DI Workshop
Westin Hotel
October 26-27, 2010

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Alberta Health Services
Calgary and Area

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Who we are

- Patients
- Clinicians
- Policy makers and System Administrators
- Educators
- Applied Researchers

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Workshop Objectives

- **Develop a framework for a multi factorial KT program for DI in low back pain for primary care in Alberta**
- Review available utilization data on diagnostic imaging for low back pain
- Understanding the barriers & facilitators of appropriate use of DI in primary care settings
- Review the results of KT science research related to policy, professional and patient level interventions to align clinical practice with evidence-informed recommendations

Greetings

Review workshop package and agenda

Chatham House Rule

‘When a meeting is held under the Chatham House Rule participants are free to use the information received but neither the identity nor the affiliation of the speakers nor that of any participant may be revealed.’

What is the Ambassador Project?

Why primary care guidelines?

What is the Ambassador Program?

- A collaboration of individuals and agencies with an interest in improving chronic pain management in Alberta
- Aims to support primary care provider by developing provider knowledge and skills
- Process for moving research evidence into practice

Ambassador Program website:
http://www.ihe.ca/research/ambassador-program/

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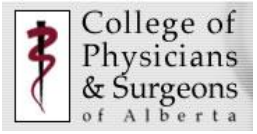
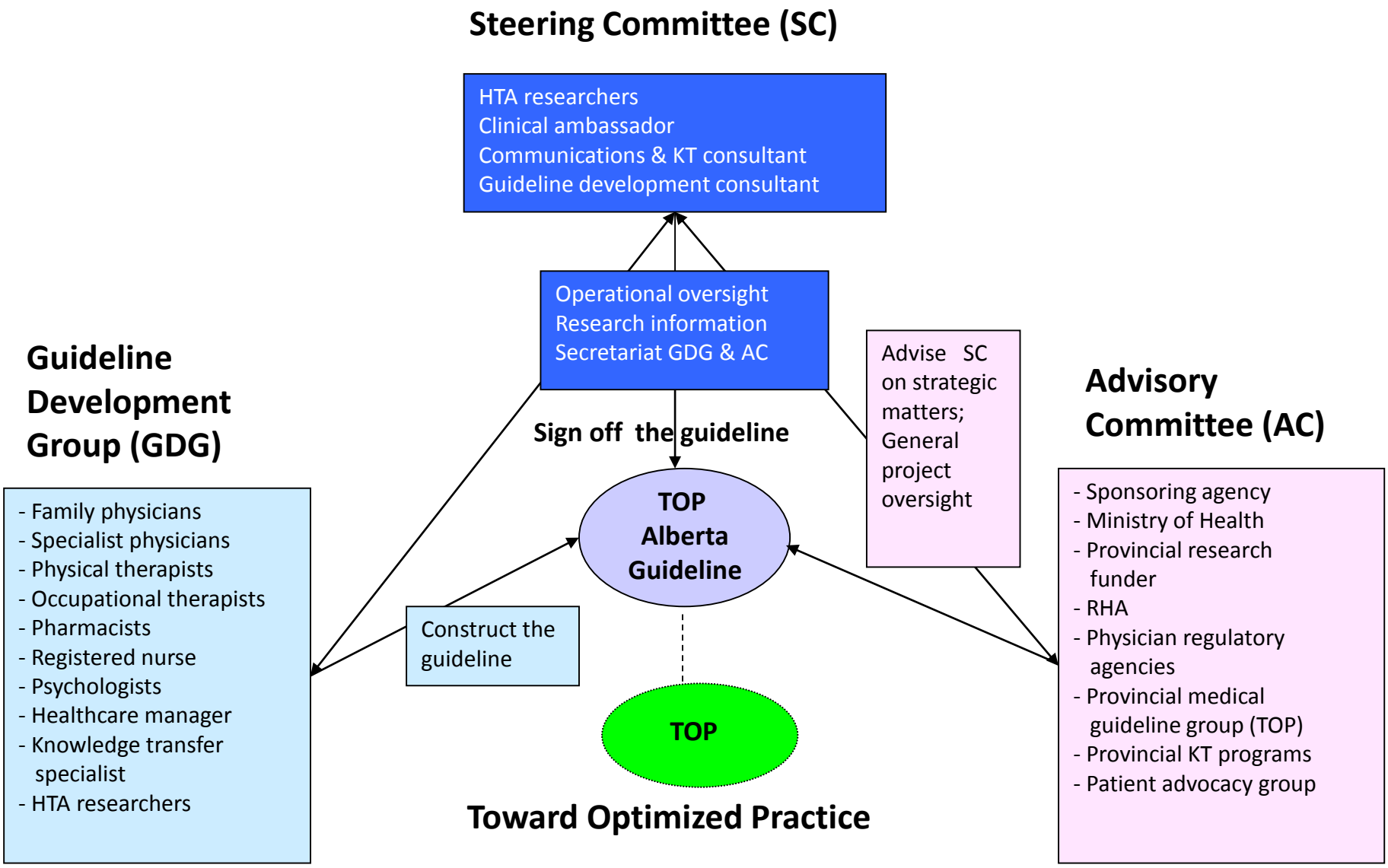
Collaborating Organizations

