

# The Need for a Central Intake and Optimization Clinic for Hip/ Knee Osteoarthritis

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# Fraser Health Geography

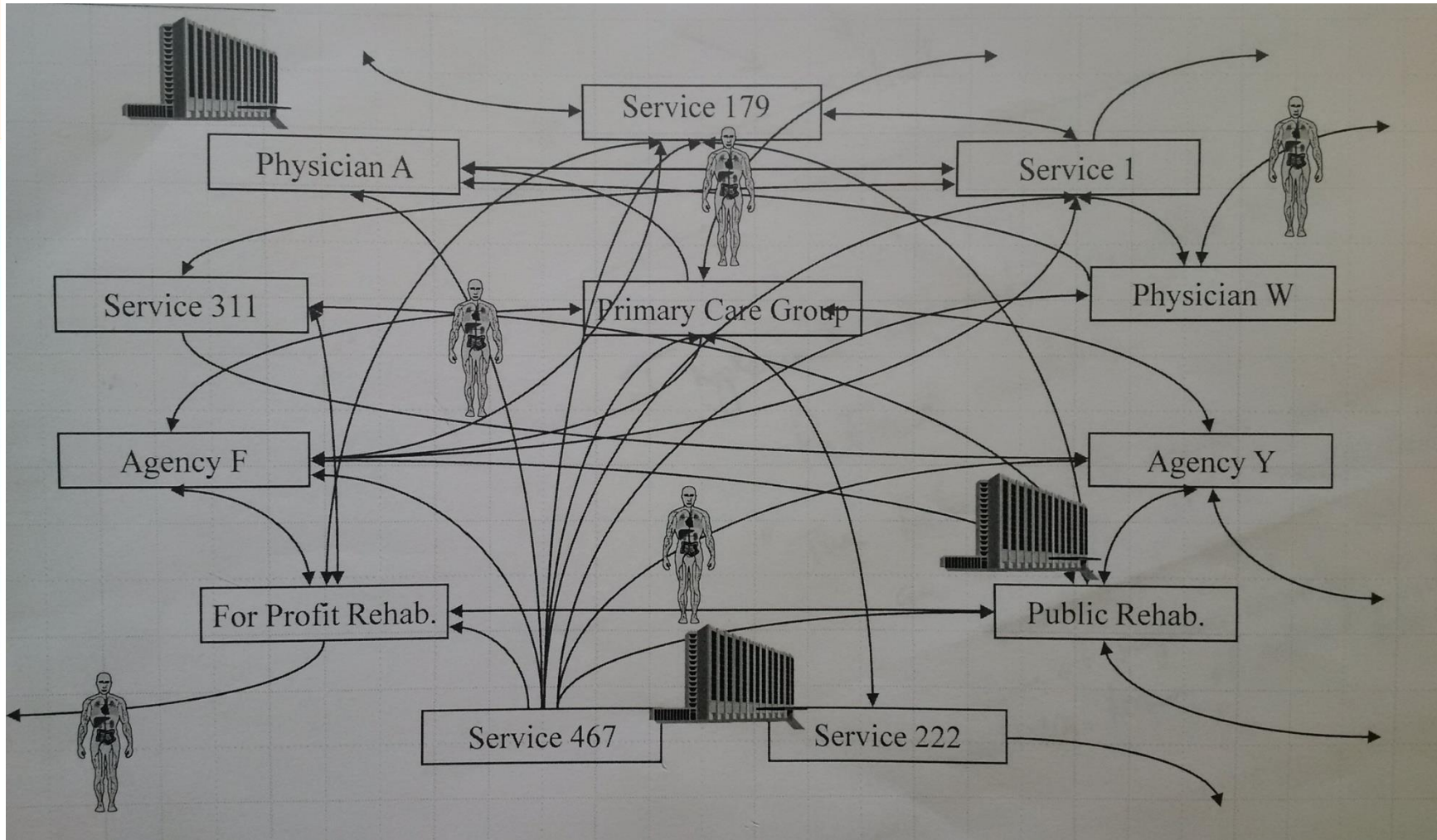


# Principle: Equitable and transparent access to consults and surgery

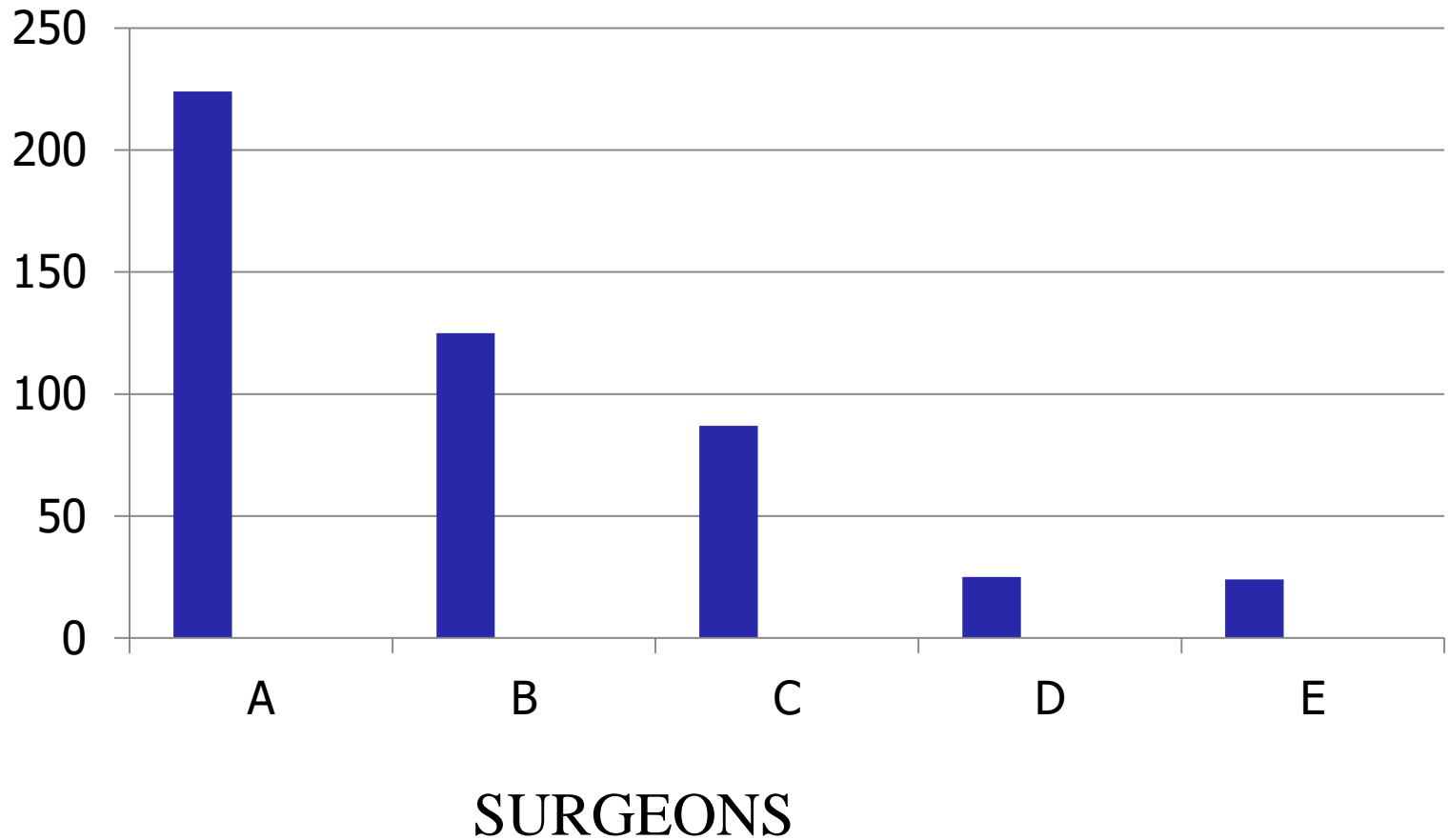


# Patient Navigation

## Complex, Inefficient and Site-Centric



# Previous status Imbalanced



# **SURGICAL SERVICES PROGRAM HIP AND KNEE REPLACEMENTS**

- Central Intake and Assessment
- Interdisciplinary, Team-based care
- Non-surgical support
- Pre-surgical support
- Post-surgical support
- Surgical efficiency measures
- Evaluation

