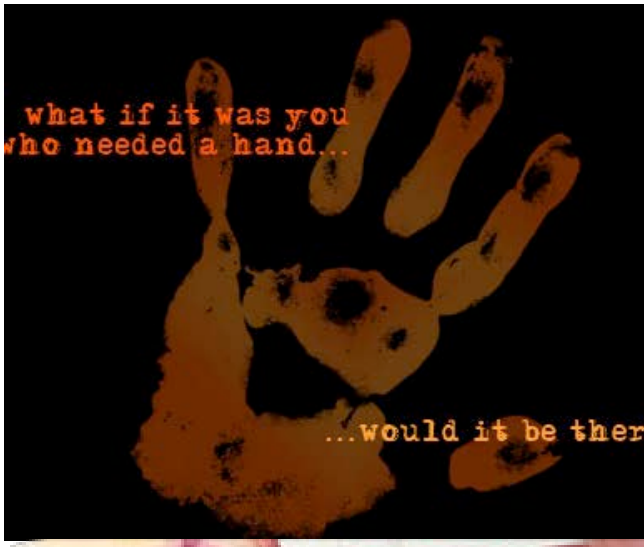
SOLUTIONS FOR PROJECT HANDS

Streamlining Charting Documents to Support Surgical Mission Trips

By Gillian Albert, Corrie Dangerfield and Ben Nehra

Getting to Know Project HANDS

- Project HANDS (Helping and Nurturing Developing Societies) is a Canadian non-profit organization
- The organization provides collaborative health care support to rural Guatemalan communities by supplying Canadian health care providers and resources for surgical missions trips
- Working in small local clinics with the partnership of Guatemalan health care providers, Project HANDS performs general, gynecological, and reconstructive surgeries



Streamlining Charting: Major Goals

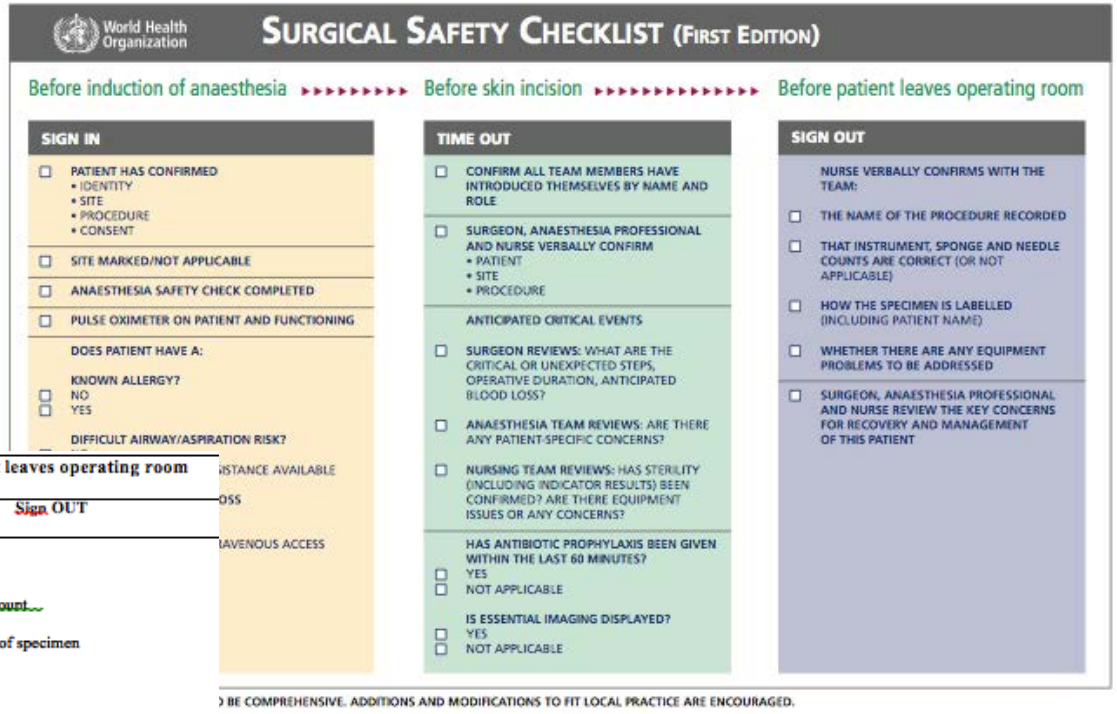
- Effective management of the diversity of nursing and medical practices between Canada and Guatemala
  - Creating charting documents that reduce confusion and can be easily interpreted by health care providers from both countries
- Design of documents that accommodate bilingual instructions
- Reformatting of current documents to enhance clinical precision
  - Troubleshooting of potential errors or miscommunication in current charting documents