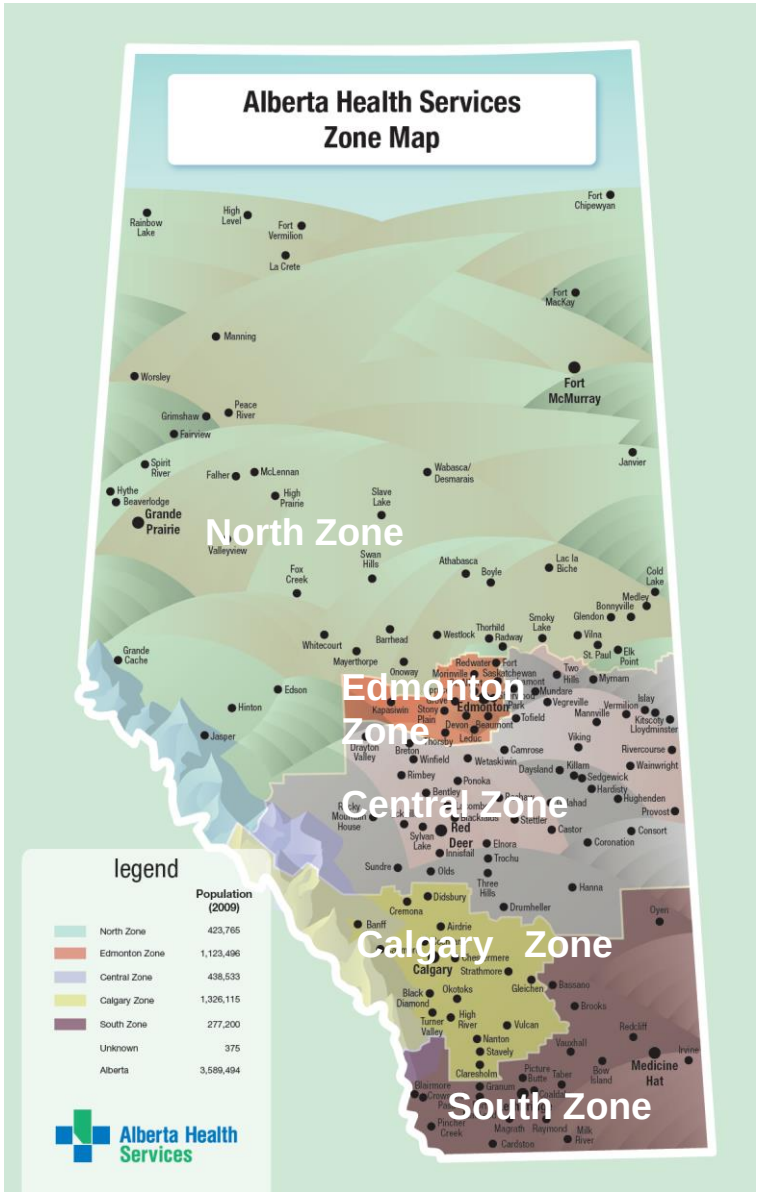


Guideline development committee structure



GDG: multidisciplinary team, rural/urban representation

- **South Zone:** physician (1), health care manager (1), physical therapist (1)
- **Calgary Zone**: family physician (2), specialist physician (2), psychologist (2), occupational therapist (1), pharmacist (1)
- **Central Zone:** family physician (3), physical therapist (1), occupational therapist (1)
- **Edmonton Zone:** family physician (3), occupational therapist (1) nurse-manager (1)
- **North Zone:** physical therapist (1), nurse (1)



The trials and tribulations of adapting existing guidelines: The Alberta Ambassador program strategy

