

The Arthroplasty Plan and the OsteoArthritis Service Integration System

The Canadian Health System Comes of Age:
A framework for 21st century care
May 29, 2008

TAP: The Arthroplasty Plan

- Background
 - Wait time for hip and knee replacement range from 8.9 to 20.6 months
 - Population demographics projected increase in arthroplasty cases over next 10 years
 - Indications the patient is to have surgery within 6 months have better clinical outcomes
- Purpose of the Richmond Hip and Knee Joint Reconstruction Project
 - To implement and evaluate a high quality, high volume, low cost Hip and Knee Reconstruction model

TAP: Objectives

- Maximize utilization of resources and create efficiencies, including:
 - Reduce average waiting time to 4-6 months
 - Reduce average length of stay (ALOS) to 4 days - hip reconstruction and 3 days - knee reconstruction
 - Improve OR efficiency by 20-25%
 - Evaluate patient outcomes
- Align/integrate with regional and provincial initiatives
- TAP Model (Toolkit)

TAP: Components of Model

- 650 cases/year
- Prioritization scoring
- Clinical Pathways for Hip & Knee Replacement
- Equipment, prosthesis & supply standardization
- Waitlist Management
- Optimize resource utilization
- Project Database
- Evaluation

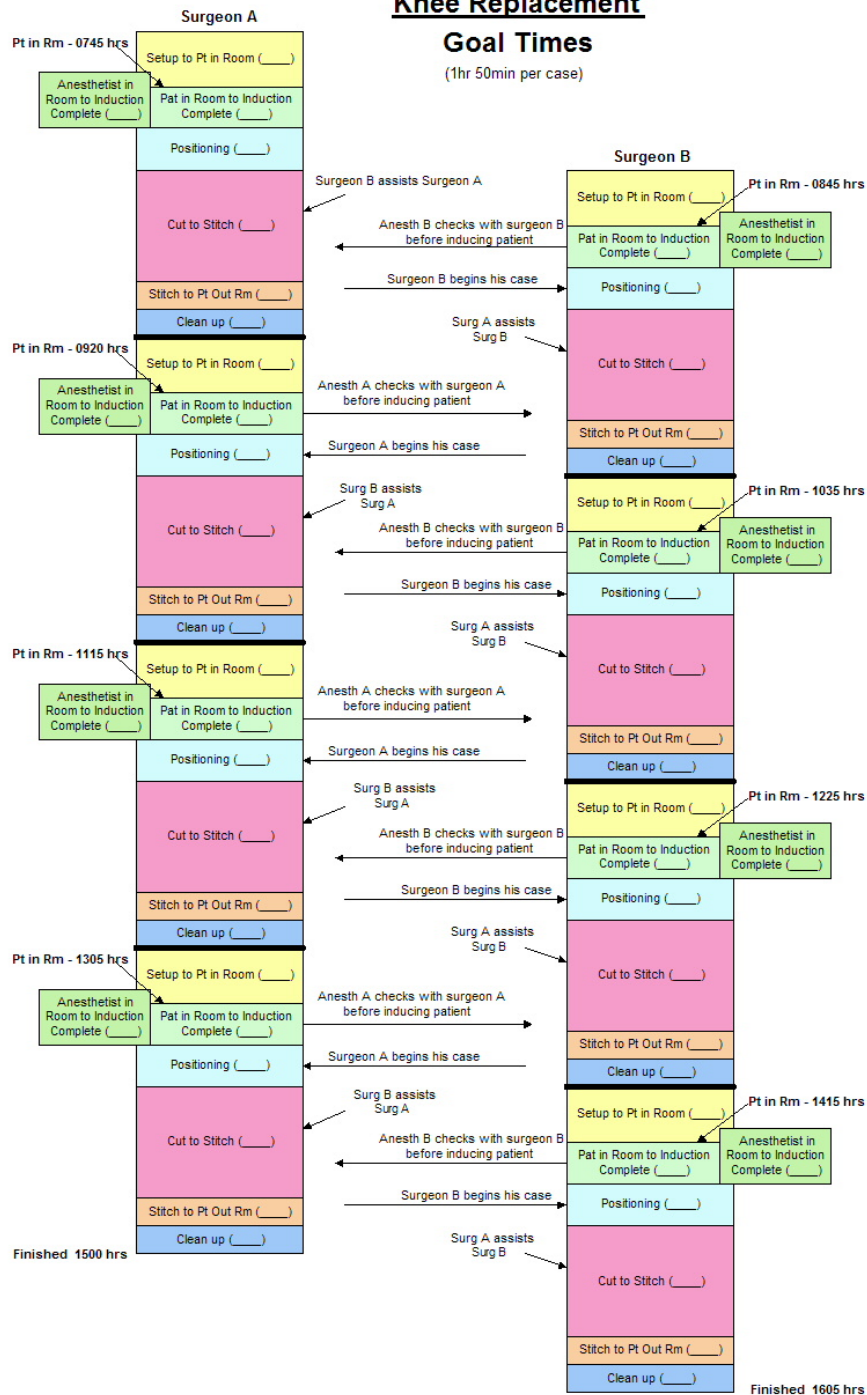
TAP: Accomplishments

- Cases completed increased by 136%
- Decreased overall waitlist by 30%
- Decreased >24 weeks waitlist by 63%
- Achieved 28% OR efficiency
- ALOS 4.1 Days for Hips
- ALOS 3.1 Days for Knees
- TAP Model Toolkit (Knowledge Transfer)

Knee Replacement

Goal Times

(1hr 50min per case)



TAP: Efficiency in the OR

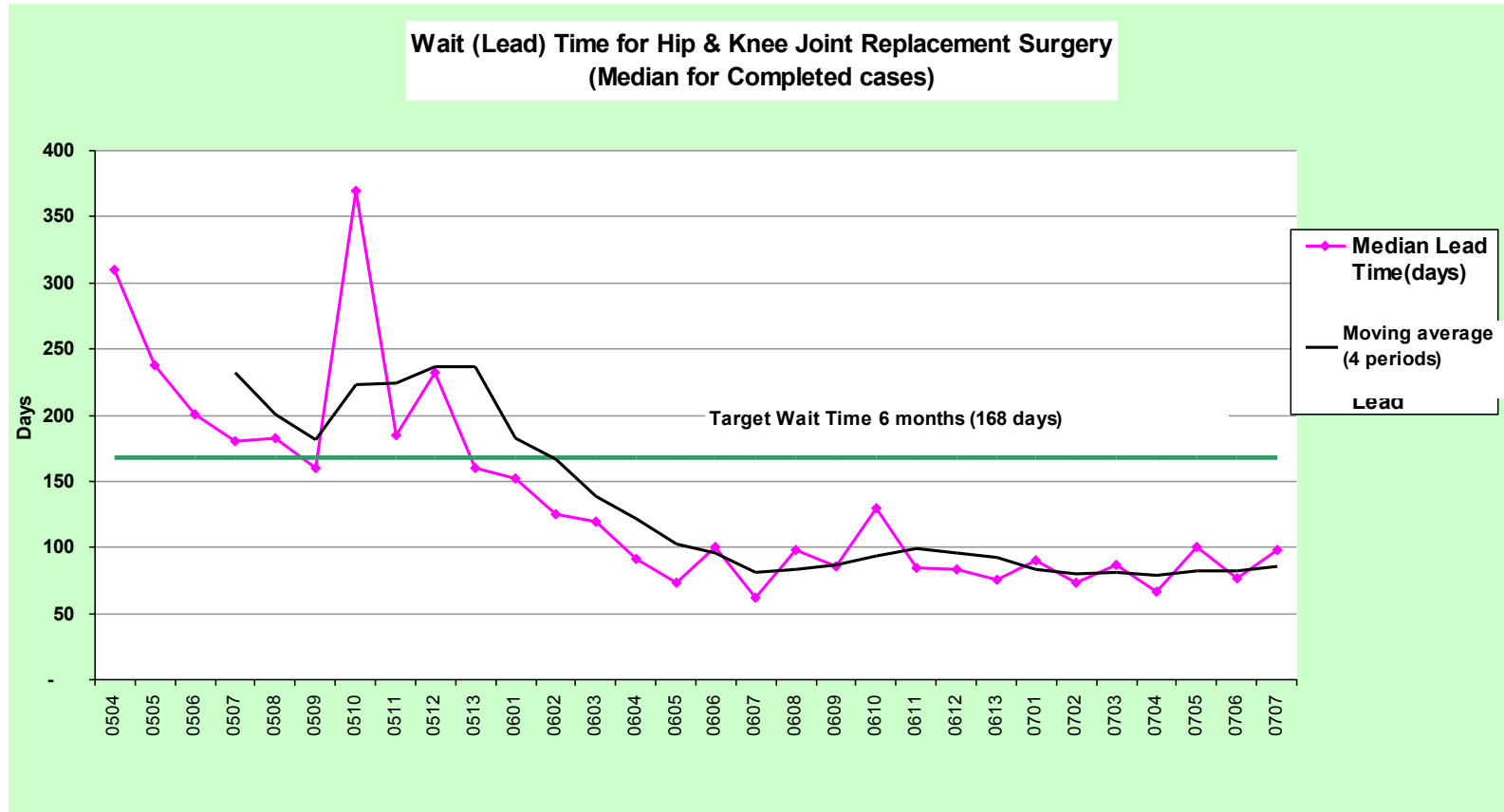
Process for running
two Operating
Rooms
concurrently