The Background Research

- CRNBC guidelines regarding nursing practice as a component of international development aid indicate that standards of practice must comply with the applicable standards of a nurse's home practice environment
  - As such, documentation practices must be thorough and precise to match those of a typical Canadian clinical setting (such as a hospital)
- Research by De Marinis et al. (2010) demonstrated that on average only 40% of nursing activities are documented in nursing records
- Research by Baker et al (1999) suggested that the use of coordinated clinical pathways may prevent deviations from established standards of care
- Comprehensiveness and accuracy of what occurs in practice need to be evident in the documentation (my note: this is even more complicated when trying to keep documentation simple and uncluttered for purposes of language barriers and difference in nursing practice when in international situations)
- Improving awareness of the importance of accurate and complete documentation by those who use it may have added benefit to reducing patient safety errors and communicative errors.
- Document deficiency has the potential to increase communication breakdown and compromise patient safety

Reference Point: Charting by Meds Sans Frontiers (Doctors Without Borders)

The Montreal Branch of MSF provided us with exemplars of their surgical guidelines for a picture of typical documentation standards among non-profit organizations.



World Health Organization

SURGICAL SAFETY CHECKLIST (FIRST EDITION)

Before induction of anaesthesia ▸▸▸▸▸▸▸▸▸ Before skin incision ▸▸▸▸▸▸▸▸▸▸▸▸▸ Before patient leaves operating room

SIGN IN

- ☐ PATIENT HAS CONFIRMED
  - IDENTITY
  - SITE
  - PROCEDURE
  - CONSENT
- ☐ SITE MARKED/NOT APPLICABLE
- ☐ ANAESTHESIA SAFETY CHECK COMPLETED
- ☐ PULSE OXIMETER ON PATIENT AND FUNCTIONING
- DOES PATIENT HAVE A:
- KNOWN ALLERGY?
  - ☐ NO
  - ☐ YES
- DIFFICULT AIRWAY/ASPIRATION RISK?
- ISTANCE AVAILABLE
- OSS
- AVENOUS ACCESS

TIME OUT

- ☐ CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE
- ☐ SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM
  - PATIENT
  - SITE
  - PROCEDURE
- ANTICIPATED CRITICAL EVENTS
- ☐ SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNEXPECTED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?
- ☐ ANAESTHESIA TEAM REVIEWS: ARE THERE ANY PATIENT-SPECIFIC CONCERNS?
- ☐ NURSING TEAM REVIEWS: HAS STERILITY (INCLUDING INDICATOR RESULTS) BEEN CONFIRMED? ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS?
- HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?
  - ☐ YES
  - ☐ NOT APPLICABLE
- IS ESSENTIAL IMAGING DISPLAYED?
  - ☐ YES
  - ☐ NOT APPLICABLE

SIGN OUT

NURSE VERBALLY CONFIRMS WITH THE TEAM:

- ☐ THE NAME OF THE PROCEDURE RECORDED
- ☐ THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT (OR NOT APPLICABLE)
- ☐ HOW THE SPECIMEN IS LABELLED (INCLUDING PATIENT NAME)
- ☐ WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED
- ☐ SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT

) BE COMPREHENSIVE. ADDITIONS AND MODIFICATIONS TO FIT LOCAL PRACTICE ARE ENCOURAGED.