The Spectrum of Guideline Development Processes

GAC

Does not develop guidelines

Endorses current guidelines selected for methodological rigour

APII

Adapts seed guidelines using a multidisciplinary development group

Seed guidelines selected for methodological and clinical relevance

COMPUS

Unbundles existing guidelines

Systematic reviews conducted on pertinent evidence

New guideline constructed with expert review panel input

American Pain Society

Constructs new guideline from scratch

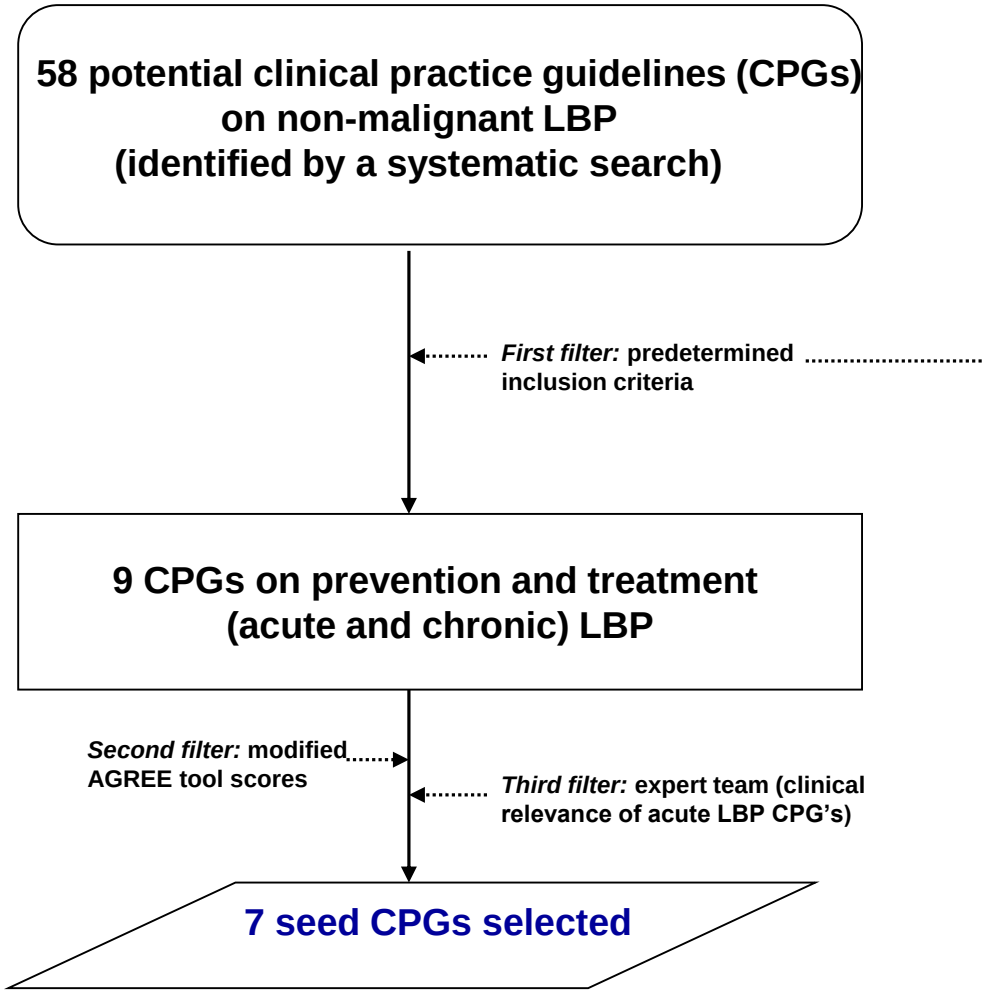
Systematic reviews of primary evidence conducted for all recommendations

Multidisciplinary development group

Trade off: quality and resources

- Avoidance of unnecessary duplication when there are a number of CPGs available
- Variances in quality rating tools used to assess internal and external validity
- Inconsistent rating of the strength of the evidence supporting the recommendation

