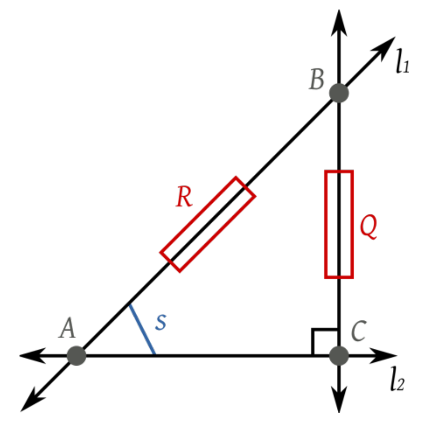
Methods to Achieve Large Scale Change - Clinical Metrics and Spread to Scale



Alberta's Strategic Clinical Networks

Presenters:

Ms. Tracy Wasylak & Dr. Blair O'Neil

Senior Program Officer & ACMO

Strategic Clinical Networks

Alberta Health Services

October 26th, 2015

Disclosures

- Dr. Blair O’Neill and Ms. Tracy Wasylak, do not have any disclosures or conflicts of interest.

Outline

- Background
- Challenge
- Teams
- Approach & Objectives
- Components
- Results
- Questions

Healthcare in Alberta: The Need for Balance

Quality
all dimensions

Providing care
improving the experience

Patients

Sustainability
value for money

Access
appropriate and equitable

What are Strategic Clinical Networks?

- Collaborative provincial clinical groups
  - Hosted by Alberta Health Services
- Focused on stages of life, diseases/conditions, areas of care in order to
  - Improve patient outcomes and satisfaction
  - Increase access and quality
  - Build a health care system that is sustainable

2012: Addictions & Mental Health, Bone & Joint, Cancer, Cardiovascular Health & Stroke, Diabetes Obesity & Nutrition, Seniors Health
2013: Critical Care, Emergency, Surgery
2014: Respiratory Health
2015: Maternal Newborn Child & Youth
Future: Kidney Health, Primary Health Care, Population, Public & Aboriginal Health

Strategic Clinical Networks in Alberta

Goal

To achieve a sustainable health care system that creates the healthiest population and best health outcomes in Canada

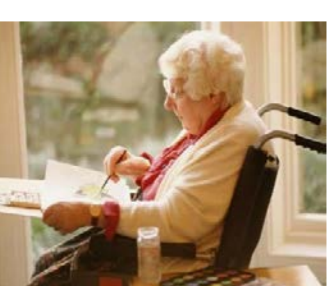
Target

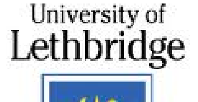
100% of Albertans are impacted positively by SCN priorities and plans – **with evidence**

Scope of SCNs

Beyond AHS to involve the whole healthcare system…

- Patients & families
- Physicians, nurses, allied health
- Researchers, institutions, foundations
- Primary care/PCNs
- Operational areas, administrators
- Government
- Not-for-profit and community groups

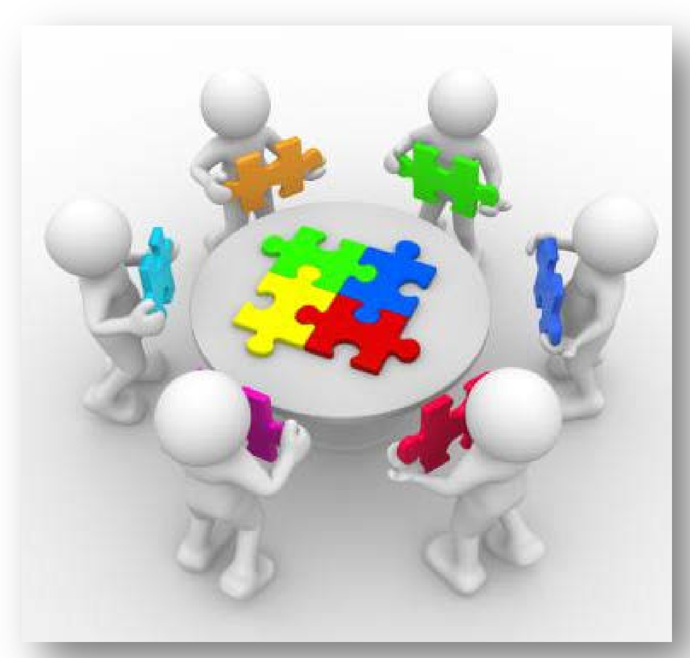




Strategic Clinical Networks

Provincial Model of Collaboration

- Put Patients at the Centre
- Support Primary Care
- Optimize all Resources
- Evidence-informed, Context Specific
- Share + Link Information to Improve
- Engage ALL levels of Health Care



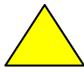
SCNs Use a Common Quality Definition

and measure one or more of six dimensions to improve

SCN IMPACTS

Over 7000 staff and clinicians involved across 5 Zones & Partner Organizations

Stroke Action Plan - 14 sites

Hip & Knee Plan - 12 sites 

Insulin Pump Program - 11 centers

Vascular Risk Reduction

Fragility & Stability - 12 Sites

Appropriate Use of Antipsychotics

Empathy - All Schools in Red Deer

E-Referral Lung / Hip & Knee

Safe Surgery Checklist - 59 sites

Enhanced Recovery After Surgery - 6 Sites

SCNs Further Value-Adds to the System

- **Internal Experts and Consultants**
  - AACHT
  - CVH&S: Cardiac Surgery Wait Times
  - CVH&S: Expansion of Advanced Cardiac Services
  - Provincial Surgery Plan
  - MNCY: Value of Fetal Fibronectin
  - Province-wide Policies (Seniors, CC, ER, Surgery)
- **Innovation and Commercialization (with AIHS)**
  - Alberta SMEs and TEC Edmonton
  - MEDEC/SCN partnership discussions
  - RX&D/SCN partnership discussions

Partnership for Innovation & Research in the Health System

SCNS

The Researcher

Users of Knowledge

On the same team creating value for money

Time for Change

Collaborative Learning

The most intensive front-line improvement work happens in Collaboratives. These 12-month programs are designed for organizations committed to achieving sustainable change within a specific topic area. Through shared learning, teams from a variety of organizations work with each other and faculty to rapidly test and implement changes that lead to lasting improvement.