# Overview

- Preliminary concept discussions 2013
- Pilot site
- Existing sites/visit or evaluation
- Service Volume Planning
- Infrastructure review
- Hip/ knee arthroplasty need to increase 5-8%/yr.

# Process

- Central fax received
- Triage
- Information package sent to patient
- Nurse call- questions and discussion
- Appointment booked with surgeon in clinic or office
- Consult with surgeon and nurse
- Booking completed or alternatives discussed
- Education class led by PT/OT
- Additional tests or consults arranged
- Clinic Nurse provides support through pre-op
- Nurse practitioner provides in-patient support





**Burnaby Hospital  
Hip & Knee Arthroplasty  
Centre Referral**

Patient Name M F DOB

Care Card #

Address

Patient Phone Home	Cell	Work	Speaks: <input type="checkbox"/> English <input type="checkbox"/> Other:
Referring Practitioner Name:		Phone:	FAX

**COMPLETE ALL RELEVANT FIELDS. ATTACH MEDICAL HISTORY/ MEDICATION LIST.  
FAX TO 604-419-1418**

**INCOMPLETE REFERRAL WILL NOT BE PROCESSED.**

Reason for referral:			
<input type="checkbox"/> First available surgeon (recommended). Or <input type="checkbox"/> Specify surgeon: _____			
Affected joint (s): Knee: <input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Bilateral Hip: <input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Bilateral			
Attach X-rays as specified of the affected joint (s) (done within 3 months) <input type="checkbox"/> Available on PACS			
<input type="checkbox"/> Knee: 1. Weight bearing AP of both knees 2. Lateral bent knee of affected side 3. Skyline of affected side			
<input type="checkbox"/> Hip: 1. AP Pelvis including proximal 1/3 of femurs 2. True lateral of affected hip			
Pain with walking: <input type="checkbox"/> None/Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe		Loss of flexion, extension or joint stability <input type="checkbox"/> None/Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe	
Walking tolerance <u>without</u> significant pain: <input type="checkbox"/> Over 5 blocks <input type="checkbox"/> 1 to 5 blocks <input type="checkbox"/> Less than 1 block <input type="checkbox"/> Household		Mobility aids used: <input type="checkbox"/> Cane <input type="checkbox"/> Crutches <input type="checkbox"/> Walker <input type="checkbox"/> wheel chair.	
<input type="checkbox"/> Pain at rest (sitting, lying down, sleeping). How many nights a week is sleep disturbed? _____		Analgesics: <input type="checkbox"/> PRN Tylenol/NSAID <input type="checkbox"/> Scheduled Tylenol /NSAID <input type="checkbox"/> PRN Opioids <input type="checkbox"/> Scheduled Opioids	
<input type="checkbox"/> * Has both ongoing pain with motion and at rest		Treatments Trialed <input type="checkbox"/> Physio therapy <input type="checkbox"/> Specialized exercise <input type="checkbox"/> Joint injections. Other: _____	
<input type="checkbox"/> Concerns regarding an insitu arthroplasty. Specify: _____			
Height _____ Weight _____ BMI _____ Medical concerns <input type="checkbox"/> None <input type="checkbox"/> Mild or past significant problem			
<input type="checkbox"/> Constant significant, difficult to control. Mental health: <input type="checkbox"/> Active Depression <input type="checkbox"/> Other comments: _____			
Signature. Referring Practitioner _____		Date: DD/MM/YY _____	
<b>For Burnaby Hip/Knee Centre USE ONLY</b>			
<input type="checkbox"/> * Requires urgent surgeon consult:			
	Date	Time	Initials
<input type="checkbox"/> Received referral from Referring Practitioner (RP)			
<input type="checkbox"/> Surgeon appointment date _____ Patient notified.			
<input type="checkbox"/> If surgeon specified, patient & RP notified of this consult date & first available date			
<input type="checkbox"/> Not a surgical candidate. Care plan to patient. Letter/Care plan to RP			

