is a structured bridge between school and full autonomy—one that eases the sharpest edges of the learning curve for new NPs while shoring up quality, safety, and patient flow for the service.

The problem the fellowship set out to solve

Like many departments, cardiovascular surgery emerged from the pandemic with a staffing headache: retirements clustered, senior expertise walked out the door, and turnover made conventional two-week orientations feel naïve. "We were seeing difficulty retaining NPs who felt overwhelmed by the scope of responsibility in cardiac surgery," recalls Desa Hobbs, former senior clinical program director and one of the program's architects. "We needed a structured way to ensure success, retention, and patient safety."

Marnee Wilson, the service's professional practice lead and a long-time NP in cardiac surgery, describes the gap succinctly: "We built our competencies gradually over decades. Expecting new graduates to suddenly manage everything is overwhelming. The fellowship bridges that."

Emma McIlhone, Desa Hobbs, Marnee Wilson

Administrative buy-in came when the department weighed the cost of turnover against a targeted investment in training. Tuition for a certificate, protected study time, and a supernumerary orientation year proved cheaper than cycling through under-prepared hires—and safer for patients.

> **What does a typical day look like?**
>
> "We see eight to ten patients daily, making care plans, preventing complications, and coordinating discharge. Surgeons step in for surgical needs, but otherwise, this is an NP-led service."
>
> — *Marnee Wilson, NP, Professional Practice Lead*

What the fellowship looks like

Hired into a full NP role from day one, fellows complete a year of enhanced onboarding rather than a separate pre-registration program. The design has three braided strands:

1

Protected academics.

Fellows complete the University of Toronto's *Acute Care of the Hospitalized Adult* four-course certificate with dedicated study time each week.

2

Interprofessional "mini-placements."

Rotations span hematology, radiology, general cardiology, the cardiovascular ICU (CVICU), stroke, and endocrinology. Most last one week; none exceed two. These placements mirror the consult patterns of daily practice and—crucially—build relationships. "Now when I page a service, I often know the clinician on the other end," says Emma McIlhone the program's inaugural fellow and now a full-time NP on the service. "That comfort improves collaboration and speeds care."

3

Mentored ward practice.

Between courses and rotations, fellows work as NPs on the ward, paired with senior colleagues who model decision-making, documentation, communication with families, and coordination with bedside nurses.

The structure is flexible by design: sequence and emphasis adapt to the individual's background (for Emma, oncology) and the service's evolving needs.

What "autonomy" means here

On this ward, autonomy isn't hyperbole. NPs are the day-to-day face of care for post-operative cardiac surgery patients, developing plans and writing orders, consulting surgeons when a specifically surgical issue arises, and looping in other disciplines as needed. A typical day includes 8–10 patients per NP, with a constant focus on preventing and managing complications—atrial fibrillation, pneumonia, catheter-associated infections, delirium—and unblocking discharge barriers.

The pace is brisk. Patients commonly arrive from the ICU within 24 hours of surgery and, if uncomplicated, discharge in four to five days. That speed requires vigilance, rapid intervention when problems pop up, and relentless communication—answering family questions, aligning with bedside nurses, and coordinating diagnostics, rehab, and home supports.

It's a lot to shoulder for a clinician fresh out of graduate school. Hence, the fellowship.

Early wins: confidence, continuity, and collaboration

While formal outcome data are still being compiled, the program has already delivered three pragmatic benefits:

- **Confidence at the bedside.** The combination of coursework and mentored practice reduces hesitation in high-stakes decisions and tightens situational awareness.
- **Continuity during transition.** As senior NPs step back or retire, the service retains institutional memory through deliberate hand-offs, rather than leaving new hires to reinvent workflows.
- **Faster interprofessional access.** Rotations seed the cross-service relationships that make consults faster and more collegial—especially valuable for time-sensitive issues like glycemic control or stroke risk.

"Our surgeons and administrators recognized the urgency," says Desa. "By supporting new NPs properly, we're stabilizing the service and improving the patient experience."

What made this fellowship stand out for you?

"The dedicated support. Most of my colleagues elsewhere got two weeks of orientation. I had a full year of structured learning and mentorship. That gave me the confidence to handle such an autonomous role."