(From Institute of Healthcare Improvement)

Learning Collaborative Teams

- Clinician-lead site teams
  - Physicians
  - Nurses
  - Allied health professionals
  - Administration
- Work collaboratively
  - over a period of time
  - on local improvements
  - toward system-wide outcomes.

Innovative Approach

Engaging learning sessions

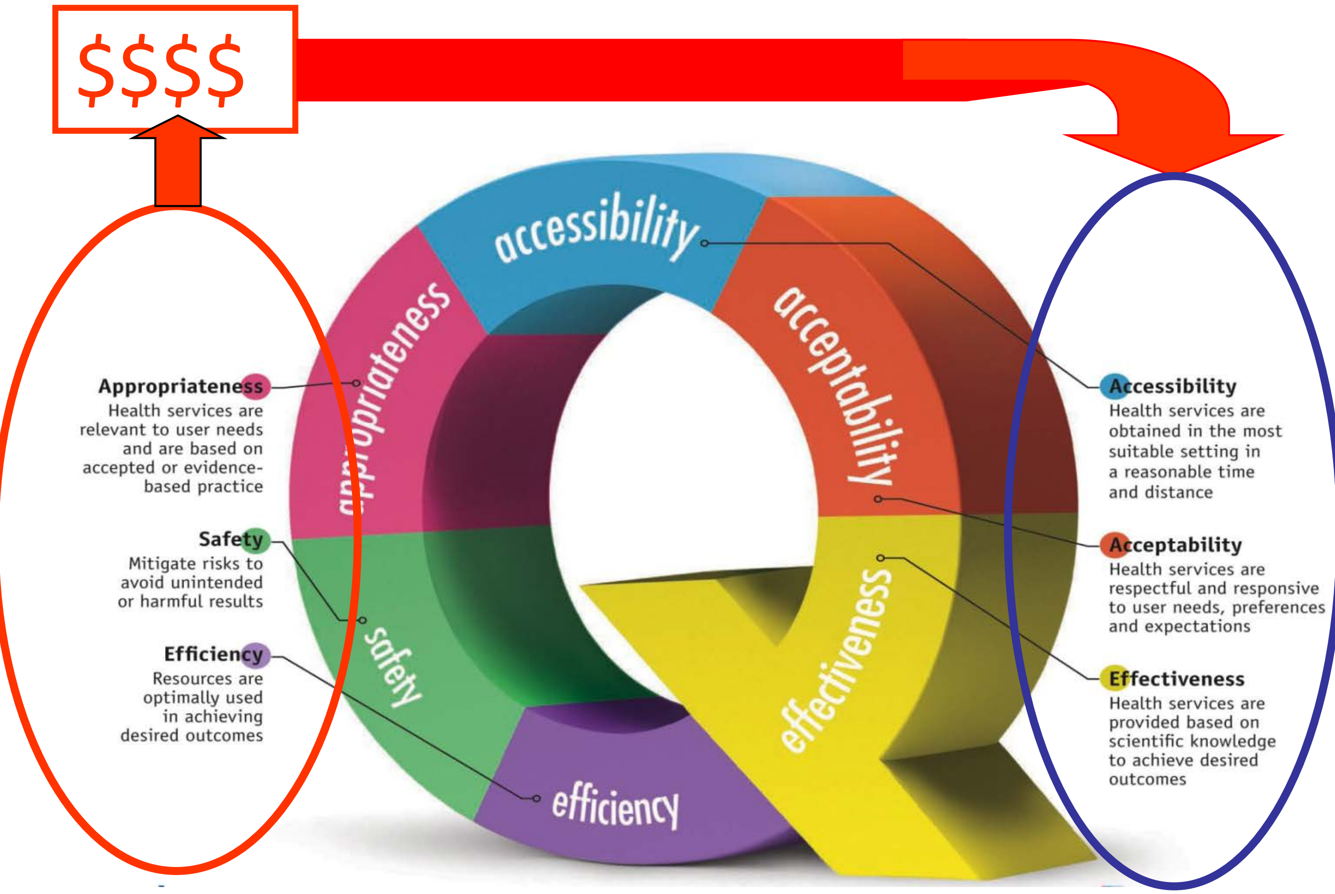
+ Action periods of local improvement

+ Balanced score card

- introduce new provincial practices at the local level
- drive sustainable change owned by the frontline staff and site leadership
- link improvements to teamwork, data and a balanced scorecard

There is a ‘formula’ that can help you set priorities

$$$$



To Eliminating Waste

Focus first on Appropriateness, Safety and Efficiency

A step toward sustainability

eliminate waste and reinvest to improve

16 000 bed days

$12 000 000

accessibility
appropriateness
acceptability
safety
effectiveness
efficiency

Appropriateness Health services are relevant to user needs and are based on accepted or evidence-based practice

Safety Mitigate risks to avoid unintended or harmful results

Efficiency Resources are optimally used in achieving desired outcomes

Accessibility Health services are obtained in the most suitable setting in a reasonable time and distance

Acceptability Health services are respectful and responsive to user needs, preferences and expectations

