Integration of care: ‘Patients First’

Dr. Arno Smit – WROSC

Physician seminar / open house

June 6, 2013

Integration / streamlining

Hospital based services →

- historically: effective model
- adequate funding
- timely programming adjustments
- stakeholders involvement

Integration / streamlining

Over last decade → Peace Arch Hospital

- Population growth +++
- Hospital capacity basically unchanged
- Critical clinical areas identified
- Loss of clinical ability (e.g. pediatric care)

Elgin Park School, June 5, ‘13

Integration / streamlining

Orthopaedics at PAH

- Priority review → directed care
- Acute vs. non-acute
- THR / TKR vs. other ortho
- Other FHA surgical resources

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Integration / streamlining

Acute ortho care at PAH

- Ambulatory vs non-ambulatory
- PAH level 2 trauma center
- Hip / long bone ## etc→ timely care
- Ankle/wrist ## etc→ variable
- Pediatric ortho→ referred out

Integration / streamlining

Non-acute ortho care

- PAH to be primarily used for THR / TKR
- UBC → THR / TKR
- Delta Hospital
- Other: Jim Pattison Outpatient Centre
- PAH non-arthroplasty ortho → OR expansion delayed

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Integration / streamlining

Access to PAH as of spring 2013

- THR / TKR → < 6 months
- Shoulder / knee arthroscopy etc→

  > 2 years (consent signed 2010)
- Foot surgery / hardware removal etc → essentially no or minimal access

