#### Health Services Research - Bern, 1.11.12



Adaptation des directives de pratique clinique: exemple des directives concernant le diabète dans un programme de management des maladies chroniques

**Bernard Burnand / IUMSP** 







### **Presentation pathway**

- Context
   Chronic diseases prevention and management programmes
- Context
   Knowledge transfer and uptake
- Adaptation of clinical practice guidelines for diabetes management
- Implementation of clinical practice guidelines
- Monitoring of clinical practice guidelines implementation and healthcare delivery











BMJ (cover) 2002;325(7370)





### Similar expected trends in Switzerland - canton of Vaud

#### Prevalence of chronic diseases: Projections 2005-2030

Chronic obstructive pulmonary disease (COPD) + 50%

Depression + 70%

Diabetes + 50%

Heart Failure + 60-70%

Based on epidemiological data and population estimations for 2030 (considering the phenomenon of population ageing only)

F. Paccaud 2006. Vieillissement: éléments pour une politique de santé publique





#### The Chronic Care Model Community **Health Systems Resources and Policies Organization of Health Care** Self-Clinical **Delivery** Decision Management Information System Support Support Design Systems Prepared, Informed, Productive Proactive Activated Interactions, Practice Team Patient

#### **Improved Outcomes**

Developed by The MacColl Institute ® ACP-ASIM Journals and Books





# **Chronic disease prevention and management – main components**

- Patient focused intervention
  - Self-management, training
- Evidence-based and planned interventions
  - Practice guidelines, clinical pathways
  - Objectives, action plan
- Multidisciplinarity
  - Nurses, physicians (primary care, specialists), dieticians, pharmacists, physiotherapists, psychologists, case managers, ...
- Continuity, coordination, communication
  - Time and place
  - Teamwork, caregivers and providers
- Monitoring, measures and feedback





## Effectiveness of chronic disease management (CDM) Review of evidence (systematic reviews)

Disease	Results	References
Heart failure	<ul><li>↓ hospitalization</li><li>↓ mortality</li></ul>	Gohler, (2006), Roccaforte (2005), Gonseth (2004), McAlister (2001)
Diabetes	<ul><li>↑ glycemic control (HbA1c)</li><li>↑ diabetes-specific screenings</li></ul>	Pimouguet (2010), Norris (2005), Knight (2005)
Depression	<ul><li>↓ symptoms of depression</li><li>↑ compliance and satisfaction</li></ul>	Neumeyer-Gromen (2004), Badamgarav (2003)
COPD	<ul><li>↓ hospitalization</li><li>↑ walking distance, quality of lifre</li></ul>	Peytremann-Bridevaux (2008), Niesink (2007)

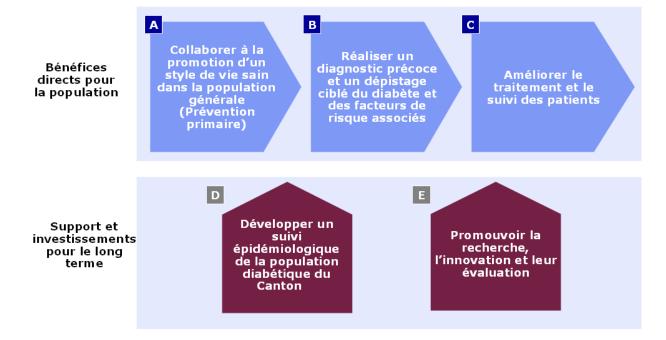
COPD: Chronic obstructive pulmonary disease





#### Programme cantonal Diabète - Vaud (PcD)

- Service de la santé publique
- Multidisciplinary, numerous healthcare professionals involved
- 5 strategic axes, > 50 projects











### **CDM - Exploratory work in Switzerland**

- Opinions of various Swiss healthcare stakeholders:
- Little divergence of opinions between groups of professionals
- Favorable to CDM development
- Main barriers: federalist political organization of care /
   CDM financing / motivation to participate
- Opinions of practicing healthcare professionals and diabetic patients (canton of Vaud):
- Insufficient information, lack of collaboration, difficulties with selfmanagement, financial concerns
- Favorable to « Programme cantonal Diabète » if adapted to needs and using existing structures

Peytremann-Bridevaux, Int J Integrated Care, 2009; Peytremann-Bridevaux Diab Res Clin Practice 2012; Lauvergeon, BMC Health Services Res 2012; Lauvergeon Health Expectations 2012





Table 3. Adherence to Quality Indicators, Overall and According to Type of Care and Function.