Goal time is 1:50h
per case

↓44 minutes

↓25+%

TAP: Wait (Lead) Time for Hip & Knee Joint Replacement Surgery



TAP: Toolkit Highlights

- Budget template
- Team Process
- Process Map of care path
- Clinical Pathways
- Scheduling / Bed Mapping
- Standardization
- Waitlist Audit
- Eight Total Joint Day (Community Hospital)

TAP: Lessons

- Senior Leadership Support
- Surgeon Champion
- Dedicated Resource
- Collaborative Approach
 - Multidisciplinary involvement
 - Cross continuum
- Knowledge transfer
- Scope Creep – Identified need for OASIS

OASIS: OsteoArthritis Service Integration System

- Arthritis: 2nd most costly disease category in Canada
- Estimated 3M Canadians with symptomatic OA
- 40-50% patients suffer intermittent pain, with 10% suffering extreme pain
- Increasing prevalence of OA associated with aging

OASIS: Closing Gaps in Care

- Fragmentation of current services – limited coordination between care providers
- Lack of coordinated capacity to respond to increasing demands for services
- Waitlist and wait time pressures (consults and surgeries)
- Gaps in care for non-operative patients
- Lack of knowledge about resources and supports available

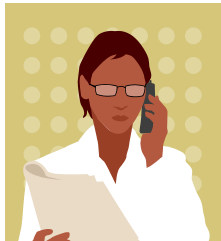
OASIS: Goals

- Limit development and progression of OA
- Slow onset of complications that can cause severe disability
- Reduce avoidable declines in health
- Reduce variations in care

OASIS Program

Target Populations

- Patients in early and advanced stages of osteoarthritis of the hip and knee:
 - Non-operative cases
 - Surgical candidates
 - Individuals seeking information on options