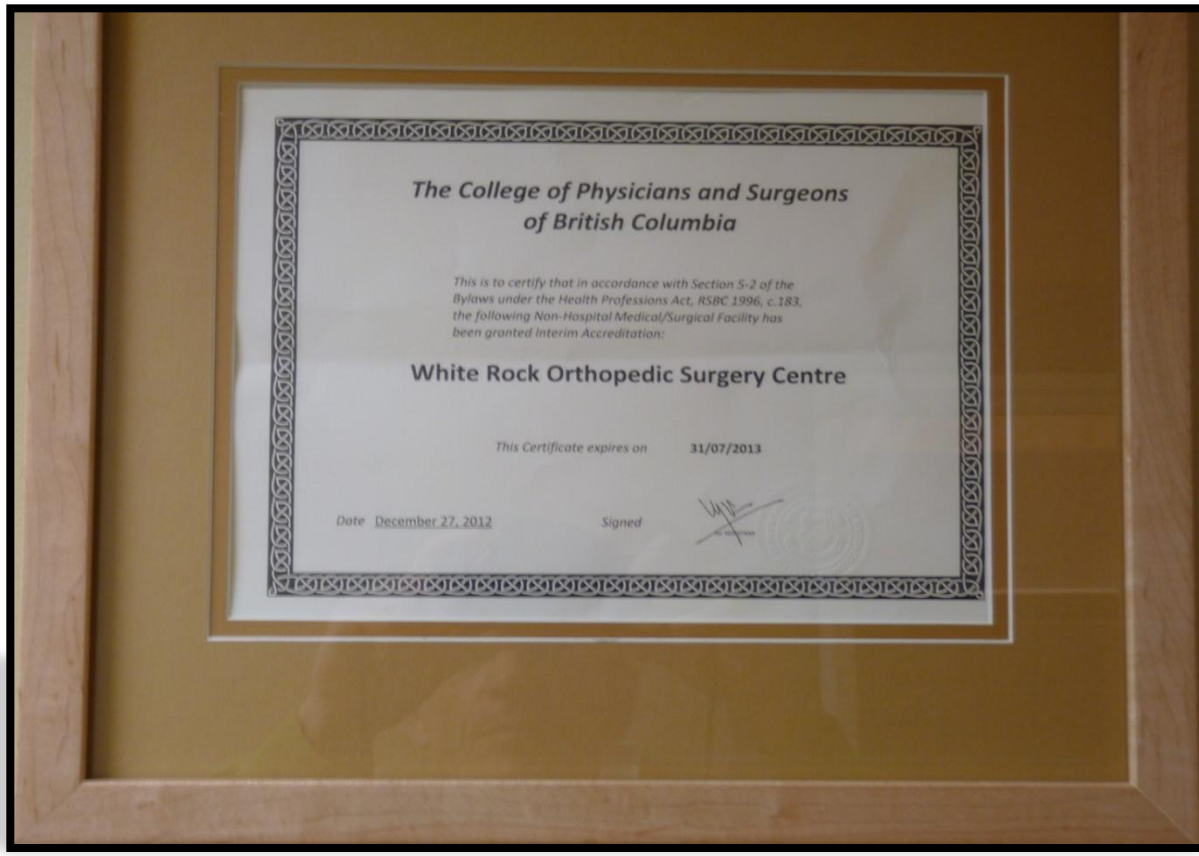
Integration / streamlining

- It always gets worse before it gets better
- MD / RN → guardians of care systems
  → drivers of change
- Building of capacity → ‘just doing it’

White Rock Orthopaedic Surgery Centre

- ✓ Non-hospital surgical facility
- ✓ November 2007
- ✓ Fully accredited
- ✓ Class-1 facility
- ✓ Over 700 cases (spring 2013)

White Rock Orthopaedic Surgery Centre -Fully accredited



White Rock Orthopaedic Surgery Centre

- ✓ General orthopaedic perspective
- ✓ Timely assessment
- ✓ Completion of diagnostic process
- ✓ Refer/treat as appropriate

White Rock Orthopaedic Surgery Centre

White Rock Orthopaedic Surgery Centre

Safety first

- crash cart, defibrillator
- MH cart, lipid rescue
- difficult airway equipment
- emergency exit / transfer to ambulance
- patient eligibility → 2-step
- ACLS
- etc….

White Rock Orthopaedic Surgery Centre

Climate control

- Laminar airflow
- Positive pressure, 20 air changes/h
- HEPA filtered
- Two air ‘curtains’
- OR lights → no boom/arm
- → avoids eddy formation
- Minimal intra-op disruption (doors)

White Rock Orthopaedic Surgery Centre

Sterile processing

- Robust
- Decontamination → separate
- Certified staff
- Ongoing external review
- Minimal ‘same-day’ turn-over needed
- Equipment in OR → traffic minimized

White Rock Orthopaedic Surgery Centre

Patient experience

- Familiar staff (reception, surgeon, anaesthesiologist, nursing)
- Private (carrousel concept)
- No pain, no sounds, no distress
- Tight follow-up
- Questionnaire

White Rock Orthopaedic Surgery Centre

- ✓ In-house x-ray and ultra-sound
- ✓ Full anaesthesia capability
- ✓ Emphasis on pain management
- ✓ Continuity of care through entire process

White Rock Orthopaedic Surgery Centre

In-house ‘point-of-care’ X-ray

- Recent addition (2013)
- Streamlining of acute care (?)
- Intra-op x-ray→ no need for C-arm
- Diagnostic exposure minimized

White Rock Orthopaedic Surgery Centre -X-ray

White Rock Orthopaedic Surgery Centre

In-house ‘point-of-care’ ultrasound

- Recent addition (December 2012)
- Enhanced accuracy of injection therapy
- Diagnostic / surveillance
- Intra-op imaging
- Dynamic assessment by treating clinician

White Rock Orthopaedic Surgery Centre -Ultra-sound

White Rock Orthopaedic Surgery Centre

Ultrasound assisted injection

- Overall patient experience improved
- Attention to details
- RN assurance
- Local skin preparation
- Needle placement under direct vision
- MSP funding → unresolved

White Rock Orthopaedic Surgery Centre -Full anesthesia capability

White Rock Orthopaedic Surgery Centre

- Consistent anaesthesia support
- Pre-emptive local anaesthesia
- IV sedation – GA – spinal
- Chronic pain : LES, trigger point injection