Variable	No. of Indicators	No. of Participants Eligible	Total No. of Times Indicator Eligibility Was Met	Percentage of Recommended Care Received (95% CI)*
Overall care	439	6712	98,649	54.9 (54.3–55.5)
Type of care				
Preventive	38	6711	55,268	54.9 (54.2–55.6)
Acute	153	2318	19,815	53.5 (52.0-55.0)
Chronic	248	3387	23,566	56.1 (55.0-57.3)
Function				
Screening	41	6711	39,486	52.2 (51.3–53.2)
Diagnosis	178	6217	29,679	55.7 (54.5–56.8)
Treatment	173	6707	23,019	57.5 (56.5–58.4)
Follow-up	47	2413	6,465	58.5 (56.6–60.4)

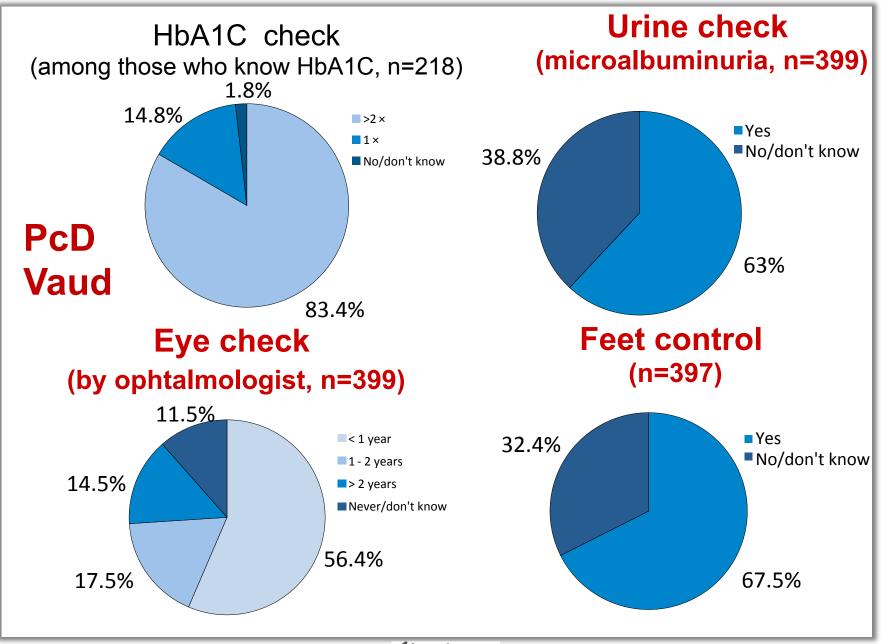
Care gap

McGlynn EA NEJM, 2003

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### Knowledge transfer and uptake

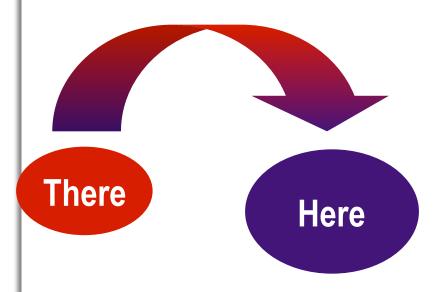
### Clinical practice guidelines (CPG)