Source of Referrals

- primary care physicians
- orthopedic surgeons
- rheumatologists

Services



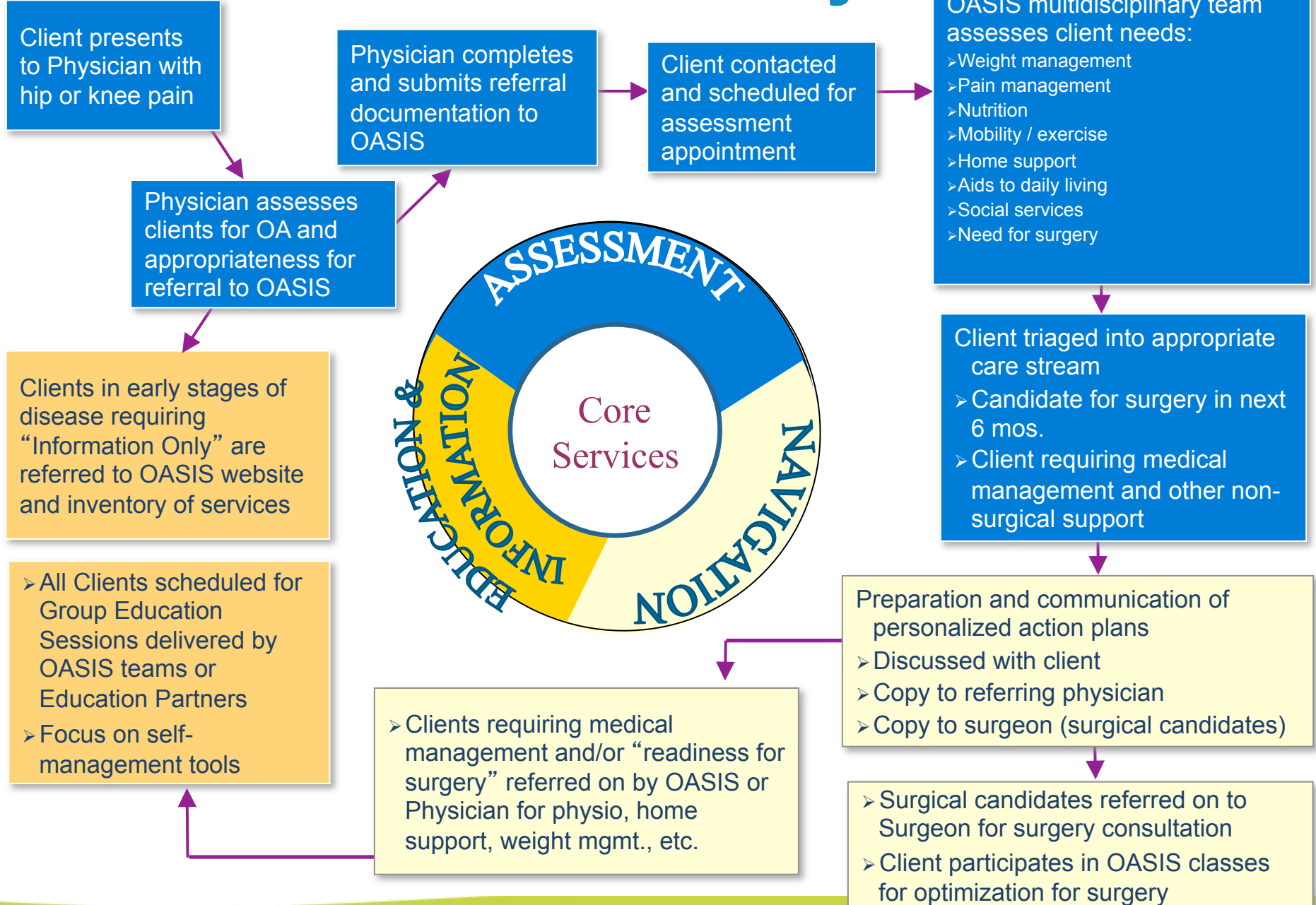
- Multi-disciplinary assessment of treatment and education needs
- Personalized action plans
- Listing of resources available in public and private sectors
- Tools for self-management
- Coaching and group education
- Coordination of referrals (optional)

Benefits



- Enhanced relationship with Primary Care Physicians
- Improved access to services
- Skills in self-management
- Improved quality of life and health outcomes
- Collaborative partnerships
- Improved use of system resources and expertise
- Linkages with other Chronic Disease Initiatives

OASIS: Patient Journey



OASIS: Multiple Stakeholders

- Clients and caregivers
- Primary Care Physicians (PCPs)
- Allied health professionals
- Orthopedic surgeons
- Rheumatologists
- Community organizations
- Education partners

OASIS: Benefits

- Equitable access to services based on need rather than entry into referral queue
- Access to first available surgeon
- Up to date inventory of public and private sector services
- Standardized referral forms and assessment tool
- Personalized action plan for all clients
- Alignment with other CDM initiatives

Cindy Roberts, Director, OASIS Program:
cindy.roberts@vch.ca

**Dr. Ken Hughes, Orthopaedic Surgeon, Co-
Chair Provincial Musculoskeletal Council:**
khrichmondortho@telus.net