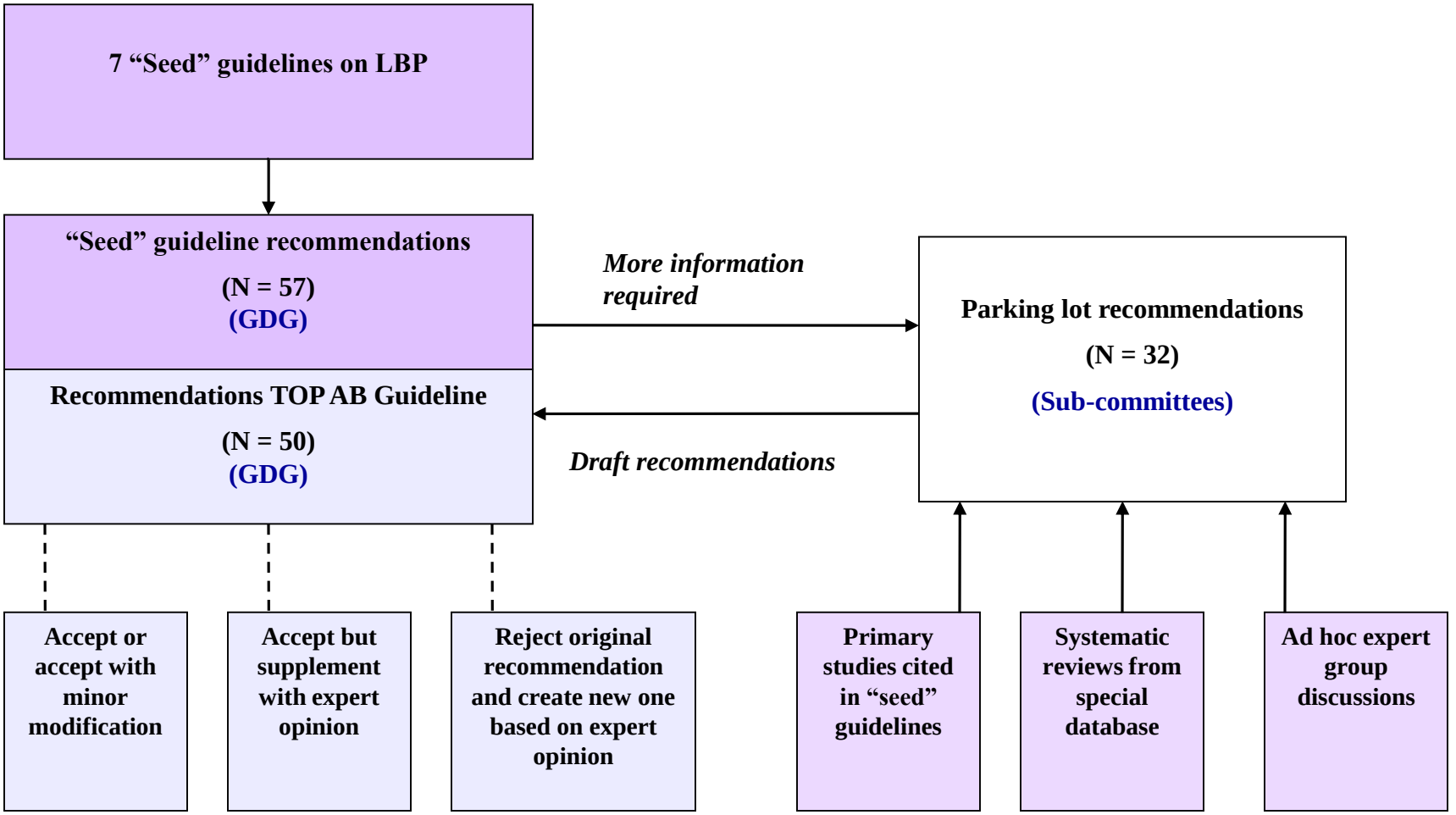
Selecting the seed guidelines



Predetermined inclusion criteria

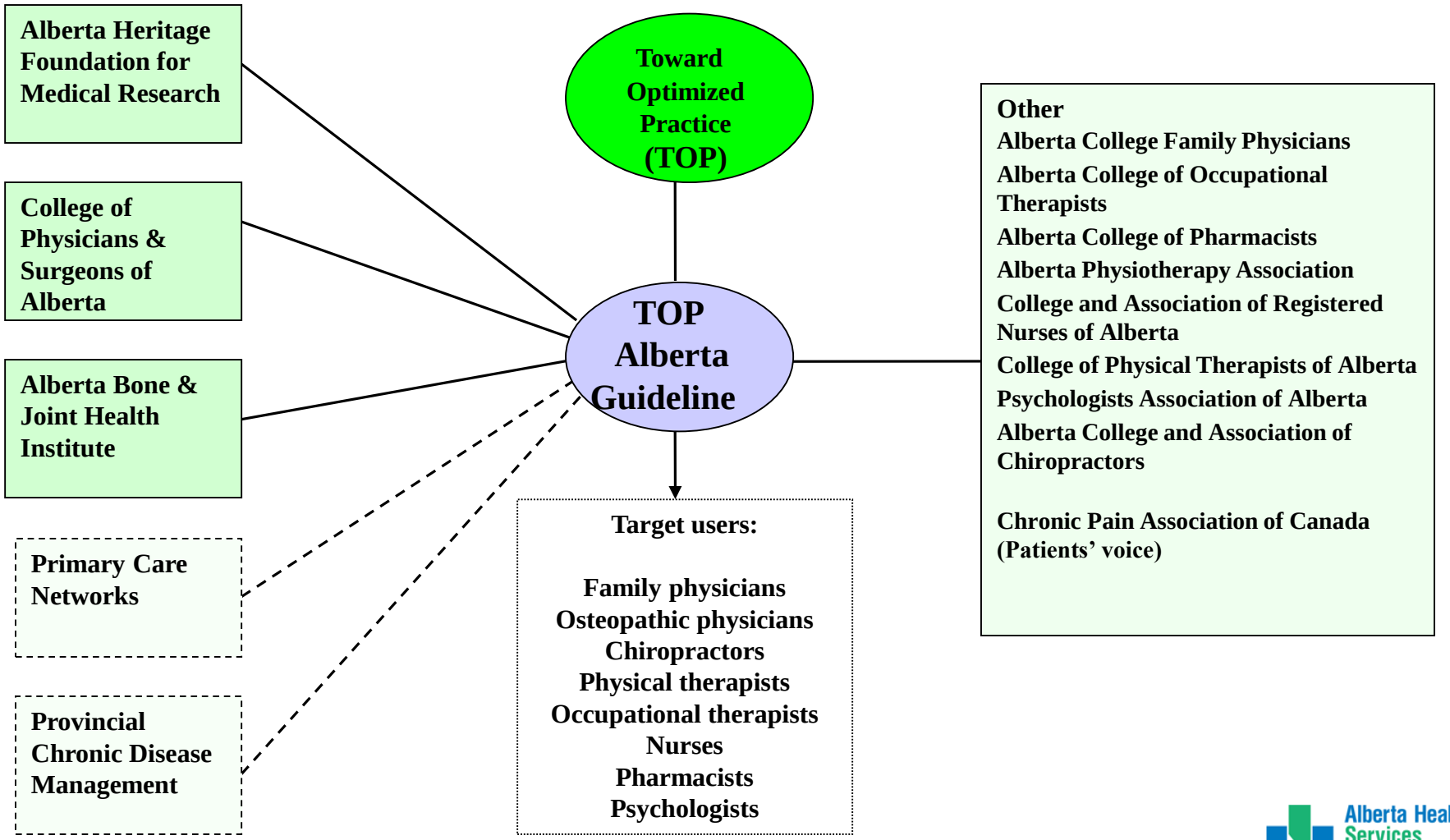
- **Condition:**
  - **Non-specific low back pain**
- **Population:**
  - **Adult patients (≥ 18 years)**
- **Intervention:**
  - **Diagnosis, non-surgical treatment, or prevention in primary healthcare settings**
- **Duration of pain defined as (treatment and diagnosis only):**
  - **acute and sub-acute pain: pain <12 weeks**
  - **chronic pain: pain ≥12 weeks (IASP definition)**
- **Publication limits: from 1996 to Feb 2008**
- **Language: English**
- **Source: countries with developed market economies**