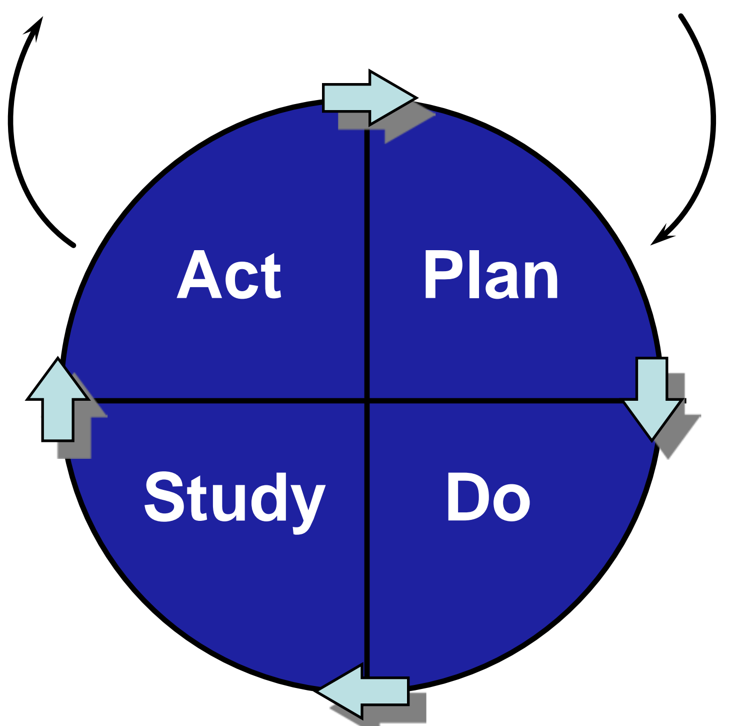
Effectiveness Health services are provided based on scientific knowledge to achieve desired outcomes

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?



From: Associates in Process Improvement

Scorecards Help Define Targets and Achieve Goals

Feedback Helps Everyone Improve

QUALITY DIMENSIONS:	**EFFICIENT**	**SAFE**	**APPROPRIATE**	**ACCESSIBLE**	**ACCEPTABLE**	**EFFECTIVE**	
SELECTED MEASURE:	(Length of Stay - LOS) **(Note 1)**	OR "Time Out" **(Note 2)**	% of Patients Mobilized Day 0 **(Note 3)**	Time to Surgery (T0 - T2) **(Note 4)**	Patient Satisfaction (H-CAHPS' Pain Control Responses) **(Note 5)**	Date of Discharge/ Predicted date **(Note 6)**	
***TARGETED IDEAL** (Level 10):*	Full compliance to established standards; non-negotiable			Ideal target based on what can realistically be achieved in two years; negotiable			
PERFORMANCE LEVEL: ▼							
10 **(Targeted Ideal)**	4.2 days or less	100% compliance	100%	400 days or less	90% or higher for "Always" Score	0%	**10**
9	4.3	**95%**	90%	**450 Days**	88%	0. 5%	**9**
8	**4.5**	90%	82%	500 Days	86%	1%	**8**
7	4.7	85%	**75%**	550 Days	85%	2%	**7**
6	4.9	80%	68%	600 Days	82%	4%	**6**
5	5.1	70%	61%	675 Days	79%	6%	**5**
4	5.3	65%	54%	775 Days	76%	8%	**4**
3 **("AS IS" at Start)**	5.5	Current Compliance 60%	47%	896 Days	**63.5% for "Always" Score (See Note 5)**	10%	**3**
2	5.7	55%	40%	1000 Days	60%	12%	**2**
1	5.9	50%	30%	1200 Days	55%	**15%**	**1**
WEIGHTING (%)	20	15	20	10	15	20	= 100 (%)
OPTIMIZATION SCORE: **(Level x Weight)**	140	150	140	70	45	20	**TOTAL SCORE = 565**