White Rock Orthopaedic Surgery Centre

Pre-emptive local anaesthesia

- Refined over the years (RMF)
- Knee / hip → COA 2007
- Consistently low pain scores in PACU→

  ACL, shoulder scope, RC…
- Effective for approx 16 h
- NSAIDs as adjunct

WROSC non-surgical care

- Assessment / diagnosis
- Counselling, physio etc
- Osteoporosis assessment and treatment
- Bracing (OA, ACL, AT tear, etc)
- Casting
- Injection therapy

WROSC non-surgical care

Injection therapy - supportive / bridging

- Corticosteroid
- Visco-supplement
- Platelet rich plasma
- Intra-articular Botox

WROSC non-surgical care

Injection therapy

-approx 30-40 injections /week

Most common

- Acutely painful shoulder
- OA knee/ankle
- Tendinopathy hip

WROSC non-surgical care

Injection therapy

Less common

- OA hip
- Piriformis
- Tennis elbow
- Trigger finger
- deQuervain's
- etc

WROSC surgical care

- **Knee:** arthroscopy, ACL …
- **Shoulder:** arthroscopy, rotator cuff, stabilization, biceps, AC joint …
- **Foot/ankle:** arthroscopy, hallux valgus/rigidus …
- **Hand/wrist:** carpal tunnel, tendon sx …
- **Hardware removal:** plates, IM nails

WROSC surgical care

Knee Arthroscopy

- ✓ Assessment (MRI 90% accurate)
- ✓ Meniscal tear
- ✓ Osteochondral injury
- ✓ Ligament reconstruction (ACL)
- ✓ Removal loose bodies

WROSC surgical care

Knee OA and arthroscopy

- Degenerative changes irreversible
- OA and meniscal tear → more pain
- Optimizing mechanics
- Methodical progression of intervention
- Injection / bracing as required
- Postpone or avoid replacement

WROSC surgical care

Knee OA and arthroscopy

- Long wait → progression
- Inevitable?
- Early intervention?
- Time is precious
- No cure, still high satisfaction rate
- Appropriate management of progressive condition

WROSC surgical care

Knee – ACL reconstruction

- Brace → bridging vs definitive tx
- Must avoid repeat giving way
- Reconstruction often most practical
- Wide age range: mid-teens into 70's
- Allograft: revision / middle age and up

WROSC surgical care

Other knee procedures

- Osteochondral bone graft (OATS)
- Soon (?): living allogeneic chondrocyte transplantation (Health Canada approval 2013)

Of note: replacement surgery can be done in hospital in timely fashion

WROSC surgical care

Shoulder Arthroscopy

- ✓ Assessment: aMRI 85-90% accurate
- ✓ Rotator cuff repair
- ✓ Labral repair (Bankart / SLAP)
- ✓ Debridement damaged /Degenerative tissue
- ✓ Decompression / Acromioplasty
- ✓ Distal clavicle resection
- ✓ Removal loose bodies

WROSC surgical care

Shoulder arthroscopy

- Assessment remains important
- Maturity: knee>>shoulder>hip
- ‘MRI arthrogram of hip and shoulder 85-90% accurate’ → against what?

WROSC surgical care

Shoulder: MRI vs Arthroscopy - gold standard?

- Video clips of antero-superior shoulder anatomy → poor consensus between orthopaedic surgeons

- Clinical implications of finding a disruption→ numerator vs denominator approach

WROSC surgical care

Pathology vs normal variant

- Anatomy did not arise from text book
- Text books arose from anatomy observations
- Concepts are re-evaluated from time to time
  - MRI / Ultrasound etc
  - arthroscopy
  - anatomy labs

WROSC surgical care

Pathology vs normal variant

- Wave of enthusiasm → retreat
- Early knee arthroscopy → medial plica
- Many unnecessary excisions
- Live and learn!