Formulation of the recommendations



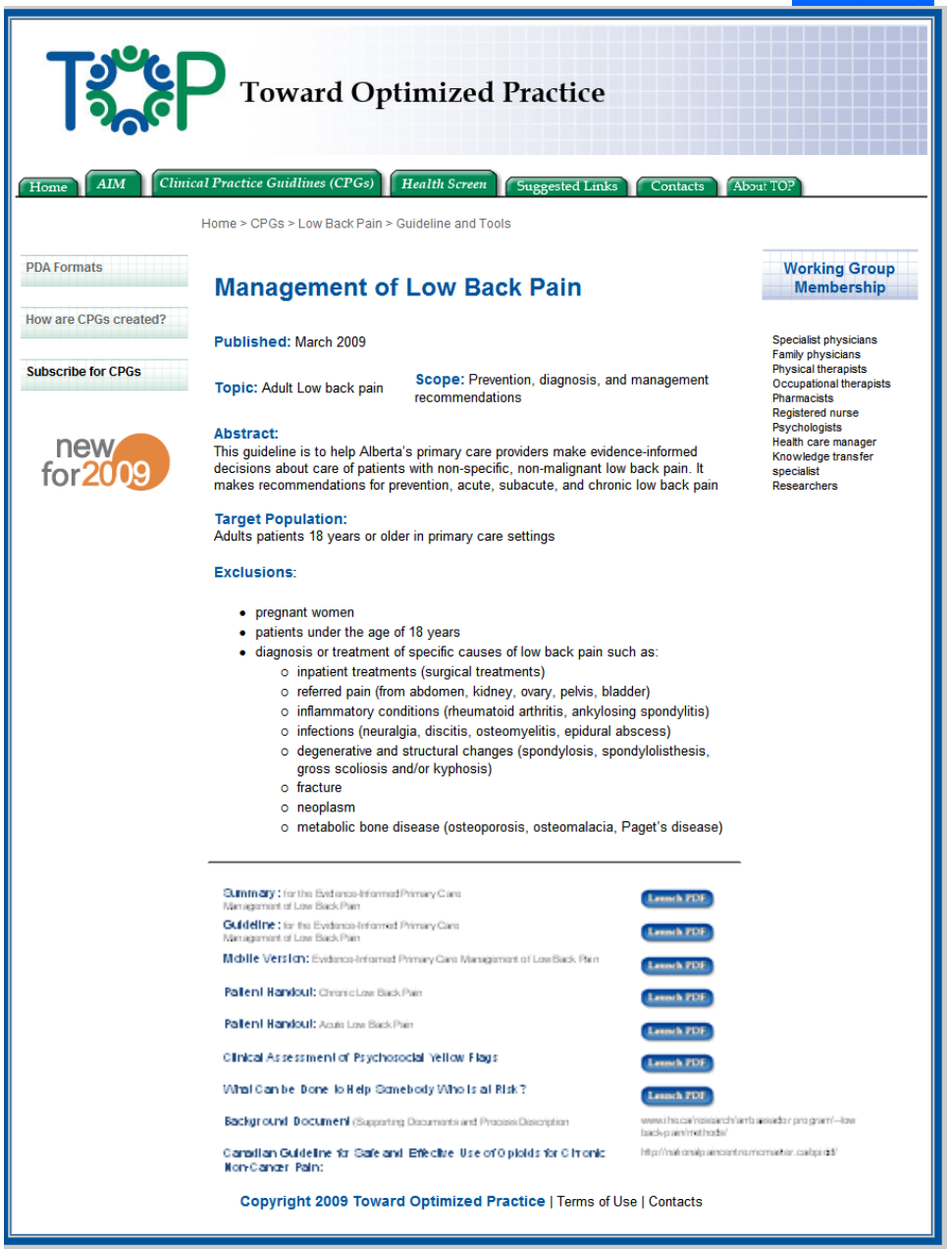
Alliances and collaborations

Endorse, promote, disseminate, and/or approve



March 2nd 2009, Low Back Pain Guideline available on TOP website

www.topalbertadoctors.org/informed_practice/cpgs/low_back_pain.html



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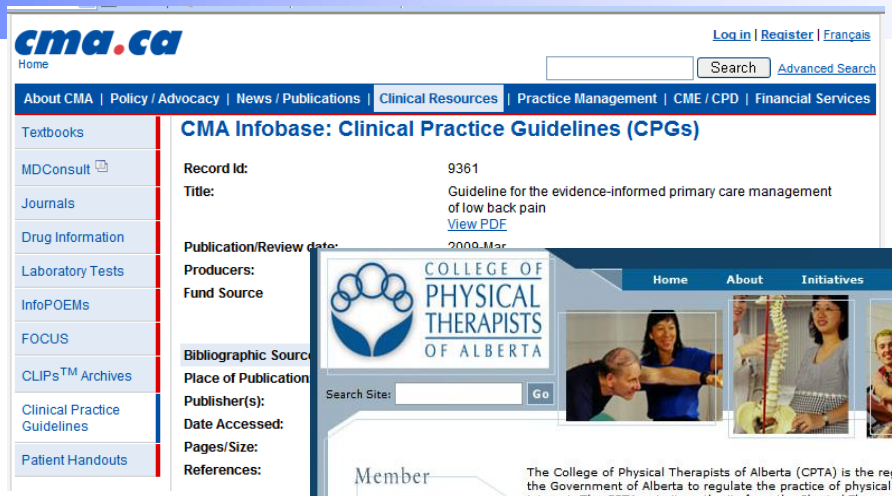

- Canadian Medical Association
- College of Physical Therapists of Alberta
- Pain Society of Alberta

P S A

Pain Society of Alberta

NEW RESOURCE TARGETS LOW BACK PAIN

An excellent resource for primary care providers in the treatment of low back pain has just been released. A new guideline, posted on the Towards Optimized Practice [TOP] web sit, is intended for the management of adults with non specific, non malignant low back pain.