Collaborative Process

Learning Workshop 1

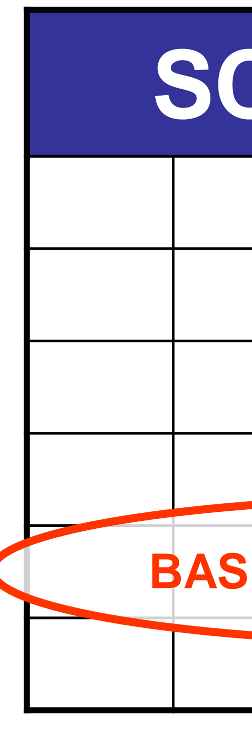
SCORE CARD

BASELINE

Plan

Action Period 1

A P
S D



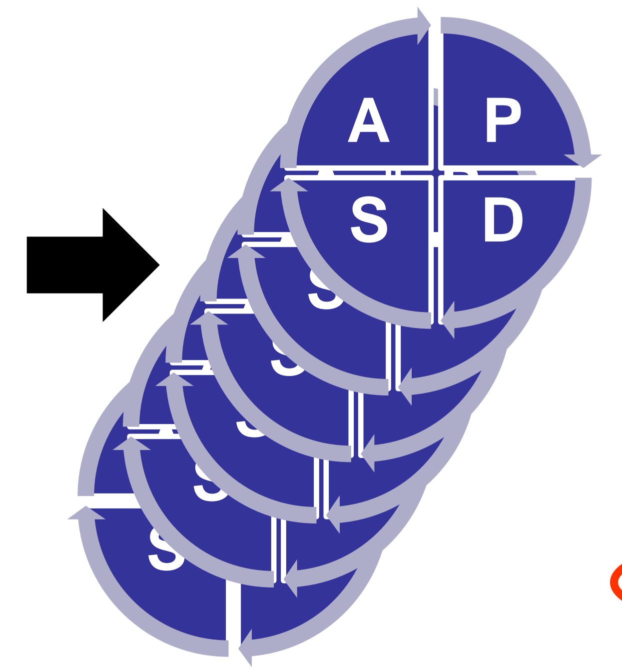
Collaborative Process: Action Period

A P
S D

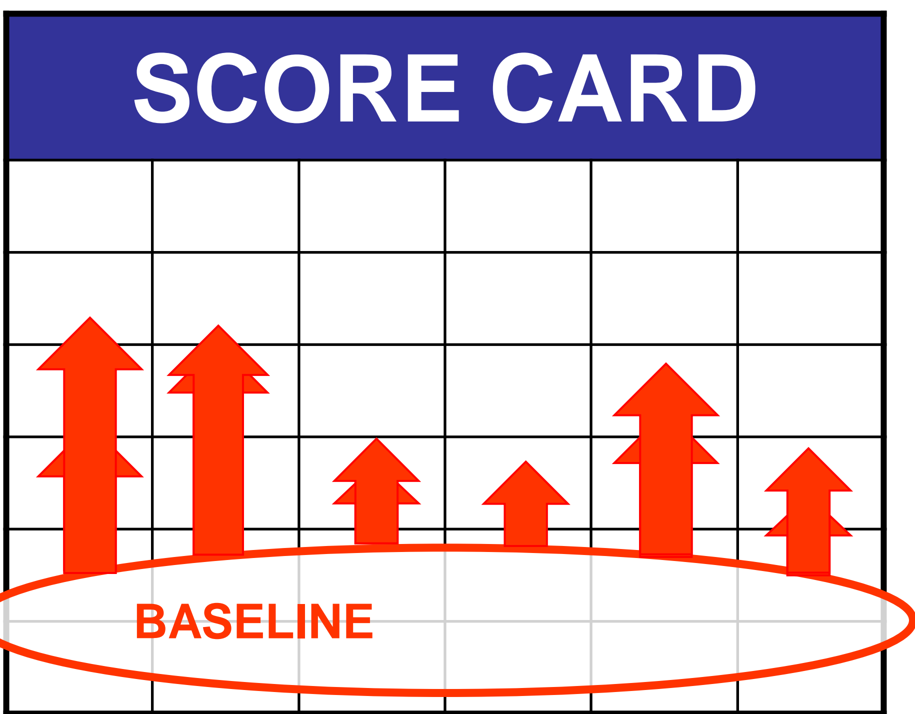
SCORE CARD					
BASELINE					

Collaborative Process

Learning Workshop 2



Action Period 2

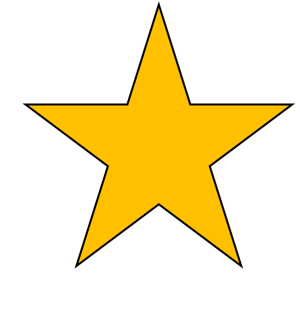


Collaborative Process

Learning Workshop 2

Collaborative Process

Sustained Continuous Improvement



Balanced Scorecard

- **STEP 1: Identify an improvement indicator under each quality dimension**

Scorecard: Quality Dimensions

JOINT SCORECARD

QUALITY DIMENSIONS:	EFFICIENT	SAFE	APPROPRIATE	ACCESSIBLE	ACCEPTABLE	EFFECTIVE	
SELECTED MEASURE:	(Length of Stay - LOS) (Note 1)	OR "Time Out" (Note 2)	% of Patients Mobilized Day 0 (Note 3)	Time to Surgery (T0 - T2) (Note 4)	Patient Satisfaction (H-CAHPS' Pain Control Responses) (Note 5)	Date of Discharge/ Predicted date (Note 6)	
TARGETED IDEAL (Level 10):	Full compliance to established standards; non-negotiable			Ideal target based on what can realistically be achieved in two years; negotiable			
PERFORMANCE LEVEL:							
10 (Targeted Ideal)							**10**
9							**9**
8							**8**
7							**7**
6							**6**
5							**5**
4							**4**
3 ("AS IS" at start)							**3**
2							**2**
1							**1**
WEIGHTING (%)	20	15	20	10	15	20	= 100 (%)
OPTIMIZATION SCORE: **(Level x Weight)**	20	150	120	70	45		TOTAL SCORE =

Scorecard Overview

- STEP 1: Identify an improvement indicator under each quality dimension
- **STEP 2: Determine the degree of importance of each improvement indictor**

Scorecard: Weighting

For Time Period: 01 Sep 2009 to 30 Nov 2009[1]

QUALITY DIMENSIONS:	EFFICIENT	SAFE	APPROPRIATE	ACCESSIBLE	ACCEPTABLE	EFFECTIVE	
SELECTED MEASURE:	(Length of Stay - LOS) (Note 1)	OR "Time Out" (Note 2)	% of Patients Mobilized Day 0 (Note 3)	Time to Surgery (T0 - T2) (Note 4)	Patient Satisfaction (H-CAHPS' Pain Control Responses) (Note 5)	Date of Discharge/ Predicted date (Note 6)	
TARGETED IDEAL (Level 10):	Full compliance to established standards; non-negotiable			Ideal target based on what can realistically be achieved in two years; negotiable			
PERFORMANCE LEVEL:							
10 (Targeted Ideal)							10
9							9
8							8
7							7
6							6
5							5
4							4
3 ("AS IS" at start)							3
2							2
1							1
WEIGHTING (%)	20	15	20	10	15	20	= 100 (%)
OPTIMIZATION SCORE: **(Level x Weight)**	140	150	140	70	45	20	TOTAL SCORE = 565

Scorecard Overview

- STEP 1: Identify an improvement indicator under each quality dimension
- STEP 2: Determine the degree of importance of each improvement indictor
- **STEP 3: Collect baseline data to populate “as-is” state**

Scorecard: Setting Targets

QUALITY DIMENSION	EFFICNT	SAFE	APPROPT	ACCESBLE	ACCEPTBLE	EFFECTV	
SELECTED MEASURE	Avg LOS			Time to surgery			
TARGETED IDEAL (Level 10):	Full compliance to established standards; non-negotiable			Ideal target negotiable & based on what is/can realistically be achieved in 2 years			
PERFORMANCE LEVEL	EXAMPLE ONLY						
8		IDEAL PERFORMANCE					"Ideal" performance sought in period
7							
6							
5							
4							
3		BASELINE PERFORMANCE					Actual performance at start of period
2							
1							
Example only for WEIGHTING (%)		20	15	15	15	10	= 100 Total
OPTIMIZATION SCORE: **(Level x Weight)**							**TOTAL SCORE =**

Increasingly Difficult

JOINT Scorecard: “As-is” State

For Time Period: 01 Sep 2009 to 30 Nov 2009[1]