# METRICS

## Central Intake & Optimization Clinic – BH Hip & Knee Arthroplasty EVALUATION

Metric	Baseline Data <sup>1</sup> <i>Jan 2015-Aug 2016</i>	Jan 9-Aug 11, 2017 (8 months)	Sept 1- Dec 31 2018 (4 months)	Target
Total # referrals	2015 - knees 298, hips 190 2016 - knees 490, hips 255	726	275	-
% referrals from Fraser North	n/a	70%	67%	-
% decline prior to assessment	n/a	18%	24.74%	-
% decline post assessment	n/a	43%	26.9% <sup>2</sup>	-
Avg time from referral to triage	n/a	71 days (range 1-537)	16 days (2-183 days)	-
		<i>Jul-Sept 2017</i> 15 days (range 1-83)		
Avg T1 wait time (referral to assessment)	n/a	87 days (range 5-543)	36 days (7-202 days)	6 weeks
		<i>Jul-Sept 2017</i> 31 days (range 5-90)		
Avg. T2 wait time (assessment to OR date)	n/a	122 days (range 16-225)	70 days (27-120 days)	<26 weeks
		<i>Jul-Sept 2017</i> 47 days (range 38-56)		
Overall wait time (T1 + T2) (consult to decision)	<b>Hips</b> 2015 – 278 days (39.7 weeks) 2016 – 223 days (31.8 weeks) <b>Knees</b> 2015 – 320 days (45.7 weeks) 2016 – 271 days (38.7 weeks)	209 days (29.9 weeks)	106 days (15.14 weeks)	< 26 weeks
		<i>Jul-Sept 2017</i> 78 days ( 11.1 weeks)		
First available surgeon	-	21%	57.09%	-
Referral to internal medicine	-	56%	21.45%	-
Referral to anaesthesia	-	16%	8% <sup>3</sup>	-
ALOS - Hip Arthroplasty	2015 – 4.7 days 2016 – 8.1 days	2017 – 7.0 days	1.88 days (April- Sept 2018)	Hip ELOS - 3 days
ALOS - Knee Arthroplasty	2015 – 4.2 days 2016 – 4.4 days	2017- 3.4 days	2.32 days (Apr- Sept 2018)	Knee ELOS - 4 days

<sup>1</sup> Baseline Data for January 2015 -August 2016 only captured patients who proceeded with surgery. This is not true referral #, but # case completed.

<sup>2</sup> 11.66% were blank as some surgeons are sending patients for diagnostic injections with follow up in the clinic

<sup>3</sup> this is changing as anesthesia is now wanting to see most of the Arthroplasty patients pre-op