The guideline will help family physicians, physiotherapists, chiropractors and other primary care providers make the best evidence-informed decisions about low back pain [prevention, acute, subacute, and chronic]. The guideline comes in several formats including a summary. Patient support materials are also available. The guideline provides evidence-based advice and answers to common questions and warning flags for serious conditions and issues.

The low back pain guideline was developed by a multidisciplinary team of researchers and practitioners from across the province through the Alberta HTA Chronic Pain Ambassador Program. The team worked with and appraised the quality of the highest rated guidelines in the world to create guidelines suitable for Alberta. Please visit the TOP web site at http://www.topalbertadoctors.org/cpgs/back_pain.html to view the guideline documents. To learn more about the ambassador program, please go to http://www.ihe.ca/research/ambassador-program/

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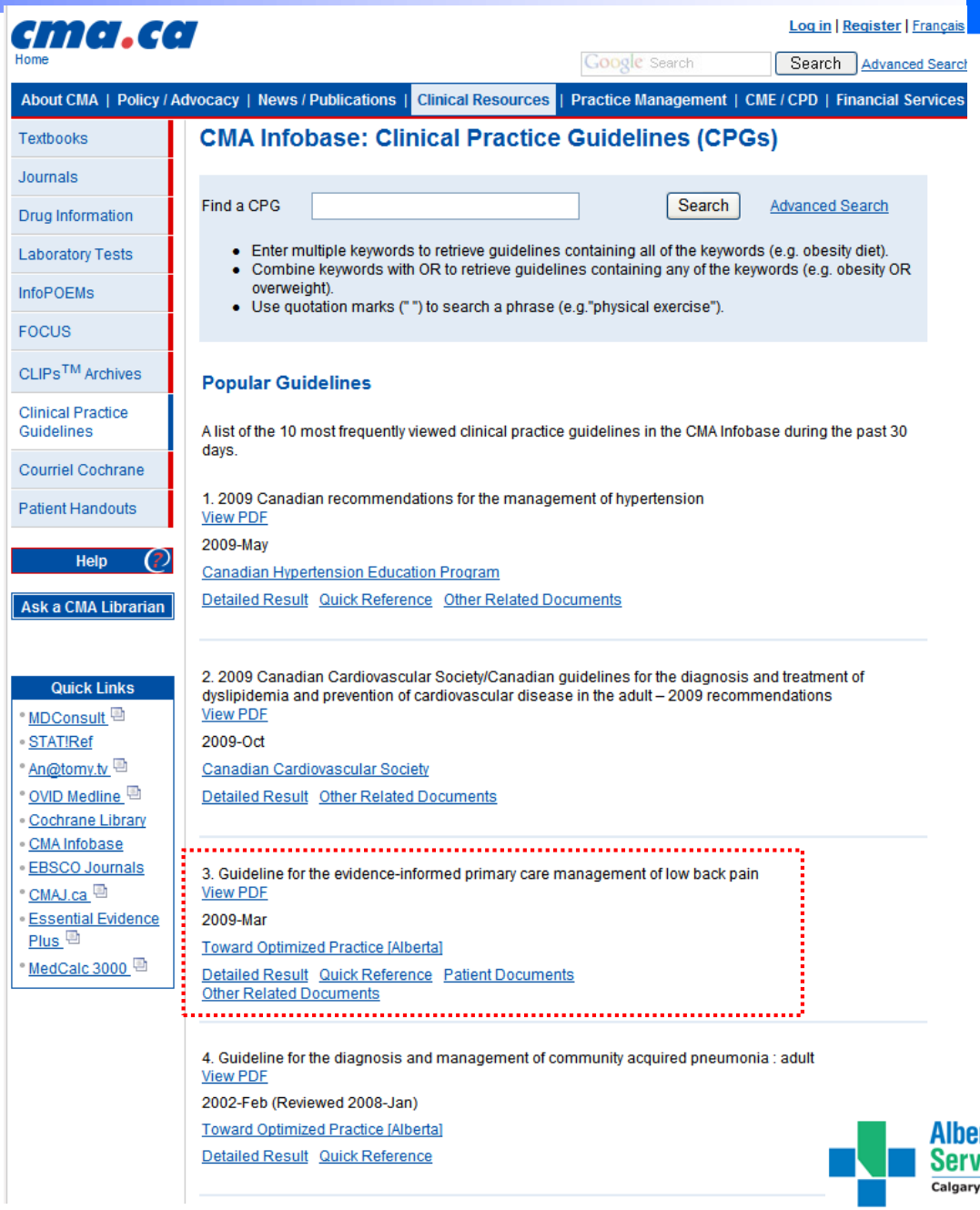
February 1, 2010