QUALITY DIMENSIONS:	EFFICIENT	SAFE	APPROPRIATE	ACCESSIBLE	ACCEPTABLE	EFFECTIVE	
SELECTED MEASURE:	(Length of Stay - LOS) (Note 1)	OR "Time Out" (Note 2)	% of Patients Mobilized Day 0 (Note 3)	Time to Surgery (T0 - T2) (Note 4)	Patient Satisfaction (H-CAHPS' Pain Control Responses) (Note 5)	Date of Discharge/ Predicted date (Note 6)	
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PERFORMANCE LEVEL: ▾							
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9							9
8							8
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6							6
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2							2
1							1
WEIGHTING (%)	20	15	20	10	15	20	= 100 (%)
OPTIMIZATION SCORE: **(Level x Weight)**	14 60	1 45	60	30	45 5	60 20	Total Score = 300

[1] Length of Stay data was only available for the period 01 Aug 2009 – 31 Oct 2009

Scorecard Overview

- STEP 1: Identify an improvement indicator under each quality dimension
- STEP 2: Determine the degree of importance of each improvement indictor
- STEP 3: Collect baseline data to populate “as-is” state
- **STEP 4: Identify measurement tools and strategies (to determine to what extent indictor selected has improved, using a scale of 1-10)**

Scorecard: Measurements

- **STEP 4: Identify measurement measures and strategies (to determine to what extent indictor selected has improved, using a scale of 1-10)**
  - Acceptability: Patient Satisfaction
    - **Measure:** HCAPS' Pain Control Responses
  - Accessibility: Time to Surgery
    - **Measure**: T0-T2
  - Appropriateness: Patient Mobilized Day 0
    - **Measure**: % of Patients Mobilized Day 0
  - Effectiveness: Date of Discharge versus Predicted Date of Discharge
    - **Measure:** Number of Days from Predicted Date of Discharge to Actual Date of Discharge
  - Efficiency: Length of Stay
    - **Measure:** Time from Patient arrival at the hospital to Actual Time of Discharge
  - Safety: OR "Time Out"
    - **Measure**: % of Surgeries preformed that completed an OR "Time Out"

Scorecard Overview

- STEP 1: Identify an improvement indicator under each quality dimension
- STEP 2: Determine the degree of importance of each improvement indictor
- STEP 3: Collect baseline data to populate "as-is" state
- STEP 4: Identify measurement tools and strategies (to determine to what extent indictor selected has improved, using a scale of 1-10)
- **STEP 5: Develop strategies to meet each goal**

JOINT Scorecard

For Time Period: 01 Sep 2009 to 30 Nov 2009[1]

QUALITY DIMENSIONS:	EFFICIENT	SAFE	APPROPRIATE	ACCESSIBLE	ACCEPTABLE	EFFECTIVE	
SELECTED MEASURE:	(Length of Stay - LOS) (Note 1)	OR "Time Out" (Note 2)	% of Patients Mobilized Day 0 (Note 3)	Time to Surgery (T0 - T2) (Note 4)	Patient Satisfaction (H-CAHPS' Pain Control Responses) (Note 5)	Date of Discharge/ Predicted date (Note 6)	
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1	5.9	50%	30%	1200 Days	55%	**15%**	**1**
WEIGHTING (%)	20	15	20	10	15	20	= 100 (%)
OPTIMIZATION SCORE: **(Level x Weight)**	1[illegible] 160	1 135	140	90	45	20	Total Score = 590 65

[1] Length of Stay data was only available for the period 01 Aug 2009 – 31 Oct 2009

Action Plan Overview

‘Four Fs’

Frontline engagement

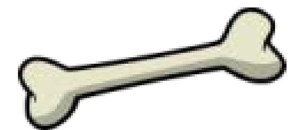
Focus on quality

Feedback (measurement)

Finish

Exemplar system-wide clinical pathway and guidelines implementation projects

Engaging front line site teams
Measuring progress
Changing complex culture



Hip and Knee Arthroplasty

BONE AND JOINT HEALTH
STRATEGIC CLINICAL NETWORK
Keeping Alberta Moving

Strategic Clinical Networks (SCNs) are creating improvements within focused areas of health care.

To get the most out of our health care system, AHS has developed networks of people who are passionate and knowledgeable about specific areas of health, challenging them to find new and innovative ways of delivering care that will provide better quality, better outcomes and better value for every Albertan.

The Hip and Knee program is a key initiative of the AHS Bone and Joint Health Strategic Clinical Network.

It is a huge success in firstly improving care for patients and also ensuring we get the best value for our health care dollars.

About 10,000 elective hip and knee replacements are performed annually in Alberta.

Alberta Health Services

Hip and Knee Program improves efficiencies and quality of care

comparing 2009/10 to 2014/15*

increased hospital capacity

79% more surgeries performed

3% increase in beds

freed up **35,800** hospital bed days saved since 2010

$37.7 MILLION value since 2009/10

wait time changes

average time from decision to surgery

2010	2011	2012	2013	2014	2015
21.3	22.0	20.9	19.3	21.1	22.3

wait times are in weeks

improved patient education and satisfaction

97% in 2015 patients satisfied up from 86% in 2010

- **89%** getting out of bed the same day as surgery in 2014
- prearranged help at home after surgery

Contributing factors to success include detailed education for patients and their families; helping them get ready to leave the hospital sooner and reducing post-operative complications.

bed days saved

Year	Bed days saved
2011	3,000
2012	5,000
2013	6,500
2014	9,000
2015	11,700

readmission rate 2015 **4.2%** down from **4.3%** 2010

return home sooner

3.9 days in hospital 2015 down from **4.7** 2010

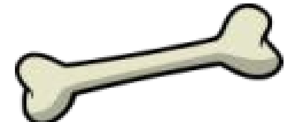
Almost all patients returned to normal function for their age, indicating no ill effects from the shorter hospital stay.