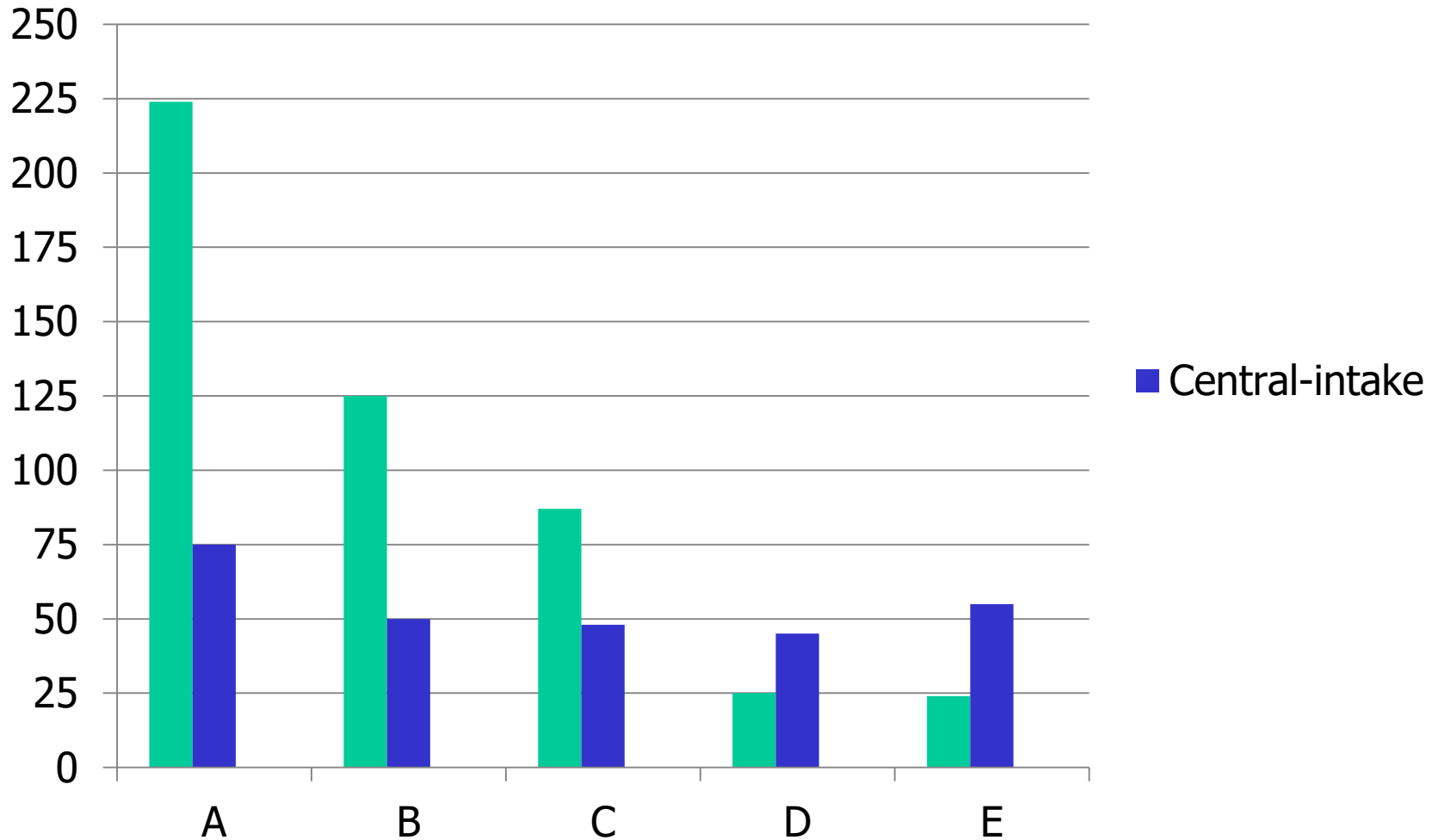
# WHAT HAPPENED

- Approval for assessment -83%
- First available surgeon
  - Initial- 18%
  - Now- **57%** , continues to increase
  - Immediate approval for surgery- 64%
  - Decline rate multifactorial
    - Not fit, not wanting surgery within 6 months, wanting alternative treatments
- Referral to triage-16 days
- Referral to assessment-36 days. Assessment to OR-70 days (total 106 days-**15 weeks**)

# Performance Comparison

- 2012/13
    - 399
  - 2017/18
    - 804
- 327 hips, 477 knees
- 2018/19 > 1000 joints

# Post-Implementation



# Quality & Performance Measures

- Time to Hip Replacement Surgery
- Time to Knee Replacement Surgery
- Readmission Rates, LOS, SSI
- PREMS (DASH MD)
- NSQIP

# Burnaby Hospital

## Value Added Aspects

- Anaesthesia- APS and block program, multimodal pain strategy, medication consideration intra-op/post-op.
- OSA-pre-op flag and sleep studies, post-op ward monitoring.
- Decreased wait times -less duplication including lab tests, x-rays, PAC visits, IM
- Day-care THR-SDC recovery, NP's  
Improved FIFO metrics