Alberta LBP Guideline in the top ten CMA website

Source:
http://www.cma.ca/index.cfm/ci_id/89497/la_id/1.htm?action=byMonth&value=1&topTen=true



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Information and Evidence to give the FP confidence in tackling patients beliefs

Summary Guideline

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A Summary of the Guideline for the Evidence-Informed Primary Care Management of

Low Back Pain

This evidence-informed guideline is for non-specific, non-malignant low back pain in adults only

Red Flags help identify rare, but potentially serious conditions. They include:

- Features of Cauda Equina Syndrome including sudden onset or loss of bladder/ bowel control, saddle anaesthesia (**emergency**)
- Severe worsening pain, especially at night or when lying down (urgent)
- Significant trauma (urgent)
- Weight loss, history of cancer, fever (urgent)
- Use of steroids or intravenous drugs (urgent)
- Patient with first episode over 50 years old (soon)
- Widespread neurological signs (soon)

EMERGENCY - referral within hours
URGENT - referral within 24 - 48 hours
SOON - referral within weeks

Conduct a full assessment

Including:

- history taking
- physical and neurological exam
- evaluation of **Red Flags**
- psychosocial risk factors/ **Yellow Flags**

Yellow Flags indicate psychosocial barriers to recovery. They include:

- Belief that pain and activity are harmful
- 'Sickness behaviours' (like extended rest)
- Low or negative mood, social withdrawal
- Treatment expectations that do not fit best practice
- Problems with claim and compensation
- History of back pain, time-off, other claims
- Problems at work, poor job satisfaction
- Heavy work, unsociable hours (shift work)
- Overprotective family or lack of support

Kendall et al. Guide to Assessing Psycho-social Yellow Flags in Acute Low Back Pain. ACC & NZGG, Wellington, NZ. (2004 Ed.).

Any **Red Flags?** **Yes** → **Refer for immediate evaluation and treatment**
e.g., emergency room, relevant specialist

No

Acute and Subacute
(within 12 weeks of pain onset)

- **Educate patient** that low back pain typically resolves within a few weeks (refer to Patient Information Sheet)
- **Prescribe self-care strategies** including alternating cold and heat, continuation of usual activities as tolerated
- **Encourage early return to work**
- **Recommend physical activity and/or exercise**
- **Consider analgesics** in this order:
  - Acetaminophen
  - NSAIDs
  - Short course muscle relaxants
  - Short-acting opioids (rarely, for severe pain)

1-6 Weeks

Reassess (including Red Flags) if patient is not returning to normal function or symptoms are worsening

Consider Referral

- Physical therapist
- Chiropractor
- Osteopathic physician
- Physician specializing in musculoskeletal medicine
- Spinal surgeon (for unresolving radicular symptoms)
- Multidisciplinary pain program (if not returning to work)

Chronic
(more than 12 weeks since pain onset)

- **Prescribe physical or therapeutic exercise**
- **Analgesics Options**
  - Acetaminophen
  - NSAIDs
  - Low dose tricyclic antidepressants
  - Short term cyclobenzaprine for flare-ups
- **Referral Options**
  - Community-based active rehabilitation program
  - Community-based self management/cognitive behavioural therapy program
- **Additional Options**
  - Progressive muscle relaxation
  - Acupuncture
  - Massage therapy, TENS as adjunct to active therapy

Moderate to Severe Pain

- **Opioids** (for appropriate patients: refer to the Canadian National Opioid Guideline endorsed by the College of Physicians and Surgeons of Alberta)
- **Referral Options**
  - Multidisciplinary chronic pain program
  - Epidural steroids (for short-term relief of radicular pain)
  - Prolotherapy in conjunction with exercise

TOP Toward Optimized Practice

new for2009

For complete guideline refer to the TOP Website:
www.topalbertadoctors.org

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Low Back Pain

Key Messages

- Do a full clinical assessment; rule out red flags
- In the absence of red flags, reassure the patient there is no reason to suspect a serious cause
- Reinforce that pain typically resolves in a few weeks without intervention
- Encourage patient to keep active
- Consider evidence-based management as per the guideline
- Recommend physical activity and/or exercise to prevent recurrence
- If pain continues beyond 6 weeks, reassess and consider additional treatment and referrals
- The goal of chronic pain management is improved quality of life
- Encourage and support pain self-management
- Monitor patient for relative benefit versus side effects