fewer transfusions

19.5% 2010

6.3% 2015

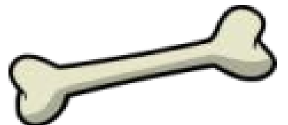
For example, 2010 refers to fiscal year 2009/10



Catch a Break Results

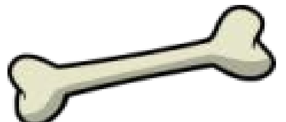
- **6433 patients have been screened through Catch a Break**
  - **4830 (75%)** patients have been identified as high risk for osteoporosis
  - **29%** of those patients have never seen their doctor about their recent fracture (these patients are again contacted at 3 months & if necessary 6 months)
    - After the 3 month follow up call:
      - **75%** of those patients contacted did go to see their family physician about their fracture
    - After the 6 month follow up call:
      - **56%** of those patients contacted did go to see their family physician about their fracture

1 year data will be available soon; including BMD testing & Osteoporosis Medication use



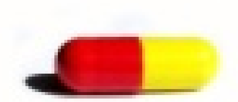
Fracture Liaison Service Results

- **≈ 18%** of patients are from out of region & are excluded from the FLS at this point in time
- **50%** of those patients enrolled in the FLS were either started, restarted, continued or had medication changes. *Earlier baseline data indicated only **8%** patients were being discharged on osteoporosis medication*
- **11%** of patients are choosing not to take osteoporosis medication during their hospital visit. *Early indications on 3 month follow up suggest some patients are re-considering their choice*
- **27%** of patients are being referred to other programs by FLS (i.e. falls, geriatrics, etc.)



Fracture Liaison Service Challenges

- **Medication challenges:**
  - Access to infusion options in the hospital/outpatient clinic or home need to be explored
  - Need to develop a common approach for patients with advanced renal disease. These are about 15-25% of patients. Evidence is not conclusive
  - Administration of bisphosphonates through Med Assist – a common practice in facilities or Home Care is a concern as bisphosphonates should be given on an empty stomach.
- **Future Program Development:**
  - Incorporating the FLS program into a larger ortho-geriatric program with a patient navigation component would be desirable.



Appropriate Use of Antipsychotics (AUA) in LTC

AUA Guideline & Web-based Toolkit

Trialed approach with 11 Early Adopter Sites

- 50% reduction in number of residents on meds over 9 months

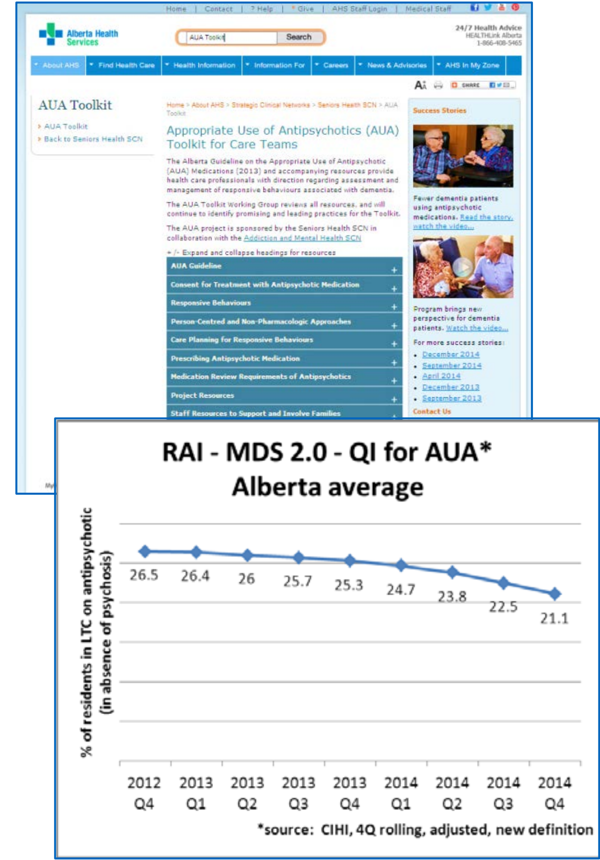
170 LTC sites in Alberta

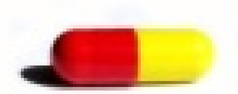
- Series of 7 Collaboratives offered across province for over 100 sites with 'higher' antipsychotic use

<u>Key processes</u>: monthly medication reviews, staff education, family engagement; data submitted to Practice Leads

Athabasca
Extendicare: Athabasca
Edmonton
Capital Care: Strathcona
Covenant: Youville
Good Samaritan: Southgate
Rimbey
AHS: Rimbey LTC
Calgary
Bethany Care: Bethany Calgary
Brenda Strafford: Bowview
AgeCare: Beverly Glenmore
Revera: Bowcrest
Medicine Hat
Revera: Riverview
Lethbridge
Covenant: St. Michael's

CIHI public reporting AUA QI



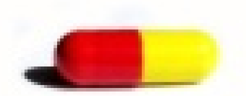


Phase 2: Early Adopter Sites (2013-14)

11 units: average antipsychotic

B…	Jul	A…	S…	Oct	N…	D…	J…	F…	M…
41%	40%	34%	31%	28%	26%	23%	21%	21%	21.5%

Y-axis: 0.0, 5.0, 10.0, 15.0, 20.0, 25.0, 30.0, 35.0, 40.0, 45.0



% Residents on Antipsychotics

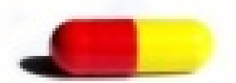
& With a Monthly Medication Review

100
90
80
70
60
%
50
40
30
20
10
0

41% 46% 51% 56% 76% 85% 89% 90% 83% 87%
36% 40% 34% 31% 28% 26% 23% 21% 21% 21.5%

% of residents on

Baseline Jun 2013 | Jul | Aug | Sept | Oct | Nov | Dec | Jan-14 | Feb | Mar



Phase 3: Provincial Implementation

19.8% current provincial average (Q1 2015)

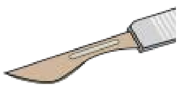
Percentage of Residents on Antipsychotics as per CIHI definition