— *Emma McIlhone, NP*

Emma McIlhone NP

What it takes to replicate

Departments considering a similar approach can start small and scale:

1. **Name the gap.** Map the highest-risk decisions new NPs must make in their first 90 days. Build rotations and teaching around those.
2. **Protect the time.** Carve out weekly hours for coursework and reflection. Without this, "learning" gets crowded out by the pager.
3. **Pair every fellow.** Assign a senior NP as a constant mentor on the ward for the first six months.
4. **Use the consult map.** Choose rotations based on your service's most frequent consults; introduce the fellow to named contacts during each placement.
5. **Track three outcome buckets.** (a) Fellow confidence/readiness; (b) time-to-independent practice; (c) patient-flow metrics (length of stay, preventable readmissions/complications). Even simple run charts will help you tune the program.

Addendum: What the evidence says about retention in high-acuity hospital settings

- **Turnover is costly and still high.** In the United States, the *2025 NSI National Health Care Retention & RN Staffing Report* estimates average RN turnover at **16.4%**, with an average **$61,110** cost per bedside RN who leaves—roughly **$3.9–$5.7 million** lost per acute-care hospital annually. High-acuity areas like stepdown and emergency services experience the highest churn. (nsinursingsolutions.com)
- **Residency/fellowship models improve retention.** A 2024 systematic review concluded that **nurse residency programs** are a "promising educational intervention" that improves retention and mitigates shortage pressures; earlier multi-site evaluations report similar gains for new graduates. (PubMed Central, AORN Journal, ScienceDirect)
- **High-acuity units feel the pressure most.** In one CTICU case report, 12-month RN turnover hit **41%** during 2021–2022 before targeted retention strategies were implemented—highlighting the vulnerability of cardiothoracic/cardiovascular critical care. (AACN Journals)
- **Canada shows parallel strain—making structured onboarding valuable.** CIHI's 2024 health-workforce review flags recruitment and retention as national priorities; the Registered Nurses' Association of Ontario reports that **4 in 10 nurses** intended to leave the profession, their job, or retire within a year (2024), driven largely by staffing and workload. (CIHI, RNAO.ca)
- **NP transition programs are specifically recommended.** The U.S. National Council of State Boards of Nursing emphasizes **transition-to-practice programs** to reduce early attrition, and literature on NP residencies/fellowships (including pediatrics and primary care) links structured post-graduate support to improved role transition and retention—findings with clear relevance to high-acuity hospital practice. (ncsbn.org, ecommons.roseman.edu, NP Journal)

Where U.S. data are cited above (e.g., NSI, AACN), the workforce dynamics closely mirror Canadian experience on direction and magnitude; Canadian data points are included where available (CIHI, RNAO). Together, these sources support the logic behind a structured, fellowship-style onboarding model for NPs in high-acuity services like cardiovascular surgery.

Why this matters—beyond one hospital

Cardiac surgery isn't the only high-acuity setting struggling with onboarding and retention. Turnover is expensive, destabilizing, and hazardous to continuity. Structured transition-to-practice models—residencies, fellowships, enhanced orientations—consistently show gains in retention and job satisfaction. The St. Michael's fellowship demonstrates that you don't need a brand-new program line to do it: with protected learning time, targeted rotations, and mentorship, a department can build a durable bridge from graduate school to confident, independent NP practice.

Program at a Glance

Cardiovascular Surgery NP Fellowship – St. Michael's Hospital, Toronto

- **Program type:** Fellowship-style onboarding for newly hired NPs (already licensed, post-graduation)
- **Duration:** ~12 months
- **Structure:**
  - *Protected academics* – Four-course *Acute Care of the Hospitalized Adult* certificate (U of T)
  - *Mini-placement*s – 1–2 weeks each with hematology, radiology, general cardiology, CVICU, stroke, endocrinology
  - *Mentored ward practice* – Direct patient care under senior NP supervision
- **Caseload:** 8–10 post-operative cardiac surgery patients daily
- **Objectives:**
  - Build confidence in independent NP practice
  - Strengthen interprofessional collaboration
  - Improve retention and reduce turnover
  - Enhance patient safety and flow

Why did the department invest in this model?

"Turnover was costing us more than investing in training. Retaining one NP offsets the program's entire cost. More importantly, it improves safety and continuity of care for our patients."

— *Desa Hobbs, Former Senior Clinical Program Director, Heart Lung and Vascular*