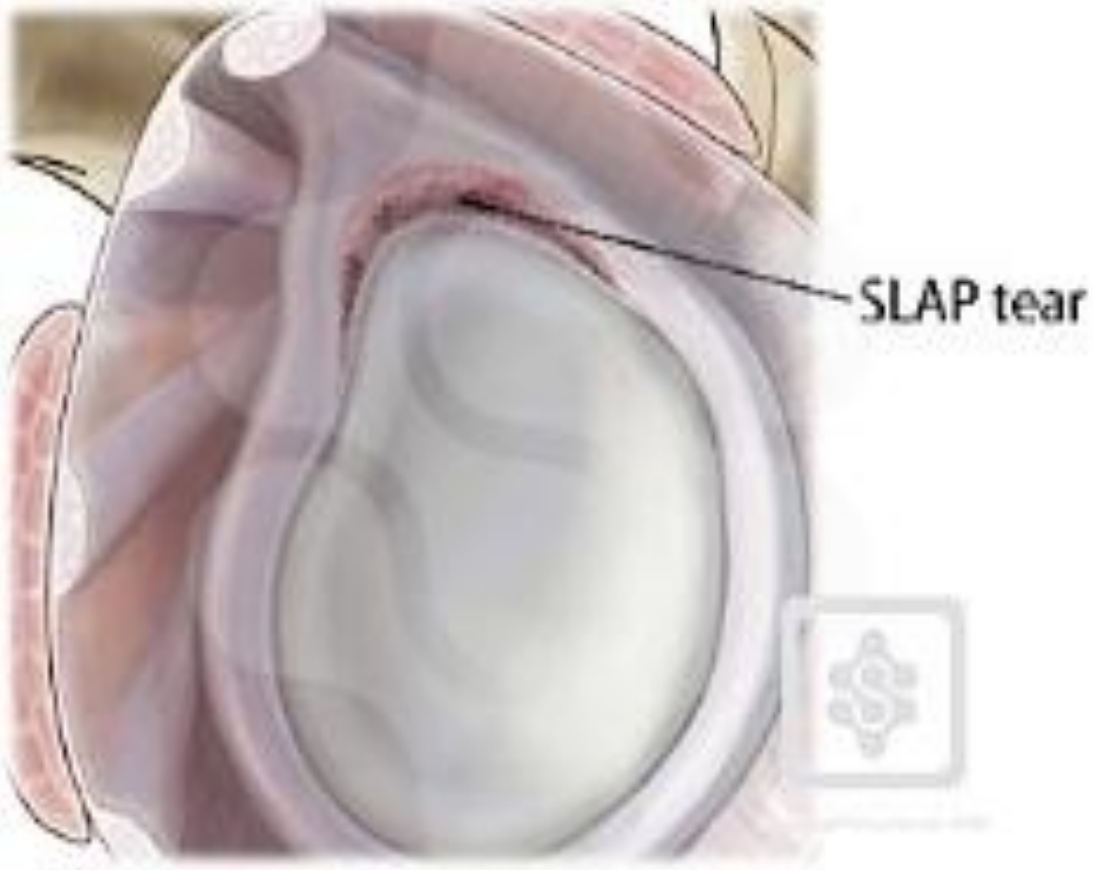
WROSC surgical care

Pathology vs normal variant

Early shoulder arthroscopy

- labral non-adherence
- mainly anterosuperiorly
- over-diagnosed as pathologic
- wide variety of normal variants

WROSC surgical care: shoulder arthroscopy-**SLAP tear**



WROSC surgical care: shoulder arthroscopy-SLAP tear

WROSC surgical care: shoulder arthroscopy-**SLAP tear**

- Sudden force through shoulder can disrupt biceps anchor
- Pain may fluctuate in severity
- Role of biceps tendon as pain generator remains under debate
- Opinion leaders: Dr. S. Snyder
  Dr. S. Burkhart