40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%

North Zone: 34.7% ... 29.1%
Edmonton Zone: 22.0% ... 16.3%
Central Zone: 34.8% ... 26.7%
Calgary Zone: 22.5% ... 17.2%
South Zone: 34.5% ... 28.8%
Alberta: 25.7% ... 19.8%

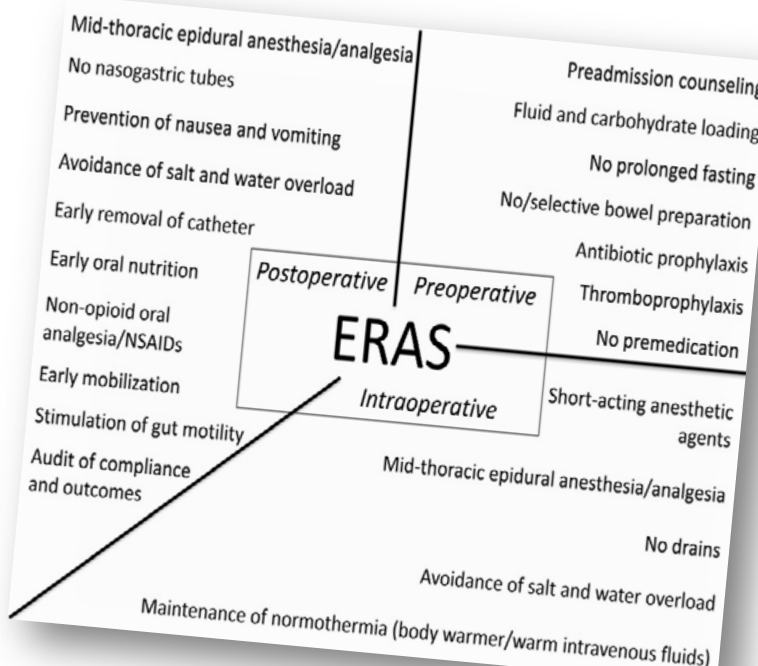
2013 Q2
2013 Q3
2013 Q4
2014 Q1
2014 Q2
2014 Q3
2014 Q4
2015 Q1

AUA Project resources were shared with all 170 LTC sites in Alberta in 2014/15. Antipsychotic use continues to decline.

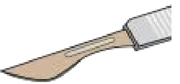


Enhanced Recovery After Surgery

- Evidence-based clinical pathways
- Data driven quality improvement
- Local site implementation and change management



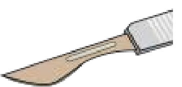
International network of leadership fron ERAS® Society



Clinical Pathway for Surgery

- Pre-Admission Clinic
- Pre-Op Care
- Surgery
- Anesthesia
- Post-Anesthesia Care
- Post-Op Care
- Home

Transforming care focused on better outcomes



ERAS Care Story (to Dec 31, 2014)

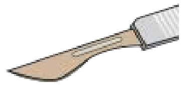
Improvement	Coeff[a]	Magnitude Δ^b
LOS Primary	0.80*	**-2.0 days**
Complications (primary)	0.65	**-19.9%**
Prevented readmissions	0.44*	**-9.5%**
LOS for those ERAS patients admitted	0.62	**-4.5 days**

Focused on magnitude and direction compared to pre-ERAS baseline

* $p < .05$
a. Coefficients from adjusted multivariate models.
b. Calculated using the coefficients from adjusted multivariate models.

Source: IHE, April 2015

- **Well enough to go home earlier from hospital** (possibly due to less complications post op)
- **Less risk of being readmitted to hospital within 30 days** (possibly due to less complications post discharge)
- **If readmitted, could be discharged earlier** (complications experienced may be less severe)

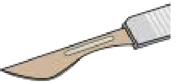


ERAS Cost Impact (to Dec 31, 2014)

$2.1 to $4.6 million in net costs saved with 690 ERAS patients (PLC & GNH)
$3.1k to $6.6k with 3.5 bed days saved for each ERAS patient

Site	Total Magnitude	Cost Impact ($ per inpatient day) Low= $1,114	High= $2,106
LOS Primary (n=690)	-1,380 days (2.0 * 690)	$1,537,320	$2,906,280
Prevented Readmissions (n=690)	-66 admissions (9.5%*690) -780 days in hosp (66*12[c])	$868,548	$1,641,977
LOS for those ERAS patients re-admitted (n=61)	-275 days (4.5*61)	$306,350	$579,150
	Total Estimated Savings	$2,712,218	$5,127,407
	Total Cumulative Intervention Cost of ERAS (PLC and GNH ending Dec 31, 2014)[d]	$546,492	
	Net Cost Savings	$2,165,726	$4,580,915
	Break even point – surgery #	174	82

$p < .05$
a. Coefficients from adjusted multivariate models
b. Calculated using the coefficients from adjusted multivariate models
c. Mean of 12 days per readmission in baseline group
d. Inclusive of labour/coordination and licensing fees
Source: IHE, April 2015



Fostering Quality Innovation in Complex Surgical Systems

ERAS Alberta

Enhanced Recovery After Surgery (ERAS) is a group of 22 clinical practices that, when implemented as a patient centered pathway, improve surgical outcomes. ERAS Alberta's vision is to improve surgical care for all Albertans by supporting wide-spread adoption of these practices.

The SCN's ERAS has demonstrated actualized net cost savings to the Alberta Health System. It is unique in that the potential magnitude of net cost savings at spread and scale is significant.

– The Institute for Health Economics

BACKGROUND

Alberta Health Services, through ERAS Alberta, (supported by three Surgery Strategic Clinical Networks – SCNs), has demonstrated astounding gains in quality improvement and cost reduction by implementing an evidence-based and internationally recognized pathway for surgical care. Through the Diabetes, Obesity and Nutrition (DON) SCN, AHS invested $800,000 in the Enhanced Recovery After Surgery (ERAS) Project for colorectal surgery demonstrating improved outcomes, and reduced complications and readmissions. This transformation of care has resulted in a lower cost per patient day and a payback of 2415 bed days in 16 months or $2.2M-4.6M in capacity/productivity gain – the equivalent of opening 5 surgical beds.