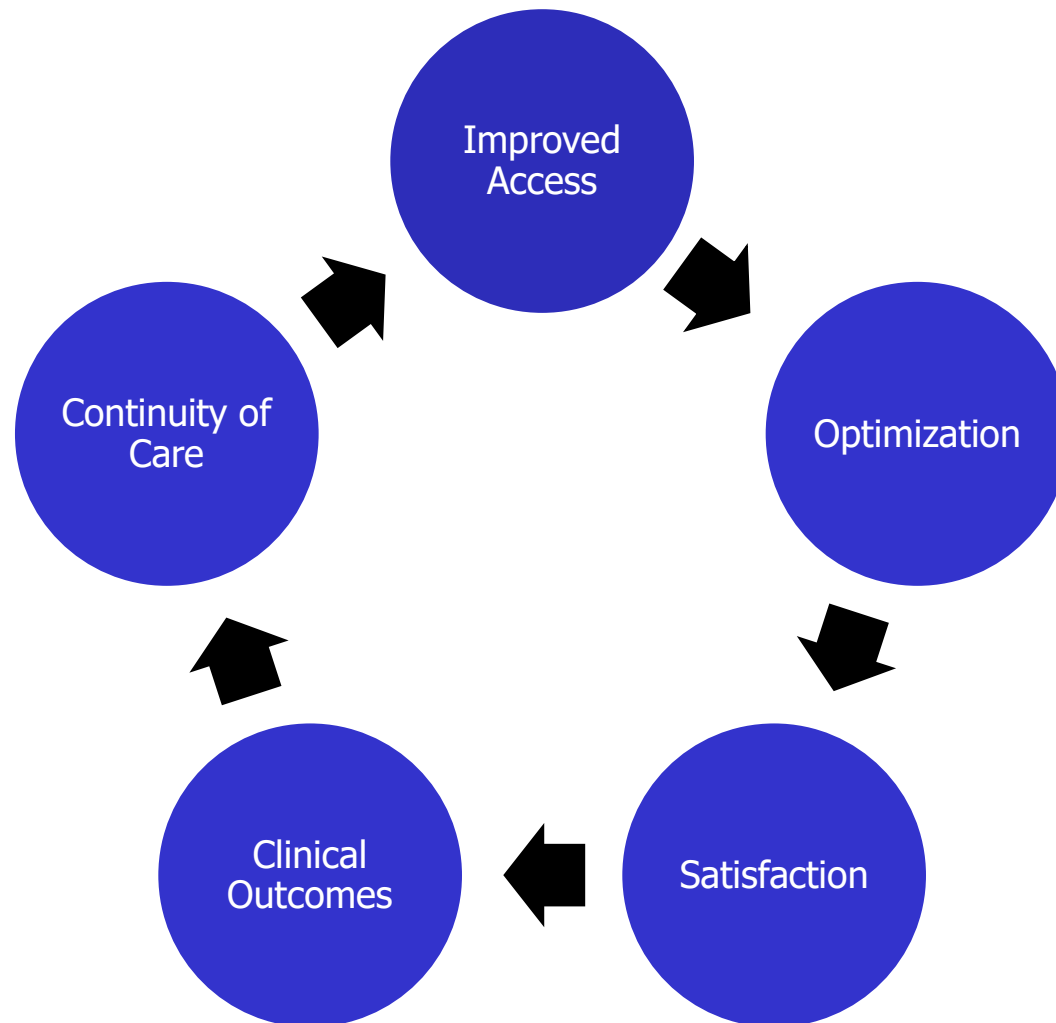
# Central Intake and Optimization aligns with BC Strategic Priorities

