Non-communicable (chronic) conditions accounted for 85% of the disease burden in Australasia in 2010 (Australia’s Health, AIHW, 2014)

In research, there are two facets considered when defining chronic conditions:
- 1. The definitional criteria used
- 2. How these definitional criteria are applied to medical conditions/diseases
Background

In 2004, the authors published a paper containing criteria for defining chronic conditions, applied to the International Classification of Primary Care, Version 2 (ICPC-2).

Criteria adopted for this definition:
- have a duration that has lasted, or is expected to last, at least 6 months
- have a pattern of recurrence, or deterioration
- have a poor prognosis
- produce consequences, or sequelae that impact on the individual’s quality of life.

Each ICPC-2 code was then assessed against each of these criteria to determine whether the condition(s) in this rubric were ‘chronic’ in nature.
Use and updates

› Used widely:
- Citations (Google Scholar) = 143 (as of the end of August 2015)
- BEACH program, Germany, Ireland, etc

Aims of this study

› To determine whether the criteria used to define chronic conditions remain relevant, and to update the definition if necessary.

› Assess the application of the criteria to ICPC-2, and update the ICPC-2 chronic condition list.
Methods

› A literature review was conducted to identify published criteria used to define chronic conditions.
   - Searched for papers that included a definition of ‘chronic disease’ or ‘chronic conditions’, limited to papers published after 2004
   - Also searched for policy statements on chronic conditions from relevant Australian and international organisations

Findings – issues identified in literature review

› Duration:
   - still the criterion used most often in definitions of chronic disease
   - recommended duration varies:
     - 3 months, 6 months, 12 months
     - ‘life-long’, ‘years or decades’.

› Consequences or sequelae:
   - also common
   - discussion of severity, burden or disability.
Issues identified in the literature review

› Numerous papers about chronic conditions include a list of conditions, with no associated definition
  → compare the lists of chronic conditions presented in papers/research reports, to identify differences between them.

Comparisons of chronic condition lists

› Using the chronic ICPC-2 rubrics as the benchmark, we compared seven lists of chronic conditions to the list of chronic ICPC-2 rubrics
› All lists were used to assess the prevalence or management of chronic conditions
› Lists assessed included:
  - Quality and Outcomes Framework (UK)
  - Ambulatory Care Groups (ACG) (US)
  - US Department of Health and Human Services – OASH list (US)
  - Measuring long term conditions in Scotland
  - List of minimum inclusions for measuring multimorbidity (Diederich et al) (Germany)
  - Epidemiology of multimorbidity (Barnett et al) (Scotland)
  - Prevalence of chronic diseases and multimorbidity in primary care practice (UK)
# Comparisons of chronic condition lists

<table>
<thead>
<tr>
<th>Number of lists</th>
<th>Chronic condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>COPD; Depression; Diabetes; Hypertension</td>
</tr>
<tr>
<td>6</td>
<td>Coronary heart disease; Cancer; Heart failure; Chronic kidney disease; Asthma</td>
</tr>
<tr>
<td>5</td>
<td>Arthritis; Dementia; Stroke; Epilepsy; Schizophrenia</td>
</tr>
<tr>
<td>4</td>
<td>Parkinson’s disease; Atrial fibrillation; Chronic alcohol abuse; Lipid disorders;</td>
</tr>
<tr>
<td>3</td>
<td>Inflammatory bowel disease; Thyroid disease; Multiple sclerosis; Obesity; Hearing impairment; Atherosclerosis/PVD; Blindness; Chronic liver disease; Rheumatoid arthritis; Myocardial infarction; Cardiac arrhythmias</td>
</tr>
<tr>
<td>2</td>
<td>Migraine; Gastro-oesophageal reflux; Psoriasis; Anxiety; Diverticular disease; Glaucoma; HIV/AIDS …</td>
</tr>
<tr>
<td>1</td>
<td>Gout; Anaemia; Anorexia/bulimia; Cataract; Chronic skin ulcers; Haemophilia …</td>
</tr>
</tbody>
</table>

## Discussion – criteria used to define ‘chronic’

- There is still no common set of criteria used to define chronic conditions.
- Similarly, there is no standard list that can be used in research to identify chronic conditions.
Discussion

Why is this important?
- You can't count what you don't measure.
- Impacts reliability and comparability of:
  - chronic disease incidence and prevalence estimates
  - multimorbidity estimates
  - health surveillance.

Implications for GPs
- Chronic disease management items: there is no list of eligible conditions included.

Conclusions

Next steps:
- This work is ongoing, and the list of chronic conditions classified to ICPC-2 is yet to be reviewed.

Recommendations from this study:
- An international standard definition for chronic conditions is required.
- This definition should then be applied to international classifications.
- Researchers undertaking smaller projects could use these as the starting point for their studies.
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(go to ‘Publications’ and select ‘Books - General Practice series’) Hard copies cost $15-35 for each book

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2014-15 books will be released on 4 November 2015