Before induction of anaesthesia	Before Skin incision	Before patient leaves operating room
Sign IN	Time OUT Cross-check.: OTnurse + surgeon + anesth	Sign OUT
Patient has confirmed.:	Identity	Surgery report
- Identity	Site	Correct Sponge count..
- Site	Operation	Correct labelling of specimen
- Procedure	Consent	Dysfunction..
- Consent		
Confirmation by OT nurse.:	Sharing of informations.: are there any patient specific concerns	Prescription for post operative care.:
- Necessary material - Sterile material - Complete patient file	- Surgery - Anaesthesia - OT nurse	- Surgery - Anaesthesia
Confirmation by anaesthesia.:	Antibiotic prophylaxis :	
- Pre-operatory visit	X-ray displayed:	
- Check-list..		

Above: Surgical Safety Checklist
Left: Perioperative List

Current Charting at Project HANDS

PROJECT H.A.N.D.S. HELPING AND NURTURING DEVELOPING SOCIETIES	DISCHARGE CHECKLIST DATE:	NAME: DOB: CEDULA:
V.S. (60 Minutes)	☐	
Instructions	☐	
Meds	☐	
Follow Up Card	☐	
Travel	☐	
Voided	☐	

Examples of charting documents currently used by health care providers on Project HANDS missions.

PROJECT H.A.N.D.S. HELPING AND NURTURING DEVELOPING SOCIETIES

Medication Administration record

Control de Medicamentos

Date:
Fecha:

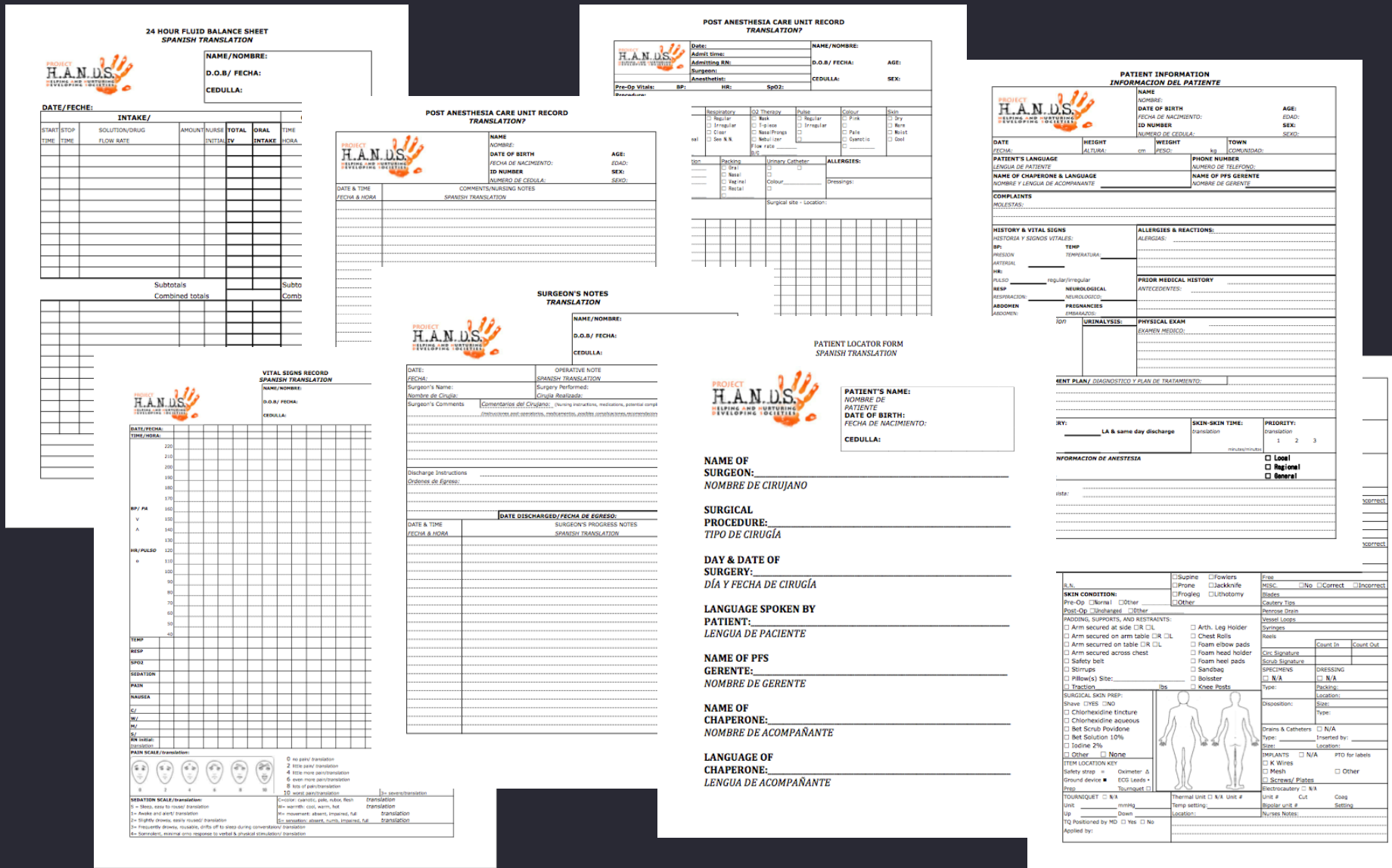
Patient ID

Medication name, dose, frequency	time	signature	time	signature	time	signature	time	signature	time	signature	time	signature
Nombre del Medicamento, dosis, frecuencia	***horario***	***firma***	***horario***	***firma***	***horario***	***firma***	***horario***	***firma***	***horario***	***firma***	***horario***	***firma***

Above: Discharge Checklist
Right: Medication Administration Record

Revised Charting for Project HANDS

(a sample)



24 HOUR FLUID BALANCE SHEET
SPANISH TRANSLATION

NAME/NOMBRE:
D.O.B./ FECHA:
CEDULLA:

DATE/FECHE:

INTAKE/

START TIME	STOP TIME	SOLUTION/DRUG FLOW RATE	AMOUNT	NURSE INITIAL	TOTAL IV	ORAL INTAKE	TIME HORA

Subtotals
Combined totals

POST ANESTHESIA CARE UNIT RECORD
TRANSLATION?

NAME
NOMBRE:
DATE OF BIRTH — AGE:
FECHA DE NACIMIENTO: — EDAD:
ID NUMBER — SEX:
NUMERO DE CEDULA: — SEXO:

DATE & TIME / FECHA & HORA — COMMENTS/NURSING NOTES / SPANISH TRANSLATION

POST ANESTHESIA CARE UNIT RECORD
TRANSLATION?

Date:
Admit time:
Admitting RN:
Surgeon:
Anesthetist:
Pre-Op Vitals: BP: HR: SpO2:

NAME/NOMBRE:
D.O.B./ FECHA: AGE:
CEDULLA: SEX:

Respiratory: Regular, Irregular, Clear, Sen N.N.
O2 Therapy: Mask, T-piece, Nasal/Prongs, Nebulizer
Pulse: Regular, Irregular
Colour: Pink, Pale, Cyanotic
Skin: Dry, Warm, Moist, Cool
Flow rate
Packing: Oral, Nasal, Vaginal, Rectal
Urinary Catheter:
ALLERGIES:
Dressings:
Surgical site - Location:

SURGEON'S NOTES
TRANSLATION

NAME/NOMBRE:
D.O.B./ FECHA:
CEDULLA:

DATE: / FECHA:
OPERATIVE NOTE / SPANISH TRANSLATION
Surgeon's Name: / Nombre de Cirujia:
Surgery Performed: / Cirujia Realizada:
Surgeon's Comments: Comentarios del Cirujano: (Nursing instructions, medications, potential compli
Discharge Instructions / Ordenes de Egreso:
DATE DISCHARGED/*FECHA DE EGRESO:*
DATE & TIME / FECHA & HORA — SURGEON'S PROGRESS NOTES / SPANISH TRANSLATION

VITAL SIGNS RECORD
SPANISH TRANSLATION

NAME/NOMBRE:
D.O.B./ FECHA:
CEDULLA:

DATE/FECHA:
TIME/HORA:
BP/ PA
HR/PULSO
TEMP
RESP
SPO2
SEDATION
PAIN
NAUSEA
C/
W/
M/
S/
RN initial:
translation
PAIN SCALE/translation:
0 no pain/ translation
2 little pain/ translation
4 little more pain/translation
6 even more pain/translation
8 lots of pain/translation
10 worst pain/translation
SEDATION SCALE/translation:
5 = Sleep, easy to rouse/ translation
1= Awake and alert/ translation
2= Slightly drowsy, easily roused/ translation
3= Frequently drowsy, rousable, drifts off to sleep during conversation/ translation
4= Somnolent, minimal omo response to verbal & physical stimulation/ translation
C=color: cyanotic, pale, rubor, flesh — translation
W= warmth: cool, warm, hot — translation
M= movement: absent, impaired, full — translation
S= sensation: absent, numb, impaired, full — translation
3= severe/translation

PATIENT LOCATOR FORM
SPANISH TRANSLATION

PATIENT'S NAME:
NOMBRE DE PATIENTE
DATE OF BIRTH:
FECHA DE NACIMIENTO:
CEDULLA:

NAME OF SURGEON:
NOMBRE DE CIRUJANO

SURGICAL PROCEDURE:
TIPO DE CIRUGÍA

DAY & DATE OF SURGERY:
DÍA Y FECHA DE CIRUGÍA

LANGUAGE SPOKEN BY PATIENT:
LENGUA DE PACIENTE

NAME OF PFS GERENTE:
NOMBRE DE GERENTE

NAME OF CHAPERONE:
NOMBRE DE ACOMPAÑANTE

LANGUAGE OF CHAPERONE:
LENGUA DE ACOMPAÑANTE

PATIENT INFORMATION
INFORMACION DEL PATIENTE

NAME
NOMBRE:
DATE OF BIRTH — AGE:
FECHA DE NACIMIENTO: — *EDAD:*
ID NUMBER — SEX:
NUMERO DE CEDULA: — *SEXO:*
DATE / *FECHA:* — HEIGHT / *ALTURA:* cm — WEIGHT / *PESO:* kg — TOWN / *COMUNIDAD:*
PATIENT'S LANGUAGE / *LENGUA DE PATIENTE* — PHONE NUMBER / *NUMERO DE TELEFONO:*
NAME OF CHAPERONE & LANGUAGE / *NOMBRE Y LENGUA DE ACOMPANANTE* — NAME OF PFS GERENTE / *NOMBRE DE GERENTE*
COMPLAINTS / *MOLESTAS:*
HISTORY & VITAL SIGNS / *HISTORIA Y SIGNOS VITALES:*
BP: / PRESION ARTERIAL
TEMP / TEMPERATURA:
HR: / PULSO ____ regular/irregular
RESP / RESPIRACION:
ABDOMEN / ABDOMEN:
NEUROLOGICAL / NEUROLOGICO:
PREGNANCIES / EMBARAZOS:
ALLERGIES & REACTIONS: / ALERGIAS:
PRIOR MEDICAL HISTORY / ANTECEDENTES:
URINALYSIS:
PHYSICAL EXAM / EXAMEN MEDICO:
PLAN/ DIAGNOSTICO Y PLAN DE TRATAMIENTO:
LA & same day discharge
SKIN-SKIN TIME: / translation
PRIORITY: / translation 1 2 3
minutes/minutos
NFORMACION DE ANESTESIA
Local
Regional
General