Contraindications

Evidence indicates these actions are ineffective or harmful

- Lab tests and diagnostic imaging in the absence of red flags
- Prolonged bed rest
- Traction
- Oral steroids
- Epidural steroid injections in the absence of radicular pain
- TENS for acute pain
- Back schools for acute pain
- Massage therapy for acute pain

Medication Table[1]

Pain Type	Medication		Dosage range
Acute and sub-acute low back pain or flare-up of chronic low back/ spinal pain	**1st line**	Acetaminophen	Up to 1000 mg QID (max of 4000 mg/day)
	2nd line NSAIDs	Ibuprofen	Up to 800 mg TID (max of 800 mg QID)
		Diclofenac	Up to 50 mg TID
	Add: Cyclobenzaprine for prominent muscle spasm		10 to 30 mg/day; Greatest benefit seen within one week; therapy up to 2 weeks may be justified
	If taking controlled release opioids: add a short-acting opioid or increase controlled release opioid by 20 to 25%		See opioids below
Chronic low back/ spinal pain	**1st and 2nd lines**	See acute pain, above	
	3rd line Weak Opioids	Codeine	30 to 60 mg every 3 to 4 hours
		Controlled release codeine	50 to 200 mg Q8h, may also be given Q12h
	Tricyclics (TCAs)	Amitriptyline Nortriptyline fewer adverse effects	10 to 100 mg HS
	4th line Tramadol (*not currently covered by Alberta Blue Cross*)		Slow titration up to max of 400 mg/day; short acting form is only available in combination with acetaminophen. Monitor for total combined daily acetaminophen dose.
	5th line Strong Opioids (controlled release)	Morphine sulfate	15 to100 mg BID
		Hydromorphone HCl	3 to 24 mg BID
		Oxycodone HCl	10 to 40 mg BID -TID
		Fentanyl patch	25 to 50 µg Q3days

OPIOIDS AND TRICYCLICS

[1] *Adapted from the Calgary Regional Pain Program. September 19, 2006*

- This guideline was written to provide healthcare providers and patients with guidance about appropriate prevention, assessment and intervention strategies
- It was developed by a multidisciplinary team of Alberta clinicians and researchers
- This guideline is for adults 18 years of age or older with low back pain and is not applicable to pregnant women
- It is recognized that not all recommended treatment options are available in all communities
- For further details on the recommendations, see the guideline and background document

2

Diagnostic Imaging: for Acute Low Back Pain

For non-specific acute low back pain (no red flags), diagnostic imaging tests, including X-ray, CT and MRI, are not indicated.

In the absence of red flags, routine use of X-rays is not justified due to the risk of high doses of radiation and lack of specificity.

Emergent Cases

Patients with red flags (See Appendix A for red flag definitions) indicating a high likelihood of serious underlying pathology should be referred for immediate evaluation and treatment to an appropriate resource depending on what is available in your region (e.g., emergency room, relevant specialist.)

Diagnostic Tests: for Chronic Low Back Pain

- In chronic low back pain, X-rays of the lumbar spine are very poor indicators of serious pathology. Hence, in the absence of clinical red flags spinal X-rays are not encouraged. More specific and appropriate diagnostic imaging should be performed on the basis of the pathology being sought (e.g. DEXA scan for bone density, bone scan for tumors and inflammatory diseases). However, lumbar spine X-rays may be required prior to more sophisticated diagnostic imaging, for example prior to performing a CT or MRI scan. In this case, the views should be limited to anterior-posterior (AP) and lateral (LAT) without requesting oblique views.

- *Oblique view X-rays are not recommended; they add only minimal information in a small percentage of cases, and more than double the patient's exposure to radiation.*

Why discourage ‘routine’ imaging for non-specific low back pain?

- “MRI studies have revealed lumbar disc abnormalities in up to three-quarters of asymptomatic subjects, including those with no previous history of LBP, sciatica or neurogenic claudication.” (Sheehan NJ. Postgrad Med J. 2010; 86: 374-8)

- “Lumbar imaging for low-back pain without indications of serious underlying conditions does not improve clinical outcomes.” (Chou R et al. Lancet 2009; 373: 463-72)

Patients expectations and beliefs

- Important to address patients misconceptions
- Need to emphasis the need for:
  - Clinical History
  - Clinical Examination
  - DI and other tests if appropriate
- The whole clinical picture.
- DI and other tests for specifics and to confirm or refute clinical findings.

Patients beliefs

- There is an anatomical cause of pain
- This can be “seen” by X-ray/CT/MRI
- Often activity is related to beliefs.
- Do not understand “degenerative disc disease”.
- Often NOT reassured by DI.
- May cloud the issue.

Guidelines

- To give the FP confidence in assessment.
- Allow addressing of beliefs early.
- Promote reactivation.
- Evidence to back up FP’s actions