*WROSC surgical care: shoulder arthroscopy-***SLAP tear**

- Treatment:

  Once conservative treatment failed → debridement, repair or tenotomy and tenodesis

WROSC surgical care: shoulder arthroscopy – rotator cuff

Rotator cuff repair

- Conservative tx: approx 70% success
- Balanced strengthening
- Injection(s) to facilitate rehab

- Acute massive tears → best early repair
- Chronic tears → approx 90% success after repair

WROSC surgical care

- ***General:***
  - ✓ Removal of Hardware (plate/IM nail etc)
  - ✓ Carpal tunnel release
  - ✓ Ulnar nerve transposition
  - ✓ Foot and ankle surgery
  - ✓ Hand and wrist surgery
  - ✓ Selected bone grafting

WROSC surgical care

- ***Hip Arthroscopy*** *- being developed*
  - ✓ Intra-operative X-ray capability
  - ✓ Specialized traction equipment
  - ✓ Overnight stay capability
  - ✓ Specialized arthroscopy equipment
  - ✓ Additional training

WROSC surgical care

- ***Hip Arthroscopy*** *– being developed*
  - ✓Assessment: aMRI 85-90% accurate
  - ✓Labral tear
  - ✓Osteochondral injury
  - ✓Loose body
  - ✓Impingement

Expected roll-out : towards end of 2013

WROSC and funding

- *Once surgical treatment proposed:*

  ✓ Excessive delay may jeopardize outcome
  (initial pain generator vs established pain patterns)

  ✓ PAH wait times: 18-24 months or longer
  '*Partially insured services*'

  ✓ WROSC wait times: 4-8 weeks

  ✓

WROSC / Pt / FHA / ICBC / Lawyer

- *Physician funding: through Teleplan*
- *Facility funding:*
  - ✓ **Not** recoverable through Teleplan
  - ✓ **Not** recoverable through extended health
  - ✓ **Can** be provided by FHA / MoH
  - ✓ **Can** be provided by patient
  - ✓ **Can** be provided by ICBC
  - ✓ **Can** be provided by law firm

WROSC / ICBC / Lawyer

- *2011 – Present:*

  ✓ Funding approval rate increasing

  ✓ Satisfaction rate high

  ✓ Patient/plaintiff's interests well-served

  ✓ Wide variety of cases

WROSC/ICBC: Typical Scenario

1) Initial Request

Work-up complete → Surgery proposed

↓

Funding requested

WROSC/ICBC: Typical Scenario

2) Reply from Law Office:

- ✓ Letter re: Rationale for surgery
  - Causation
  - Implications of delay, etc
- ✓ Possibly formal report (less common)

WROSC/ICBC: Typical Scenario

3) Funding authorized

- ✓ Surgery performed
- ✓ Recovery and rehab

WROSC/ICBC: Typical Scenario

4) Completion

- ✓ Final report
- ✓ Court hearing (rare)

WROSC/FHA

- Trial of FHA/MoH funded arthroscopy

→ 50 knee arthroscopies, 2011

→ funding not extended

- Could help with back log in daycare surgery

WROSC/FHA

- Role in provision of acute care:

→Assessment of ‘walking wounded’

→ Pediatric trauma?

→Adult trauma?

Discussion

- ✓ Streamlining of surgical MSK care is feasible
- ✓ This is beneficial to patients
- ✓ What is next?

Discussion – What is next?

Acute ortho care?

- Pediatrics → majority could be dealt with at WROSC

Discussion - what is next?

Acute ortho care ?

- Walking wounded → reduce pressure on PAH ER?

  -From family physician's office or walk-in clinic → WROSC

  -Assessment / X-rays / treatment plan

Conclusion

- ✓ The concept and process of integrated care were introduced
- ✓ Local resources were identified
- ✓ Expanded access to care options were presented

Thank you…

Looking forward to further working with you.