## Patient Experience

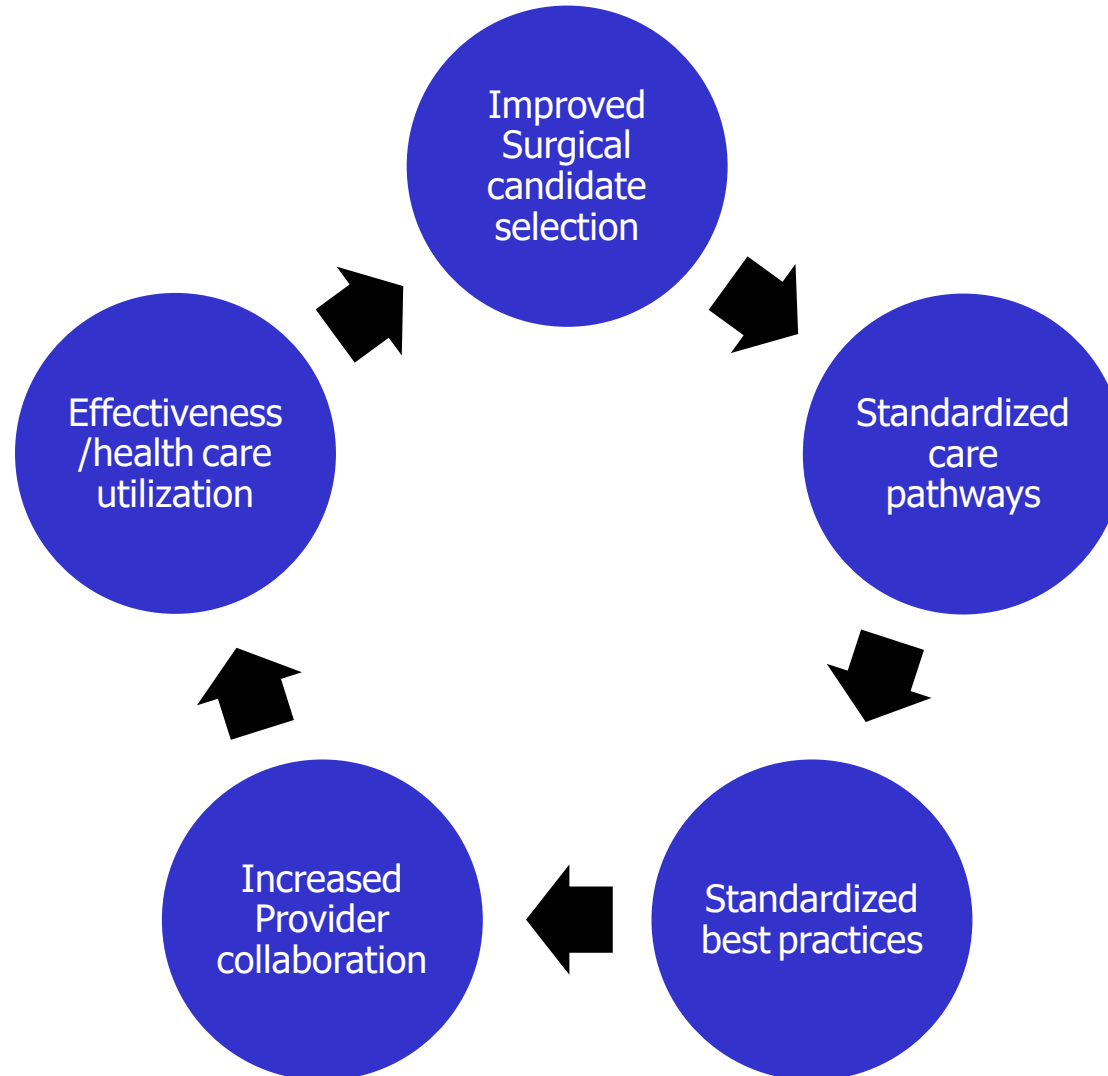
Central Intake-one stop shopping  
Standard care pathways → LOS/Risks  
Discharge planning/rehab



# For Patients-Optimization of experience and outcomes



# For Providers-Standardized pathways and practices



# Thank You!

## Your Questions!



**fraserhealth**

Better health.  
Best in health care.