R.N.
SKIN CONDITION:
Pre-Op Normal Other
Post-Op Unchanged Other
PADDING, SUPPORTS, AND RESTRAINTS:
Arm secured at side R L
Arm secured on arm table R L
Arm secured on table R L
Arm secured across chest
Safety belt
Stirrups
Pillow(s) Site:
Traction lbs
Supine Fowlers
Prone Jackknife
Froglegs Lithotomy
Other
Arth. Leg Holder
Chest Rolls
Foam elbow pads
Foam head holder
Foam heel pads
Sandbag
Bolster
Knee Posts
SURGICAL SKIN PREP:
Shave YES NO
Chlorhexidine tincture
Chlorhexidine aqueous
Bet Scrub Povidone
Bet Solution 10%
Iodine 2%
Other None
ITEM LOCATION KEY
Safety strap Oximeter
Ground device ECG Leads
Prep Tourniquet
TOURNIQUET N/A
Unit mmHg
Up Down
TQ Positioned by MD Yes No
Applied by:
Thermal Unit N/A Unit #
Temp setting:
Location:
Free
MISC. No Correct Incorrect
Blades
Cautery Tips
Penrose Drain
Vessel Loops
Syringes
Reels
Count In Count Out
Circ Signature
Scrub Signature
SPECIMENS N/A
Type:
DRESSING N/A
Packing:
Location:
Disposition:
Size:
Type:
Drains & Catheters N/A
Type:
Inserted by:
Size:
Location:
IMPLANTS N/A
K Wires
Mesh
Screws/ Plates
PTO for labels
Other
Electrocautery N/A
Unit # Cut Coag
Bipolar unit # Setting
Nurses Notes:

Areas for Further Exploration

- In the context of remote surgical work in rural areas, is electronic charting a feasible option to increase consistency and accessibility?
  - Electronic record keeping and charting has been demonstrated to reduce errors (Cowen et al., 2007)
- What is the most efficient way to document transfer of accountability given this unique clinical setting?
  - The College of Nurses of Ontario recommends that health care providers be trained in a standardized form of communicating the parameters around transfer of accountability to minimize errors and missed information (2009)
- Should document orientation and expectations be discussed with mission volunteers in a training session prior to providing care?

References

Baker, B., Fillion, B., Davitt, K., & Finnestad, L. (1999). Ambulatory surgical clinical pathway. *Journal of Perianesthesia Nursing*, *14*(1), 2-11.

Braaf, S., Manias, E., & Riley, R. (2011). The role of documents and documentation in communication failure across the perioperative pathway. A literature review. *International Journal of Nursing Studies*, *48*(8), 1024-1038.

College of Nurses of Ontario. (2009, April). Transferring Clients Safely: Know Your Client and Know Your Team. Retrieved from http://www.cno.org/Global/docs/policy/TransferringClientsSafelyApril2009.pdf

College of Registered Nurses of British Columbia. (n.d.). Documentation. Retrieved February 11, 2014, from https://crnbc.ca/Standards/PracticeStandards/Pages/documentation.aspx

Healy, K., Hegarty, J., Keating, G., Landers, F., Leopold, S., & O'Gorman, F. (2008). The change experience: how we updated our perioperative nursing documentation. *Journal of perioperative practice*, *18*(4), 163.

Pirie, S. (2011). Documentation and record keeping; Open Learning Zone; Report. *Journal of Perioperative Practice*.

Rateau, F., Levraut, L., Colombel, A. L., Bernard, J. L., Quaranta, J. F., Cabarrot, P., & Raucoules-Aimé, M. (2011, June). Check-list" Patient Safety" in the operating room: one year experience of 40,000 surgical procedures at the university hospital of Nice]. In *Annales françaises d'anesthèsie et de rèanimation* (Vol. 30, No. 6, p. 479)

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