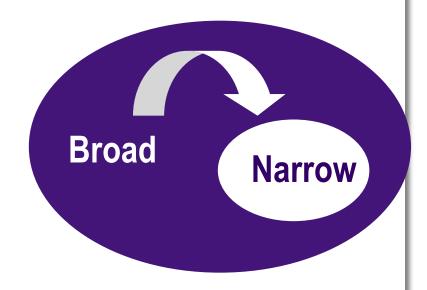
- No systematic, comprehensive, updated diabetes CPG adapted to Switzerland
- No "guidelines agency" in Switzerland (NICE, HAS, SIGN, ....)
- Adaptation of existing high quality, evidencebased CPG
  - Tailored for Switzerland and PcD





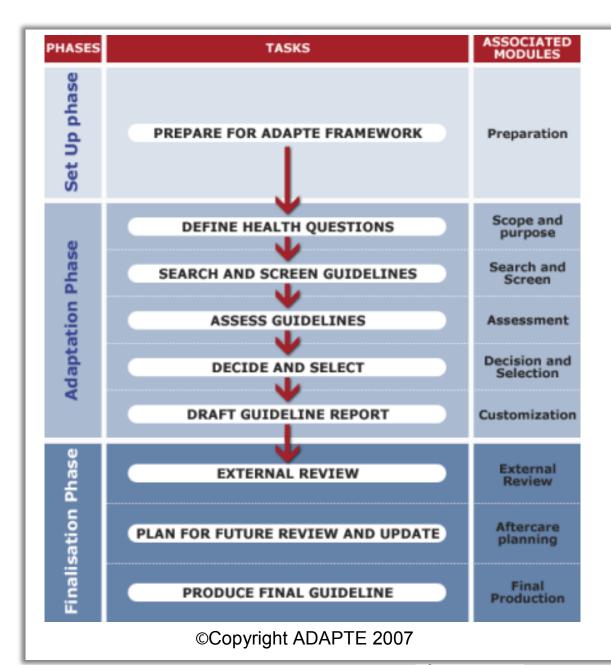
# Purposes of Guideline Adaptation ADAPTE





- → Alternative to de novo guideline development
- → Take advantage of existing guidelines to reduce duplication of effort
- → Implementation
- → Tailoring of a national guideline to the local context

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ADAPTE
Framework
Manual
and Tools

Int J Qual Health Care 2006;18:167 Qual Saf Health Care 2011;12:2





#### Adaptation of CPG for PcD

#### Adapting ADAPTE

- Search of diabetes CPG in dedicated databases (www.guidelines.gov, G-I-N, diabetes associations, Medline, ...)
- Evaluation of CPG quality (AGREE-2)
- Matrix of recommendations
- Working group / methodologists / experts
- Multidisciplinary revision and endorsement group

AGREE – Int J Technol Health Care 2000;12:18







#### Implementation of CPG for PcD

- Adaptation of CPG
- Multidisciplinary
- Short forms
- Easy to find recommendations (AGREE)
- Diffusion, media, website (www.recodiab.ch)
- Presentation and contextualisation in workshops (Forum diabète)
- Support letter from Canton's Physician
- Audit and feedback (gaps)
- CPG adapted for patients (with patients)





# Diabetes Care in the Canton of Vaud: a cohort study

- Cross-sectional baseline analysis
- 406 non-institutionalized adult diabetic patients visiting a pharmacy with a prescription for
  - oral anti-diabetic drugs
  - Insulin
  - glycemic strips
  - glucose meter





### Diabetes Care in the Canton of Vaud: a cohort study

Mean age 64.4 years

41% women

13% Diabetes type 1:

 Diabetes type 2: 69%

 Diabetes type unknown: 19%

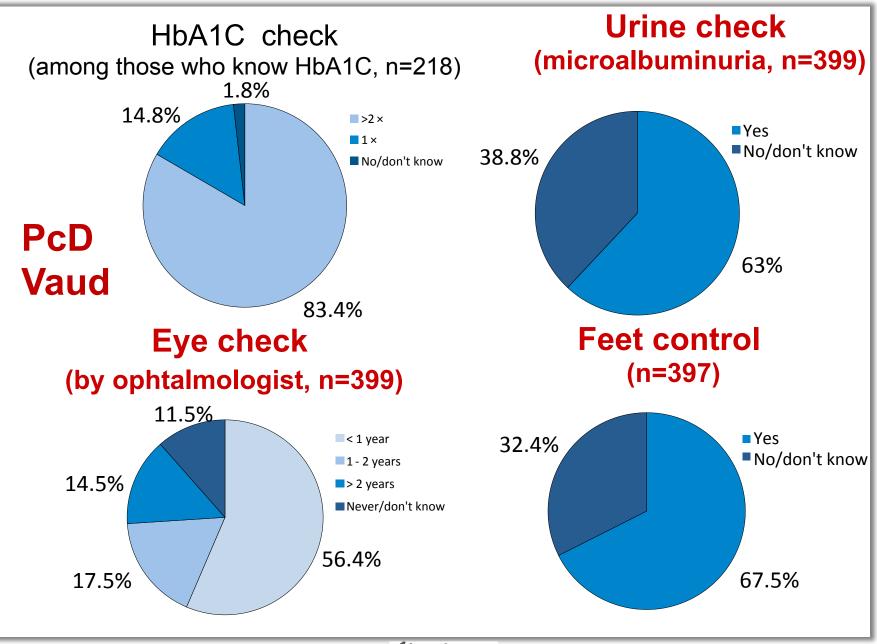
• OAD: 50%

Insulin: 23%

OAD + insulin: 27%







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# Diabetes Care in the Canton of Vaud: a cohort study

Influenza immunization:

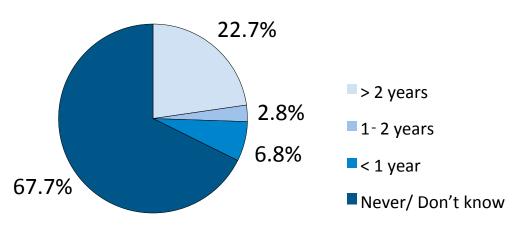
62%

Little evidence for multidisciplinary care

### Participation to « education » classes (n=396)













### **Summary - Discussion**

- High prevalence of chronic diseases in Switzerland
- Need to adapt our healthcare system to chronic diseases
- Chronic diseases prevention and management programmes
- Knowledge gap
- Knowledge transfer and uptake programmes
- One component of chronic diseases management is evidence based health care – CPG
- Adaptation and Implementation of high quality and updated CPG
- Monitoring of CPG implementation and healthcare delivery





#### **Summary - Discussion**

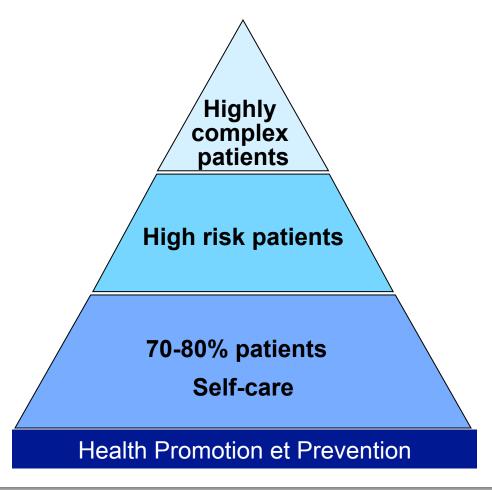
- High prevalence of chronic diseases in Switzerland
- Need to adapt our healthcare system to chronic diseases
- Chronic diseases prevention and management programmes
- Knowledge gap
- Knowledge transfer and uptake programmes
- One component of chronic diseases management is evidence based health care – CPG
- Adaptation and Implementation of high quality and updated CPG
- Monitoring of CPG implementation and healthcare delivery
- Health services R&D projects imbedded in actual activities, development and evaluation of the healthcare system







## Stratification de l'intervention en fonction de la sévérité de la maladie



Increased intensity of the intervention

Adapted from Kaiser' triangle





### Ambulatory care visits to (12m) ...