In acute care, each hospital delivers practices in unique contexts creating large variation and complex processes. ERAS Alberta implemented complex practice changes through collaborative clinician-led local teams, integrated research, detailed auditing, local access to cloud based analytics, provincial quarterly balanced scorecard target presentations and SCN learning collaboratives.

The mandate of ERAS Alberta is to transform surgical care across the province and create an integrated quality feedback system that informs provincial clinical practice and drives international surgical innovation and quality improvement.

CHALLENGE

To improve surgical outcomes for Albertans through applying ERAS pathways in the acute care setting and auditing to ensure sustainment. The challenge was to integrate the changes into the daily work and culture of our clinical teams and embed these changes in all levels of the health system (patient, provider, system) to achieve long-term success.

APPROACH AND OBJECTIVES

Clinical pathways were generated to ensure consistent application of ERAS best-practice. This was achieved through empowering and resourcing local facilitation and auditing, and through strong provincial leadership and coordination. Measurement includes compliance to ERAS practices and patient outcomes (diagnostic, length of stay, and complications). The key is measuring if each clinical practice reaches patients consistently. The ERAS audit allows local teams to track their progress and success.

TEAMS

Each hospital has a local team of dedicated clinicians led by a surgeon, an anesthesiologist, and an ERAS nurse coordinator. The Strategic Clinical Networks (SCNs) give ERAS Alberta access to clinical and research experts and patient consultants from across the province. ERAS Alberta helps local teams change patient education, pre-operative care, surgical and anesthesia practices and care, as well as post-operative care including helping patients transition to home.

COMPONENTS

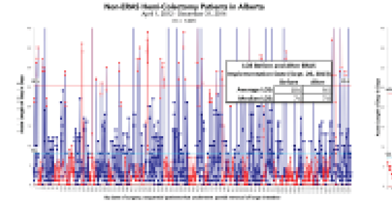
- Local teams: Surgeon and Anesthesiologist leads, an ERAS nurse coordinator, and multidisciplinary team members
- Outcome focused clinical practice improvements inform on-unit and system process re-design
- Detailed and comprehensive auditing and analytics. Audit data is highly valuable to implementation, sustainment and measurement of ongoing quality improvements. This involves collecting detailed quality and clinical data for each patient before during and after surgery.
- Quarterly reporting of balanced scorecard targets through the SCN's learning collaborative environment. Balanced scorecards focus local team work on the Health Quality Council's Six Dimensions of Quality.
- Sharing of quality practice and process innovations between sites and across the province

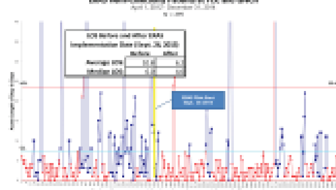
RESULTS

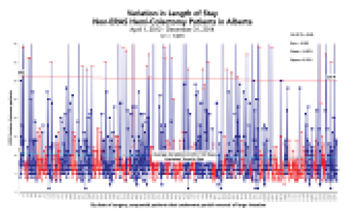
Largest per patient quantifiable quality improvement gain recorded in Alberta Health Services history.

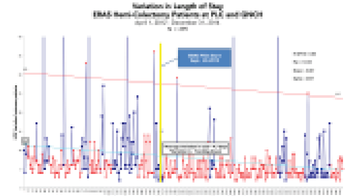
Alberta Hemi-colectomy Control Charts

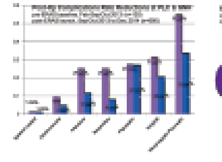
All Alberta sites versus the Peter Lougheed Centre (PLC) and the Grey Nuns Community Hospital (GNCH)



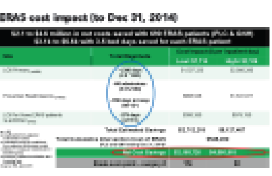








ERAS cost impact (to Dec 31, 2014)



Complications are high cost within health systems and have long lasting socio-economic impacts to patients and their families. A micro-costing exercise is currently being planned to better capture this savings. An independent economic analysis by the Institute for health economics is underway that will consider additional factors beyond the cost reduction related to length of stay and readmission rate reductions.

The SCN's through ERAS Alberta continue to advance practice improvements and re-design care delivery processes to sustain and embed continuous improvement in health delivery at the system level.

CLINICAL PATHWAY FOR SURGERY → Pre-Admission Clinic → Pre-Operative Care → Surgery Anesthesia → Post-Anesthesia Care → Post-Operative Care → Home

JEANNETTE LAWRENCE, BScN RN, MBA(Queens), MBA(Cornell)
Jeannette.Lawrence@albertahealthservices.ca

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Stroke Action Plan

- Implemented stroke best practice in 14 rural centres

Hospital chosen to pilot rural stroke rehabilita

The Elements of Sustainability

1. Unit – ongoing individual and team actions to improve, patient and family engagement, staff education

2. Site & Organization

Actions to support individuals and teams
Monitoring indicators
Fostering culture to support quality care
Staff competencies
Successes celebrated

3. Zone – actions to support sites to sustain outcome, maintain awareness of changes– standing agenda items, monitoring and auditing, consulting teams; physician, nursing and allied health support

4. System

Broader system supports

Policy established

Standards and Guidelines

Ongoing monitoring strategy established

Embed in Pathways

Outcome to be maintained (improvements continue)

Questions?

Additional Resources & References

- www.albertahealthservices.ca/scn.asp
  - AUA: www.albertahealthservices.ca/auatoolkit.asp
  - Stroke Action Plan: www.albertahealthservices.ca/7678.asp
  - Hip & Knee Arthroplasty: www.albertahealthservices.ca/10780.asp
  - ERAS: www.albertahealthservices.ca/10318.asp
- www.ihi.org/engage/collaboratives/

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